

MIST,
METAL,
AND
ASH

GWENDOLYN CLARE

{Imprint}
MAKE YOUR MARK

NEW YORK

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The first one who steals this sequel,
Shall lose a possession its equal.
And whoever steals it next
Shall find himself scribed in the text.

FOR CARL, WHO UNDERSTANDS
THAT SCIENCE *IS* MAGIC

THE FOUR STATES OF ITALY, 1891



PROLOGUE

When no one is listening, the Clockwork Creature breaks the rules.

She knows all the ways out of the world, the easy ways and the difficult ones, the paths where you must walk on the ceiling or jump twenty meters over a bottomless chasm. She has mapped and completed every route. There is not much else to do, while the Broken Boy sleeps.

Tonight the Clockwork Creature crouches on a windowsill and spies through the glass. Her bronze-tipped fingers dig grooves into the stone, and her wings snap open for balance. The Mad Boy has returned home and brought another with him. The Lost Boy is golden-blond where the Mad Boy's hair is coffee-black, but they have the same eyes—glinting like chipped amber in the warm yellow light of the gaslamps.

The Clockwork Creature watches the boys argue. Though

she can hear them, she does not understand. They are using the Voice Words, the ones she does not know.

She does not like the Mad Boy very much. He is unpredictable—by turns kind, or cruel, or indifferent. Nothing like the Broken Boy, whom she loves with all her heart.

Perhaps this new boy is broken, too. From the outside he looks whole, but there are many kinds of broken. Perhaps he will be given to the Clockwork Creature.

She leans forward, overeager, and the tip of one curved horn clacks against the glass. A mistake—the Lost Boy glances in her direction.

The Clockwork Creature lets go of the sill, twisting and falling through the night. But she'll be back, she decides, wings spreading to catch the air. She'll come back to watch the Lost Boy. And perhaps to take him.

1

STUDY AS IF YOU WERE GOING TO LIVE FOREVER;
LIVE AS IF YOU WERE GOING TO DIE TOMORROW.

—*Maria Mitchell*

PISA, KINGDOM OF SARDINIA—1891

Elsa flipped through the pages of *Advanced Alternate Physics* by Joseph Fourier, desperate for inspiration. The quiet inside Casa della Pazzia's octagonal library felt oppressive, three stories of bookshelves staring down at her failure in silent reproof.

Could she apply integral transforms to scriptology? The science of creating new worlds with lines of script in a book usually came so easily to her; Elsa loved the subtlety and precision of syntax, combined with the endless applications. She had created a laboratory world with stockrooms that never depleted, and even a book that linked one location on Earth to another for instantaneous travel. But the particular worldbook she most needed at the moment was refusing to function.

Elsa set aside the Fourier and opened the worldbook again, its pages vibrating softly against her fingertips like the shiver of a butterfly. It was a map world she'd created to serve as a locating device for people here on Earth, and there was someone she needed to find: a thief. A traitor. *A lying liar who lies*, as Faraz once called him.

Faraz's words had seemed like a harmless joke among friends at the time. Not anymore.

Elsa took up her fountain pen and set to work adding new lines of text to modify the book's tracking property. Worldbooks were not confined by the physics of Earth, and it was difficult to predict how their unique physical properties would function. She was out on the edge of known science, trying to solve a problem no one had ever seen before—a thrilling prospect, if only the safety of the whole planet weren't teetering on the brink with her.

In the center of the library a black hole irised open, a corridor through the fabric of reality connecting Earth to a scribed world, and out of the darkness stepped Porzia Pisano. As the portal closed behind her, Porzia arched one dark eyebrow. "You altered the worldbook. While I was still inside. You do know that's dangerous, don't you?"

Elsa blinked. "My mother does it all the time with Veldana." Veldana was her home, and the only scribed world in existence with a native population.

Porzia managed an even more skeptical expression, which was a feat in and of itself. "Mm, yes, and as we've established, Jumi's judgment is always flawless."

Elsa's instinct was to jump to her mother's defense, but the truth was Jumi had started this whole mess when she scribed the most dangerous object in existence—a book with the power to edit the real world. Whoever controlled the editbook could permanently alter anything they wished on Earth, up to and includ-

ing the complete destruction of the planet. The editbook was supposed to protect Veldana from European interference; instead, it became the focus of a power struggle, one that had nearly cost Jumi her life and her world. And if Elsa failed to steal it back, there was no limit to the havoc the editbook could inflict.

Elsa exhaled her tenseness and leaned her head back. The gasolier hanging from the center of the domed ceiling dazzled her eyes and cast intricate shadows. “Did I at least change something inside the world? At this point, I’ll take any kind of improvement to the tracking process as a victory.”

“You turned the sky red—which I have to say looks *very* ominous—but no, the tracking property was unaffected.” Porzia pulled out a chair and flopped down with an uncharacteristic lack of decorum, her full skirts puffing like a thrown pillow. She tossed her handheld portal device on the table, its brass casing clattering against the wood.

“So still no fix on Leo’s location, then.”

Porzia, who was a talented scriptologist in her own right, reached for the worldbook and dragged it closer to scowl at the text. She flipped through the pages, glowering as if she could make the world do what she wanted by intimidation alone. “We’ve expanded the tracking map to function globally; we’ve been through every line of script looking for optimizations. It’s no use.”

Elsa nodded, trying not to let her frustration show. A week had passed since Leo stole the editbook and rejoined his father and his brother, Aris. Despite all her efforts, Elsa wasn’t so much as an inch closer to recovering the editbook—or to confronting Leo.

No, better not to think about him. The memory of his betrayal felt like fragments of glass grinding together somewhere behind her sternum.

Elsa made herself focus on recovering the editbook. “So either

they're hiding off-world, or Aris figured out a surprisingly effective way to block the tracking map.”

Porzia sighed. “Looks that way.”

“First he designs a way to detect portals, now he's blocking our tracker,” Elsa grumbled. “Does this guy have a clone? How does he work so fast?”

“I suppose it doesn't hurt being a polymath,” Porzia said.

“Wait—what?” Elsa sat up straighter. “Aris is a polymath?”

Porzia gave her a confused look. “You didn't know . . . ?” Elsa got the sense she was trying hard not to say, *Leo didn't tell you?* Another secret withheld from her; another shard of glass sliding between her ribs.

Elsa shook her head. “Signora Pisano told me I was the only living polymath.” Most pazzerellones, people with the madness for science, specialized in one of the three disciplines—mechanics, alchemy, or scriptology—but Elsa could perform all three.

“When Mamma said that, she thought Aris was dead,” Porzia pointed out.

“Oh. Right.” Certain moments of Leo's behavior toward Elsa suddenly made more sense—the odd flashes of jealousy and insecurity. “What about Garibaldi?” she asked. Ricciotti Garibaldi was the father of Leo and Aris, and the madness often ran in families. He had two pazzerellones for sons; their scientific impulses must have come from somewhere.

Porzia cocked her head to the side. “Um . . . alchemist, I guess. Leo never talked much about his father's work.”

Elsa frowned. Garibaldi was obsessed with unifying the four states of Italy into a single country. As far as she could tell, everything he did—faking his own death, going into hiding, stealing the editbook—was done in the service of that cause. It seemed to Elsa that he treated Aris more like a soldier than a son. If Garibaldi

had expected Leo to be a polymath like his brother, and left him behind in Venezia because he wasn't . . .

Against her better judgment, she felt a pang of sympathy for Leo, but it shifted quickly into anger. “How could Leo go back to that horrible man? Garibaldi *abandoned* him, and we’re the ones who cared. I even thought Leo and I were—” Elsa cut herself off before she could voice the words. When she was young, Jumi had told her, *They call it “falling” in love in some Earth languages. To fall, as one falls into a trap.*

Porzia looked at Elsa steadily, a kind of grim resignation visible in the set of her mouth. “Garibaldi is still his father—you can’t break the ties of blood. We were naive to assume he *wouldn’t* turn against us.”

The door creaked behind Elsa, and she glanced back as Faraz entered the library with Skandar riding on his shoulder. Faraz was tall, dark, and awkward; Skandar was all tentacles, with a pair of wings and one giant wet eye in the middle. Since Leo left, Faraz had taken to carrying Skandar, his alchemical masterpiece, everywhere with him. (Except the dining hall, which Porzia had declared absolutely off-limits for tentacle monsters.) Faraz was one of the orphaned pazzerellones raised at Casa della Pazzia; Elsa worried that, given his history, this latest abandonment was like a blow to a tender, unhealed wound.

“Hi, you two,” Elsa said.

Faraz made a poor attempt at a smile. Skandar, however, raised a few tentacles cheerfully, pleased to see her. Elsa held out an arm as Faraz approached, allowing the beast to crawl from Faraz’s shoulder onto hers. She’d grown accustomed to the feel of suckers clinging to the back of her neck, though Porzia wrinkled her nose just at the sight of the transfer.

“Sorry I’m late,” Faraz said.

Porzia muttered, “Not that it matters.”

“Actually, I’ve had a thought.” He pulled out a chair and sat. “So far, we’ve only tried targeting the tracking map with Leo’s possessions in order to track Leo. Right?”

Elsa nodded. “True.”

“Well . . . what if the block—whatever it is that’s blocking us—only applies to Leo? For example, if they’d scribed a prison worldbook to keep him in.”

“Interesting,” Elsa said. Privately, she found it impossible to share Faraz’s faith in Leo—that he had been tricked and was being held against his will—but his idea still had merit. “We might be able to track Aris or Garibaldi, instead of Leo.”

Porzia said, “Except for the slight problem that the only possession we had of Garibaldi’s was the pocket watch, which Leo took with him. We have nothing to target the map with.”

For the first time in days, Elsa felt a spark of hope. “No, but we know someone else who might: Signora Scarpa.”

Porzia rubbed her temples. “For heaven’s sake, Elsa. We ought to be working with the Order, not the Carbonari.” The Order of Archimedes was the secret society of pazzereLLones that Porzia’s family were members of; the Carbonari were revolutionaries fighting for an Italy free of foreign rule. The two groups had an occasionally tense agreement to keep out of each other’s way.

“The Order?” Faraz looked genuinely shocked at the suggestion. “They only care about retrieving the editbook, so it won’t threaten their precious political neutrality.”

Elsa saw anger and frustration in the set of Porzia’s jaw, portending an argument as surely as storm clouds promised rain. Elsa quickly said, “Yes, but we’re not going to let anyone else take the lead on this. We’ll be the ones to find the editbook. And, if he needs it . . . rescue Leo, too.” She didn’t believe her own words, but she knew this was what Faraz wanted to hear.

He nodded. “We’ll have to plan our approach carefully, if we want to rescue Leo and retrieve the editbook before Garibaldi knows what hit him.”

Porzia snapped, “I can’t do it any longer. What is wrong with you, Faraz? He left us! He’s gone! He’s *not coming back*.”

“How can you say that?” Faraz stared at her, aghast. “It doesn’t make any sense! We were his family, for *seven years*, and he just up and turns on us with no warning? There must be something else going on.”

Porzia stood, slammed the tracking worldbook closed, and snatched it up angrily. “Wake up, Faraz! He had a choice to make: us or them. And he chose. It’s that simple.”

She whirled around, knocking over her chair in her haste to leave. She slammed the library door as she went. On Elsa’s shoulder Skandar shivered with distress, and she put a hand up to soothe the beast. Elsa herself was too stunned at Porzia’s outburst to know how to respond. That sharp, constant pain in her chest—the pain of betrayal—certainly agreed with Porzia, but she knew Faraz clung to hope like a lifeline.

“Don’t listen to her,” Faraz said, sounding shaken. “She’s only distraught. She’s trying to make sense of this as best she can.”

“Right,” Elsa said. It did not escape her that, perhaps, Porzia was not the only one at a loss.

He stared at the closed door through which Porzia had left them. “She’s wrong—blood and family aren’t the same thing. We’re Leo’s family, not them.”

“I know.” Elsa squeezed his arm reassuringly, but then felt guilty for encouraging him. What if Porzia was right, and Faraz was simply weaving an elaborate self-deception to soften the blow of Leo’s absence? The doubt ate away at her like rot in the heart of a tree, and Elsa wondered if she’d ever be sound again.

* * *

Elsa followed Faraz through the cobbled streets and airy piazzas of Pisa, relying on his familiarity with the city and his general street-savvy. They were headed to see Rosalinda Scarpa, the Carbonari operative who had been Leo and Aris's childhood fencing instructor, before Garibaldi faked his death and splintered from the Carbonari. Elsa had met her only once, but once was enough to make her apprehensive about asking the woman for a favor; she didn't seem to like pizzerellones very much, with the exception of Leo, whom she treated with a strange sort of maternal possessiveness.

The walk through the city streets only worsened Elsa's nerves. It felt like traversing the floor of a never-ending valley, entrapping her on either side with row upon row of red-tile-roofed buildings. Faraz looked naked without Skandar on his shoulder; he'd left the beast at home so as not to draw attention, but Elsa still felt the weight of sideways glances, of gazes lingering a little longer than propriety would dictate. She didn't know whether the cause was their brown complexions, giving them away as foreigners, or her sartorial choice of trousers and a leather bodice.

Elsa said, "So you've never been there before?"

"I had to ask Gia to write down the address." Faraz crumpled the scrap of paper in his hands.

Gia was Porzia's mother and headmistress of Casa della Pazzia, which made Leo her ward. "She must have been *thrilled* about that request," Elsa said dryly. "Though I suppose we should count ourselves lucky that somebody knew about Rosalinda at all."

They crossed an old stone bridge over the river that bisected the city, and the openness came as a relief to Elsa. It was a clear day, bordering on hot as May surrendered to summer, and the sunlight glinted off the water.

“Yeah,” Faraz agreed halfheartedly. “I guess there was some sort of custody disagreement between the Order and the Carbonari after Garibaldi faked his death.”

Elsa was getting the distinct sense that Faraz did not want to talk about Leo right now, and especially did not want to talk about the things Leo had chosen to keep secret from the rest of them. She decided to shift the subject. “Speaking of the Order . . .”

Faraz shook his head. “We’d be gambling on the reliability of their assistance. The more people become involved, the more opportunities there are for someone to slip up.”

Opportunities for a slipup . . . or opportunities for a betrayal. Porzia’s father was in Firenze at the headquarters of the Order, and the Pisano family had influence. But Elsa had been betrayed once by someone she trusted completely, and she was not about to make the same mistake again.

“There is an alternative.”

Faraz tucked his hands into his pockets. “I’m all ears.”

“We don’t involve anyone else. We use just one person, infiltrating Garibaldi’s operation.”

“You want to become a spy?”

“Think about all the levels of security Montaigne designed to protect the editbook, and he was just one scriptologist working alone. Montaigne was the original creator of Veldana, who had betrayed the Veldanese by helping to steal the editbook and then double-crossed Garibaldi to keep the book for himself. Garibaldi has Aris and a whole squadron of ex-Carbonari assassins. It may not be possible to get it back by force. What if the best way to steal the editbook is to trick them into giving me access?”

Faraz stared ahead, his expression thoughtful. “We’d need to somehow convince Garibaldi that you want to join his revolution. And if Leo is locked up, you’d be operating alone.”

“Well,” said Elsa, “it’s a possibility to consider.”

They arrived at the door of a narrow town house. Elsa tugged on the bellpull, which produced a muffled twang somewhere deep in the house. As they waited, she snuck a glance at Faraz: his features looked composed, as if he'd regained his usual unflappable resolve.

The sound of heavy, not especially ladylike footfalls preceded the door swinging open. The woman on the other side was tall, thin, and severe. She was dressed in men's trousers and a long black frock coat, and her steel-streaked hair was pulled back in a tight chignon at the back of her neck.

Elsa cleared her throat. "Rosalinda . . ."

"Signora Scarpa, if you please," she corrected. Her expression closed down at the sight of them, as if she had shutters she could lock behind the windows of her eyes.

Elsa felt her own expression darken in response. She opened her mouth to reply, but Faraz smoothly cut in. "Our apologies, Signora Scarpa, if we're disturbing you at an inconvenient hour."

Instead of replying, she scrutinized them with that hooded, hawk-like gaze of hers; she glanced at Elsa's hip, noting the revolver Elsa had taken to carrying. At least she didn't slam the door in their faces.

Faraz took this for an invitation to continue. "We'd like to speak with you about Leo. May we come in?"

With a sigh, she let them in and led them down a short hall to a sitting room, where she grudgingly waved them toward a pair of chairs.

Signora Scarpa's sitting room was neither particularly fancy nor particularly "lived-in," as Alek de Vries liked to call his cluttered flat in Amsterdam. The thought sent a pang of guilt through Elsa—for leaving her home world of Veldana, and for asking Alek to stay there to look after her terribly ill mother. Alek had mentored Jumi when she first learned scriptology, and though he

was the closest thing to a grandparent Elsa ever had, she still felt that the responsibility to care for Jumi was hers alone. *What's done is done*, she chided herself. If she wasted time dwelling on decisions already made, she'd never get anywhere.

Faraz was telling Signora Scarpa about what happened with the editbook, Leo, and Garibaldi. If Scarpa's expression had been closed before, now it seemed to have turned to stone. Impenetrable and unreadable. Not an especially good sign; Elsa had hoped for *some* kind of reaction.

"So what are you doing here?" Signora Scarpa said, when Faraz finished the story.

"We came to you for help," Elsa said. "That is, assuming you care at all about what happens to your world, or to Leo." Talking about Leo as if he were an innocent victim felt like drinking acid, but she doubted the alternative would get her anywhere.

"Under my roof, you will watch that mouth of yours," Signora Scarpa snapped. "That boy is like a son to me. Do you think I live in Pisa by happy coincidence?"

Elsa shrugged. "I don't pretend to have any notion why you do the things you do."

"I trained him since he was old enough to pick up a foil," Signora Scarpa said. Her voice started out tight and soft, but her volume rose as she continued. "I was the one who got him out of Venezia alive, and *I* was the one who comforted him when he woke up screaming in the middle of the night for months afterward. Then the Order exerted their right of custody—caring only that he was a pazzere, not that he was a scared child—and I was expected to simply turn him over to the care of strangers. So yes, I asked the Carbonari to transfer me to Pisa. Not so I could manipulate him, as you seem to believe. But because he was a child and he needed me."

Elsa felt heat rise in her cheeks. Perhaps she should not be so quick to distrust everyone.

Faraz cleared his throat. “If you want to help Leo, he needs it now more than ever. Assuming you aren’t”—Faraz paused, his gaze flicking over to meet Elsa’s for a fraction of a second—“pleased to see him back in the custody of his father.”

“He’s being manipulated,” Scarpa said with rock-hard certainty. “If he isn’t simply held against his will.”

Faraz offered a weak smile. “That’s what we think, too.”

“Not *think*,” she insisted. “I *know*.”

Elsa said, “Either way, we’ve been trying to locate him, but he’s well hidden. We were thinking it might be easier to track Aris, but for it to work we need something—an object, a possession—that belonged to him.”

Signora Scarpa frowned in a way that suggested she doubted Elsa’s intelligence. “The Trovatelli estate *burned*. It wasn’t as if we had much opportunity for collecting keepsakes. And I imagine anything of sentimental value would have left with Aris before the fire, in any case.”

“It doesn’t have to be his most favorite possession ever,” Elsa said testily. She took a breath, reining in her temper. “If you can think of anything at all, it would be most appreciated.”

Signora Scarpa still looked skeptical, but she nonetheless paused to think on it. “There was a mask. A carnevale mask, white with a long snout—the plague doctor mask, do you know it?” she said, turning to Faraz, who shook his head. “The spring before the fire, Ricciotti let Leo and Aris go out during carnevale by themselves. They ended up at my place somehow, wide-eyed and out of breath, but they wouldn’t tell me what trouble they’d gotten into.” Rosalinda smiled slightly at the memory, then caught herself and straightened her expression. “Aris left the

mask behind by accident. So later I gave it to Leo as a remembrance. I don't know if he's kept it this whole time, though."

Elsa nodded, relieved. "It's something to look for. Thank you."

She and Faraz made ready to depart, but Signora Scarpa forestalled them.

"Wait," she said, "just for a moment."

Elsa turned back and looked at her expectantly.

Her face was a mask of non-expression, but she pressed her thumb into her opposite palm, as if she were struggling with a difficult decision. Finally, she said, "I believe you already know this, but . . . Garibaldi is dangerous."

"Yes, of course," Elsa said impatiently.

"That's not all." She shook her head in dismay. "I suspect Aris is also dangerous, in a way entirely different from his father. And because of that, I fear Leo may be dangerous as well—dangerous to you, I mean. Do you understand?"

Elsa swallowed around a lump in her throat. "I—yes, I think I do."

Signora Scarpa's expression quivered, as if she was struggling to keep her emotion off her face. "I'm not trying to say you shouldn't rescue him. Nothing could be worse for Leo than falling under their influence. But, by the time you find him . . . he may not understand that anymore."

Elsa wanted to snap that it was too late, that Leo had already willingly given himself over to their corrupting influence. But instead she pushed her anger down deep, where it could not escape from between her lips. "We'll work fast."

"I hope you do," she said.

"Signora Scarpa . . ." Elsa hesitated, aware she was edging onto uncertain ground. "Once we have a location, can we count

on your assistance? The assistance of . . . of the Carbonari, I mean.”

While Garibaldi had parted ways with the Carbonari over methodological disagreements, they still shared the same fundamental goal: to unite the four states of Italy into a single country. And if anyone could help Elsa become a spy, it was this woman.

Signora Scarpa’s thin lips twisted into a grimace. “To what end?”

“I need to infiltrate Garibaldi’s operation as a supposed defector from the Order of Archimedes,” Elsa said.

“There is a strict arrangement of noninterference between the Order and the Carbonari, and the Order sees Garibaldi as *their* problem to solve. Officially, my answer has to be no.”

Faraz raised his eyebrows. “And unofficially?”

There was a pause before Signora Scarpa answered, “Come to me when you know more, and I’ll see what can be done.”

2

IT HAD LONG SINCE COME TO MY ATTENTION THAT PEOPLE OF ACCOMPLISHMENT RARELY SAT BACK AND LET THINGS HAPPEN TO THEM. THEY WENT OUT AND HAPPENED TO THINGS.

—*Leonardo da Vinci*

Leo couldn't remember the last time he truly wanted to be left alone. It didn't come naturally to him, he who usually thrived on the company of others. But no matter how Aris behaved—enthusiastic, annoyed, bossy, concerned—he always inevitably served as a reminder of everything Leo had ruined. Even if he could find comfort in his brother's companionship, he wasn't ready to let anyone replace his old friends. And his father was worse—Ricciotti had a talent for making Leo feel reduced to a petulant child, when he wasn't too busy planning revolutions to remember about Leo at all.

Leo leaned against the window frame in his new bedroom, grateful to have a moment to himself. There was nothing in the world so exhausting as pretending to be happy. The diamond-shaped panes of glass were cool to the touch, and the view beyond looked even colder, the naked, craggy peaks of the Italian Alps

free of ice only by virtue of the season. There was green in the valley below, but it seemed impossibly remote, at the bottom of a precipitous drop.

The view was almost enough to make even Leo dizzy, and certainly enough to make him glad he wasn't prone to fear of heights like Faraz. *Faraz*, his best friend, whom he would never see again.

There was something poetic about Ricciotti Garibaldi hiding out in such a cold, remote location. Certainly more fitting than the tenement building in Nizza where their reunion had taken place. That had been a center of operations, but not a home. This stronghold was where his father and Aris had lived these past seven years, ever since they'd fled Venezia without him. To Leo it seemed as unsentimental as it was opulent, though Aris was comfortable enough here.

Aris, who refused to understand. Aris, who had never been discarded like an obsolete machine.

Leo pressed his forehead against the glass and let the cold seep into him.

His gaze fell on the windowsill, and he frowned. Were those marks carved into the stone outside the glass? He reached for the latch and yanked the window open, stiff hinges creaking. The narrow ledge beyond the window frame had eight long grooves carved into it, two pairs of four, almost like . . . claw marks? Leo ran a finger over the rough edges, then spread his fingers to measure the span. No, the grooves were too far apart to have been made by a hand—a human hand, at least.

“I hope you're not weighing the merits of jumping.”

Leo whirled around. His father stood in the doorway. He felt a reflexive flash of guilt, as if he were a child caught breaking the rules, but it was quickly replaced with annoyance. He hadn't done

anything wrong, and even if he had, he was long past caring what Ricciotti thought of him.

“I was airing out the room.” With slow deliberateness, he swung the window closed and latched it. He did not ask about the marks on the ledge.

Ricciotti clasped his hands behind his back and stepped casually into the room. “I know you’re not happy here.”

Leo raised his eyebrows. “Really, Father? Whatever gave you that impression?”

“So stubborn,” Ricciotti said. “You were never this stubborn when you were a boy.”

“It’s not as if you’ve kept up to date. A lot can change in seven years.”

He sighed. “Listen, Leo—when our situation in Venezia became untenable, my hand was forced. I would have waited until you were older if I could have. And it was always my intent to retrieve you, when you were old enough to understand what we’re trying to do.”

Leo felt his throat tighten with anger. Quietly, he said, “Don’t you dare pretend your children were ever a priority for you. Pasca *died* in that fire. What could you possibly say to make that right?”

“Nothing,” Ricciotti admitted. “I don’t expect you to forgive me, but you have one brother still alive. I only ask that you not punish Aris for my mistakes.”

“You know why I’m here,” Leo said, tight-lipped. He was the consolation prize for letting Elsa and her mother go free. “I intend to honor my end of the bargain, but I never promised to enjoy it.”

Ricciotti’s eyes narrowed. “And what good are you to us like this? Do I have to remind you how valuable Elsa could be—another polymath, and one who already knows how to safely use the editbook?”

A thread of icy panic laced through him at the mention of Elsa, and Leo fought to keep his expression stoic. “Careful, Father. Are you so eager to find out what happens when you threaten me?”

Ricciotti laughed. “Whether you like to admit it or not, you certainly are my son.” He turned to walk out, then paused in the doorway. “Your brother is waiting in the ballroom. I expect you to attend him.”

Ricciotti swept away down the hall, leaving Leo wordless in his wake.

Leo considered disobeying his father, but in the end he decided this particular hill was not worth dying on. Without a doubt there would be worse battles than this, and it would be smarter to save his energy for one that mattered. So he left his room and went downstairs.

The grand ballroom had no furnishings whatsoever, not even curtains on the tall windows lining the south wall. His footsteps echoed as he entered the empty space.

“Heads up!” Aris called, and threw a fencing foil at Leo.

Leo snatched it out of the air, reacting instinctively despite his surprise. He raised an eyebrow at his brother. “We’re fencing now, are we?”

“What, you don’t like it anymore? We always used to fence.” Aris’s brow pulled down in a scowl, and Leo felt tension building in the air like an electric charge.

“No, it’s fine,” Leo said quickly, heading off his brother’s mood before it could solidify.

Aris’s tawny eyes lit up—nothing delighted him like getting his way. He strapped on a wire-mesh fencing mask, tossed a second mask to Leo, and brandished a foil of his own. He was taller than Leo, which gave him a bit more reach, and his wiry body moved with a tense, coiled energy.

Leo swung the training foil through the air experimentally. The foil was lighter than his rapier and not as well balanced, but it felt eerily familiar. Had Aris bothered to rescue their fencing equipment from the house fire in Venezia all those years ago? *He took the foils with him, but left me behind.*

Leo shook his head to clear it. Aris had been young, too, back then, and was only following their father's commands. Besides, now was not the time to dwell on it.

"En garde?" Aris said, grinning like a fiend behind the protective mesh of his headgear.

Leo raised the blunt tip to eye level and widened his stance. They began—lunge and parry, shuffle step, flick of the wrist—more akin to a dance than a battle. Leo thought hard about how skilled he should appear. If he beat Aris soundly, his brother's good mood would vanish, as would any future advantage Leo might have in a fight. But if he played it too slow, Aris would realize it was an act; they'd crossed swords in the labyrinth, after all, and Leo had held him off then, long enough for Elsa and Porzia and Faraz to get away with the editbook. Back before Leo realized he would have to betray them all. Lord, that memory ached.

Aris landed a hit.

"Touché," Leo admitted with a rueful smile. Apparently all he had to do to fake mediocrity was let his mind wander.

Annoyed, Aris said, "You're distracted."

Leo saw no point in denying it. "I have a lot on my mind."

Aris scowled. "If you don't pay attention, I'm going to gut you like a fish."

Leo dropped out of his stance, feigning dismay. "I'm afraid that might happen either way. You've gotten quite good."

"Don't worry, you'll catch up soon enough," Aris said, somewhat mollified. "You were always a quick study with a foil, and now that you're home, we'll practice every day."

Leo almost snapped, *This isn't my home*, but he swallowed the words. "All right then, brother," he said. "Let's practice."

Leo raised his foil to the ready position. He'd fought his way out of some tricky situations in the last few weeks. Stopped a runaway train, thwarted a Carbonari-trained assassin, navigated a madman's scribed labyrinth. Here at last was the trap he could not escape from: family.

But perhaps he was thinking about this situation all wrong. There was genuine delight written in Aris's features. Could Leo strengthen their bond of brotherhood and turn Aris against their father? Ricciotti had the editbook but no scriptological talent of his own—he would have to rely on Aris to figure out how to use it.

So there *was* a way Leo could throw a wrench in Ricciotti's plans, after all.

Alek de Vries looked up from the writing desk to watch Jumi. She sat on her cot, awake, leaning against the wall amongst a nest of pillows. There was a book open in her lap, but she was staring off into space instead, a frown line creased between her dark eyebrows.

Sighing, Alek set down his fountain pen and closed the lid on the inkwell. Worrying about Jumi really ought to be declared the national pastime of Veldana.

"What is it?" he said. "What's bothering you?"

She turned her head quickly, startled, and blinked those eerie green eyes at him. "Hmm? Oh, just thinking. Wondering what will become of Montaigne, now that he's in custody."

It was Alek's turn to frown. Montaigne, his once-friend, who had scribed the Veldana worldbook and then spent the next eighteen years bitterly regretting it. The Veldanese had no interest in glorifying their creator, and Jumi had held the editbook over

Montaigne's head like the sword of Damocles—not that it excused his terrible decisions.

“The Order of Archimedes will decide what to do with him,” Alek said. “He conspired with Garibaldi. He broke our most basic rule.”

“Don't be a miserable pig?” Jumi said dryly.

“Don't involve yourself in politics.” Alek paused. “Which is almost the same thing, now that I think about it.”

A quick rap on the cottage door interrupted their conversation. Jumi moved to stand, but Alek waved a hand at her reprovingly and got up to answer it himself. From the door he could see down the slope to the other whitewashed, thatch-roofed cottages of the village, tucked into the valley with cypress trees rising behind like protective sentinels. It could have been a scene from the Mediterranean, except for the subtle alien scent to the air that never quite allowed Alek to forget he was in a scribed world.

In any case, the boy waiting on the stoop shouldn't have to suffer through Alek's ruminations. “Good afternoon, Revan,” Alek said in Veldanese, his command of the language somewhat shaky.

“Good afternoon, Honored de Vries,” the boy pronounced slowly for Alek's benefit.

He held the door wide to let Revan in. Alek still thought of Revan as the restless skinny boy who had followed young Elsa around everywhere. He was a grown lad now—tall for a Veldanese and filling out, his brown complexion made even darker by long hours in the sun. Still restless, though.

Revan aimed straight for the cot set up against the side wall of the cottage. He crouched beside Jumi and they spoke in rapid Veldanese, the liquid syllables flowing off their tongues so fast that Alek caught only one word in three. Alek went back to the

writing desk, turning his attention away to give them some semblance of privacy despite the smallness of the cottage.

He ran a hand over the half-blank page of the worldbook open before him. The scriptology paper seemed to pulse slightly, like the slow heartbeat of some hibernating animal. The book wouldn't truly feel alive until he'd finished it, though. Assuming he *could* finish it. He was attempting to duplicate a worldbook scribed by Elsa, which gave her the ability to open portals between two locations on Earth. Most scriptological scholars would call the doorbook—as Elsa had named it—a ludicrous impossibility, but Alek had seen it, and used it, and knew for a fact that it was real.

He didn't understand how she'd pulled it off, though. He had nearly five decades more experience and study, and he still couldn't figure it out.

Alek didn't look up from his project again until Revan stood to leave. The boy's gaze swept over the cottage like a searchlight before he made for the door. Alek frowned, but told himself it was nothing. The Veldanese simply had more of a cultural emphasis on awareness of one's surroundings.

"What was that about?" he asked, after Revan had gone.

"Everything's fine," Jumi assured him, fingering a page of the novel still open in her lap. "Some of the villagers want to learn how to use the portal devices."

"Why?"

"In case of emergency. When Elsa and I were both off-world, Veldana was entirely cut off from Earth."

Alek harrumphed. "With the editbook in Garibaldi's hands, it's probably safer here, inside the Veldana worldbook, than it is in the real world."

"Still, we need to be better prepared," she said. He could tell the *we*, in this case, meant *us Veldanese* rather than *you and I*.

Alek nodded, but in his mind he was replaying Revan's visit. He couldn't shake the feeling that the boy was up to something.

Leo kept himself awake by mentally reviewing what he knew about the layout of his father's alpine fortress. He composed a blueprint in his mind's eye, sketching all the places he'd been so far, and all the unknowns implied by the negative space around those places. He might need to know these things, and soon.

Claw marks outside his window. Was he being watched? If he went digging for answers, would they immediately know? Was it Aris or Father, or some outside force trying to monitor him? The Carbonari, maybe, or the Order. Leo felt torn between a desire to act, to *do* something about it, and a desire not to tip his hand too soon. Assuming someone actually was watching him, they did not yet know that Leo knew he was being watched, and that could be useful.

It was a quandary, when the thing you wanted to investigate was your own surveillance.

The house had been quiet and dark for hours. Leo stared at the ceiling of his room, waiting. There was a grandfather clock at the end of the hall, and if he lay very still, he could hear the swish and clack of its pendulum as it measured time.

Now, he decided, and slid off the bed. In the dark, he fumbled with the velvet-trimmed flannel smoking jacket that had been left in the room for his use, impatient to wrap himself tightly against the chill. The nights were as cold here in May as Casa della Pazzia was in the dead of winter.

He lit a candle, eased his bedroom door open, and slipped out into the hall. Sneaking around the house, in and of itself, should not tip off his surveillants. There were a dozen reasons he might

want to go exploring at night. One might even argue that if he *didn't* go sneaking around, that would be a sure sign he knew he was being watched.

So he padded barefoot down the hall. By the time he reached the bottom of the stone stairs, his feet were freezing, but that was the price he paid for moving silently.

To his right gaped the dark maw of the entranceway into the ballroom, the large space swallowing the meager light of his candle. At the far end the moonlit windows seemed to hover in the air like specters. Leo turned the other way instead—north, into the bowels of the fortress, where the boundaries between the house and the mountainside blurred together.

As he followed the dark hallway, he stopped at every door and listened for a minute, ears straining for any sign of movement within. When he heard none, he would try the knob. Some of the doors were locked, which would not usually provide much of a deterrent for Leo, but he'd left his lockpicks hidden in his room. He was saving those for when the need was urgent; he didn't want to risk getting the lockpicks confiscated over some undirected exploration. Still, it was hard to walk away from those doors—the mere fact that the locks were denying him entry made him itch to get past them. Locking a room was as good as *begging* a mechanist to break in, and for a fleeting moment Leo wondered if this was some game Aris was playing with him.

Now you're getting paranoid, he thought, and moved on to the next door.

Whenever he found an unlocked room, he did a quick sweep inside. A disorganized storage area full of empty shipping crates. A long chamber lined with empty cots, which might serve as a barracks or a hospital, perhaps. And then, deeper into the mountainside, a wide, tall room outfitted as a mechanist's laboratory.

Leo paused in the doorway, suspicious. Lit only by his candle, the hulking machines cast enormous, distorted shadows against the walls and ceiling. There was no heat in the air, no telltale smell of lubricant, no sign that someone had been at work that evening. So why, then, would the door be left unlocked? They were hosting a mechanist of questionable loyalty; they should have secured the tools the minute Leo arrived.

Leo carried his candle over to one long workbench, and he did not have difficulty finding a place to set the holder down. Everything was quite clean and organized—meticulously, almost obsessively organized. Leo could not help but smile a little at that. Even as a boy, Aris had insisted on keeping everything in its proper place. Leo, on the other hand, would set a tool down any old place and have no trouble remembering where he'd put it the next time he wanted it. "Away" was wherever the tool landed when he let go. That had always driven Aris nuts.

Leo idly ran his fingertips along the dustless, polished wood of the workbench. It was comforting that some things never changed. He still *knew* his brother, and it gave him hope that Aris could be swayed from the path Ricciotti dictated.

Then the smile fell from his face. Neat was not the only thing Aris had always been—he'd also been possessive and manipulative. There was no way Aris would leave his laboratory unlocked by accident, which meant he'd left it open for Leo to find. What was this—an offering? A lure?

Perhaps Aris wanted Leo to search the lab and find evidence of whatever had left those claw marks outside the window. Or search the lab and find an absence of evidence. Or the unlocked lab and the claw marks were unrelated, and Aris had some other motive. Leo turned over each possibility, mentally mapping them out like planning future moves in a game of chess.

He picked up the candleholder again and moved deeper into the laboratory, examining his brother's machines. Toward the back was another workbench, this one with a thin white sheet draped over the lumps and angles of some half-completed mechanical components. And atop the cloth was a note, the careful loops of Aris's cursive standing out starkly against the pale paper and paler cloth.

It read: *Don't touch my stuff.*

Leo moved the note aside and gently lifted the sheet to see what lay beneath.

A procession of tiny clockwork parts was spread across the wood, each gear and bolt and screw positioned precisely as if they were soldiers lined up for a march. Leo turned the cloth back farther and discovered a half-built mechanical hand, brass skeleton joints shining in the candlelight. He froze and stared at it—could this be the evidence he was looking for?

But no, the size didn't look right. Leo held out his hand for comparison, and the brass skeleton fingers were no longer than his own. This part could not belong to whatever creature dug those grooves into his windowsill.

He uncovered more of the workbench and, with it, a second note. It read: *Fine. Be that way. But for the love of God, put things back where you found them.*

Leo smiled again. Despite their years of separation, how well Aris knew him. And chess had always been Aris's game.

Leo saw little of his father the next day, and even less of Aris. At first he treasured the solitude, but his relief at their absence soon transformed to suspicion. For them to leave him so unattended, something must be going on—something of import.

Leo walked the empty hallways, pausing at each closed door, until he heard movement within his father's study. He froze, then leaned in, pressing his ear to the wood.

On the other side a voice spoke—muffled, yet still recognizably belonging to Aris. “You want to know how it's going? Slowly. Like a snail. That's how it's going.”

Ricciotti's voice replied, “What can be done to expedite the process?”

Aris let out a disbelieving laugh. “Father, the entire book is written in a language *nobody can read*. I have to decipher the grammar and syntax and vocabulary—all without any references—before we can even begin to use it.”

There was a long pause, and Leo could vividly imagine the stare that must be passing between Aris and Ricciotti.

Eventually, Aris broke the thick silence. “We shouldn't have let the girl go. She's valuable.”

“Must you constantly second-guess my decisions?” Ricciotti said, half-amused and half-annoyed.

“Do you know what the locomotive engineer told the police? I read the report. She left through a portal and came back with a device that put out the fire in the firebox. Father, she's a polymath.”

Ricciotti sighed audibly. “Yes, Aris, I am aware. But your brother made the conditions for his return quite clear.”

“I was right that we should have retrieved Leo sooner, and I'm right about this, too. We need her skills. Even more, we need her language.”

“But we don't need her yet. For now, she is serving a different purpose—she gives Leo a reason to stay. In time, he'll remember he belongs with us, and her freedom will no longer be a necessary bargaining chip.”

Leo pushed away from the door, struggling to stay silent. His hands, he realized, were shaking. Panic lit his veins and buzzed in his brain. *No, no, no, please no.*

After everything he'd sacrificed to buy her freedom, Elsa was still not safe from his father.

3

SCIENTISTS DELIGHT NOT IN ABUNDANCE OF MATERIAL;
THEY REJOICE ONLY IN THE EXCELLENCE OF THEIR
EXPERIMENTAL METHODS.

—*Jabir ibn Hayyan*

They walked back through the narrow, straight streets and wide-open piazzas of Pisa. There was a renewed energy to Faraz's step, and Elsa had to hurry to keep up with his long legs.

Back at Casa della Pazzia, he took the grand staircase two at a time. Faraz was the one to open the door and let them into Leo's bedchamber, seemingly comfortable with the thought of entering his friend's space uninvited. Elsa, however, stepped into the middle of Leo's large room and looked around awkwardly.

Afternoon sunlight streamed through the glass doors that led onto the balcony. Aside from the bed and a garishly upholstered wingback chair, there was a wardrobe and shelves and drawers, all overburdened with more possessions than one person could possibly need. She hadn't noticed before, but apparently Leo was the sort of person who hoarded *everything*.

“On the bright side,” said Faraz, eyeing the mess, “I find it highly unlikely that Leo would have thrown out the mask.”

Elsa started with the wardrobe, hoping this would be the easiest hiding place to eliminate. It was packed full, so she felt around to confirm everything was made of cloth. She struggled to understand how anyone could accumulate so much junk—her own unsentimental upbringing had taught her that the value of an object was its practical use, but Leo’s collection of stuff was clearly about something more personal than utility.

She said, “I don’t know about you, but I feel a little strange going through his things like this.” It seemed somehow intimate, as if exploring Leo’s private space would bring her closer to him—whether she wanted that or not.

Faraz was searching the shelves, undeterred by such inhibitions. “Look at this,” he said, holding up a folded sheaf of paper. “Playbill from an opera we saw more than a year ago.” He put it down and pointed at a badly corroded, broken sextant. “Salvaged from a tall-ship wreck we explored when we were fourteen. Ticket stub from our first train ride to Firenze. And I don’t even know when this is from,” he said, fingering a wine cork that Leo had kept for some reason. “I swear, he’s worse than a magpie.”

This seemed to delight Faraz, as if it were tangible proof that the Leo he remembered had, in fact, existed. But looking around, Elsa sighed. How could a person who clung with apparent sentimentality to every scrap of his life simply walk away from all of it, with nothing but the clothes on his back and the tools in his pockets? To Elsa, the clutter spoke of a desperate need to feel settled and at home here in Casa della Pazzia. Was Garibaldi now fulfilling that need?

Were all of them—the Pisanos and Faraz and Elsa—nothing but a poor substitute for the true family he’d always yearned after?

Elsa pushed the thought away, along with the sharp pain it gave her, and went back to searching. She concluded that nothing was hidden in the wardrobe other than a reluctance to dispose of old clothes, and she moved on to exploring the contents of an ornately carved cabinet with an abundance of little compartments.

“Isn’t *any* of this organized?” she huffed, frustrated.

“Oh, it’s all organized,” Faraz assured her. “But I’m afraid the method of organization is entirely opaque to anyone who’s not Leo.”

Elsa sighed and opened another little door, then froze. “Um, Faraz?”

“Yeah?”

“What color did Rosalinda say the mask was?” she said, reaching into the compartment.

Faraz shifted his weight, turning his attention toward her. “White.”

Elsa held up a broken piece of white ceramic. “I think we have a problem.”

Elsa needed to break something.

Hanging on the wall over the washbasin in her bedroom was a small, oval mirror with a somewhat tarnished silver frame. She lifted it off the wall and looked it over, familiarizing herself with every detail. It was heavier than she’d expected—not that she’d had much experience with such little luxuries before coming to Pisa. *The Europeans value rarities*, her mother once explained. *Minerals and metals that are hard to find in their world. But what is rarity to us, we who scribe the stone?*

“Casa?” she said, addressing the empty air.

The house’s smooth, low, artificial voice seemed to emanate from everywhere and nowhere. “Yes, signorina?”

“Who would you say this mirror belongs to?”

“Well.” Casa’s pause sounded thoughtful. “It hangs in your room for your use.”

“Yes, but does it really *belong* to me?” It didn’t feel like hers; it was simply an object that had been left in the rooms she borrowed.

“In what sense, signorina?”

Elsa rubbed her thumb against a spot of tarnish. “In the scriptological sense: the property of ownership.” The map world was a finicky invention—hence why the shattered fragments of the mask would not provide strong enough ownership for tracking—and Elsa needed a test object with clear ownership.

“Scriptologically speaking, it cannot belong to me, as I am neither human nor alive,” said the house. “I belong to the Pisano family, and so by extension all that I contain is theirs as well. Does that help?”

“Thank you, Casa. You are, as always, very helpful.”

“I exist to serve.”

Elsa nodded, padding barefoot through her sitting room with its absurdly lavish furniture upholstered in green-and-beige damask, and into her cozy, well-lit study, with its delightfully large writing desk. She should test the mirror first, to be sure, before breaking it.

“And to protect,” Casa added.

Elsa looked up. “What?”

“I *exist* to *protect*,” the house said emphatically.

“Riiight . . .,” Elsa said. She had no idea what that was about. “Thanks,” she said, to dismiss the house’s attention.

She set the mirror down on her writing desk and opened the tracking worldbook to the first page. Elsa had found the tracking book waiting for her outside the door to her chambers. Apparently

Porzia was *done* with the search, and Elsa and Faraz would have to continue without her assistance.

Elsa read the coordinates listed in the front of the worldbook and set the dials on her handheld portal device. She picked up the mirror again in her other hand and flipped the switch to activate the device.

A gaping black hole irised open, cutting through the air in the middle of her study. Elsa stepped into it. The cold, black nothingness of the in-between space washed over her, and then she passed through to the other side, stepping into ankle-deep salt water.

Inside the tracking world, a scale model of Europe stretched before her. She stood in the middle of the Adriatic Sea, towering like a giant over the landscape, the immensity of the Alps reduced to an inconvenience no taller than her shins. Turning left, she saw that the world now included the continent of Africa, and behind her was the Near East. The cuffs of her trousers were wicking up the water, so she stopped looking around and stepped across Europe to get to the podium-shaped machine that would control the tracking map.

She set the mirror atop the podium and fiddled with the controls, then yanked down on a large lever to start the machine. Gears whirred, and the targeting settled in with a series of *ka-chunk* noises.

When the machine was done, she sloshed back through the Atlantic to stand on Europe, staring down between her feet; on the map, a little red dot glowed over the location of Pisa within the Kingdom of Sardinia.

“Excellent,” Elsa murmured. The mirror had enough ownership property for the machine to target its owner—apparently Signora Pisano, since her husband was currently in Firenze at the headquarters of the Order.

Elsa grabbed the mirror and opened a portal back to her study in the real world. Then she shut the tracking worldbook to make room on her desk. Taking the frame in both hands, she whacked the mirror down against the desk's hard wood. It made a soft crunching noise, and a spiderweb of cracks marred the glass.

Now all she had to do was design a device that would repair the mirror without muddling the ownership property. The clarity that came with focusing on a task relieved her of anger, of hurt, of doubt. Elsa smiled.

She would build the device, fix the mask, and track down Aris. Then she would make her mother proud by recovering the editbook. Leo meant nothing, she told herself. The task was all.

Elsa prayed to nothing in particular as the machine chugged and huffed.

She was in the main room of her laboratory worldbook, with its smooth wood floor and ample worktables. The single broad window showed a view of waves lapping at the sandy shores of a barrier island, but the scene was an illusion; no outside existed beyond the laboratory walls in this world. The water was silent and bereft of the salt-and-decay scents of an actual sea, and the sight alone brought her little comfort. Elsa would have to scribe sound and smell sometime.

She turned back to watch the machine she'd just built. It was approximately the size and shape of a steamer trunk, though the steel and brass construction rendered it much heavier. The pitch of its whirring gears lowered as they slowed to a halt.

Elsa opened a pressure valve and waited a minute before reaching for the latch that held the machine's lid tightly sealed. The lid opened with a soft hiss. She pulled on a pair of long, thick

leather gloves and lifted out the still-hot oval mirror. Tilting it in the light, she held the mirror so close to her face she could feel heat wafting off the surface. Its cracks were sealed now, but there remained bubbly deformations in the glass where the cracks had been, like the glass equivalent of raised keloid scar tissue.

“Damn,” she muttered, setting the mirror down on another lab bench to cool. She pulled off the gloves and threw them across the room, which was momentarily satisfying but in the end not terribly productive.

Pressing one palm to her forehead, Elsa had to acknowledge she was exhausted. She had no notion of what hour it was—she deliberately did not keep a clock in her laboratory, since she disliked being reminded of the passage of time while involved in a project. Her stomach told her she had missed the dinner hour, though. She should take a break and eat something; perhaps a solution would present itself once she was refreshed.

The portal took her back to her rooms in Casa della Pazzia. As soon as she was through, Casa’s voice startled her, saying, “Signor Hannachi requests your presence in the alchemy lab, when you’re able.”

She squeezed her eyes shut, willing her heart rate to calm down. “Thanks for your, uh, *diligence* in delivering that message, Casa. I’ll go see Faraz now. Would you send some leftovers to the alchemy lab for me, please?”

“It would be my pleasure, signorina.”

As she navigated through the hallways of Casa della Pazzia, her mind drifted back to Leo. It was easy not to think of him when she was focused on calibrating the pressure gauge or tweaking the sealant formula to activate at a lower temperature. But as soon as she stepped away from the diversion of engineering, the betrayal and doubt came flooding back, and she felt as if she were walking

through a marsh where at any moment the next step might be the one that sucked her under.

At least she and Faraz were united in a common goal; Elsa needed that camaraderie. If she didn't force herself to trust someone now, she might never be able to do it again. Not after what Leo did. Elsa paused outside the alchemy lab door, part of her wanting to withdraw, but instead she made herself go in.

Faraz's laboratory—in contrast to Leo's—was immaculately clean, with the shelves of chemicals and cabinets of glassware all neatly organized. The white shards of the mask were laid out like puzzle pieces on the worktable in the center of the room, and beside them Faraz was sculpting a lump of clay with his hands.

Elsa said, "What do you have there?"

"Good evening," Faraz said, glancing up. "I was thinking I could shape a clay mold, and stick the broken pieces on the outside. Then we'd just need your machine to fuse the cracks."

"If I can ever get it to work," she said darkly.

"Of course you'll get it to work," he said with utter faith. He motioned for her to come over. "Take a look at this."

This was a book he had open on his worktable. Elsa touched the pages, but the paper felt dead to her—it was just a regular book, not a worldbook. "What is it?"

"A history of the plague," he explained, pausing to rub his nose with the back of his hand. "I found a sketch of what the plague doctor mask looks like. It was actually worn by doctors in the seventeenth century, if you can believe it."

Elsa leaned close to look at the picture. The mask was designed to cover the entire face, with two round holes for the eyes and a long, downward-curving beak like that of a mournful ibis. "Well," she said, "at least we now know what we're trying to reconstruct."

A bot let itself into the lab, bringing Elsa a bowl. “Thank you, Casa,” she said as she accepted the food—white beans and stewed tomatoes with sausage chopped into it. She was too hungry to care that it was room temperature, and started shoveling it into her mouth.

“How close are you with the machine?” asked Faraz, who had gone back to molding the clay, using the picture in the book as a guide.

“No idea. I can predict the chemistry, but figuring out how to retain the ownership property is blind trial and error,” Elsa said between bites. The food tasted of garlic and sage, with bursts of spiciness when she bit into a piece of sausage. “Though I should test it on something ceramic to check my temperature and pressure calculations.”

Faraz leaned away from the clay mold and shifted from side to side, examining it for imperfections. “Well, in about thirty seconds you’ll have an empty ceramic bowl,” he teased.

“Ha-ha,” she said around a large mouthful.

But by the time Elsa made it back to her rooms, the bowl was indeed empty, so she licked it clean and brought it through the portal into her laboratory.

She set the bowl on a workbench, rested a narrow-bladed chisel against the bottom, and gave the chisel a good whack with a mallet—splitting the bowl into two neat pieces. Now that the machine would have some physical damage to repair, she lifted the lid, placed the two halves of the bowl inside, and applied a thin trail of liquid sealant to the crack. Then she checked her notes, adjusted the machine’s settings, and let it run.

Elsa worked long into the night, running tests and more tests. They only had the one mask, so there was no margin for error. Casa brought her teacups and saucers and plates, and expressed

only mild reservations about allowing Elsa to break the Pisanos' fine china.

Once Elsa was satisfied with a visual inspection of the machine's results, she began taking her repaired objects through a portal into the tracking world and testing the strength of their ownership property. She kept tweaking the fusion machine until its products consistently retained a strong, clear ownership signal, and only then did she admit to herself that it was time to give in to exhaustion.

She took a portal back to her rooms in Casa della Pazzia. Outside her windows, dawn had already brightened the sky, and a songbird's melody permeated the glass, muted but audible. Apparently she'd worked the whole night away.

"Casa, I'm going to grab a few hours' sleep. Please wake me when Faraz has finished reconstructing the mask."

"As you wish, signorina," said the house.

This was going to work. She would make it work—by sheer force of will, if she had to.

Faraz's reconstruction of the mask was a work of art, as far as Elsa was concerned.

"Will this do?" he asked as he rested the mask-covered clay mold on an empty worktable in her laboratory.

For a moment, Elsa was too baffled to respond; she almost would have accused him of false modesty, if he didn't seem so genuinely unsure of the quality of his work. "Faraz, don't be ridiculous, it's a thing of beauty—I can barely see the cracks and we haven't even sealed them yet."

Together they prepped the mask with sealant, and Faraz carefully lowered it into Elsa's machine. She set the dials, took a deep

breath, and flipped the switch to turn it on. The machine hissed and hummed as the chamber got up to temperature.

“How does it work?” Faraz asked.

Elsa watched the gauges closely. The pressure needle was wavering a little, so she made a couple of fine adjustments. “The sealant lowers the melting temperature of the ceramic and the glaze just along the cracks, while the rest of it stays solid.”

“Doesn’t that leave behind trace contamination?”

“Nope.” There, that was better—the pressure needle held steady. “The sealant burns off when I increase the partial pressure of oxygen.”

Keeping an eye on the built-in timer, Elsa let the chamber hold at peak conditions for another ninety seconds before she turned the dial to increase the oxygen content. When the entire process was complete, she opened a valve and vented the chamber to equilibrate it with the air in the room.

Elsa said, “If you’re the praying type, now would be the time.”

“That’s not really how prayer works . . . for me, at least,” Faraz replied, his expression turning wistful.

Elsa shrugged. The Veldanese had no religion, so she grew up only vaguely aware of the concept; someday she’d have to get Faraz to explain it to her properly, but today was not the time for that.

She handed her thick leather gloves to Faraz and opened the chamber lid for what would hopefully be the last time. Faraz pulled on the gloves and gently lifted the plague doctor mask out of the machine, leaving behind the clay mold he’d used for the reconstruction. The mask held together in his hands.

Faraz set it down on an empty workbench, and Elsa leaned in for a closer look. The seals in the porcelain looked almost

seamless—Faraz had done an excellent job of fitting the pieces together, and after a whole night of trials, Elsa had the machine running optimally.

Elsa dared to hope. “So far, so good. We should let it cool before taking it into the tracking world—let’s not risk a rapid temperature change.” She worried the cold nothingness between portals would crack the mask if it was still hot.

They let it sit on the bench for an agonizing few minutes. When the anxious impatience in her chest became too sharp to bear, Elsa tapped her naked fingertips against the mask, testing its temperature, and found it still warm but not painfully so.

They both took off their boots. Elsa picked up a portal device and Faraz lifted the mask, and together they stepped through a portal into the shallow water of the Adriatic Sea. They walked across Europe and into the Atlantic, and Faraz placed the mask atop the tracking podium with a care bordering on reverence.

“Moment of truth,” he breathed.

Elsa grinned at him. “Truth is what we make it to be.”

She adjusted the controls and pulled the lever to input the target. The mechanical innards of the podium chugged and whirred, and then the targeting was complete.

Faraz said, “Did it work?”

Elsa sloshed her way back through the ankle-deep Atlantic to continental Europe. “Check the map. Do you see the dot?”

They stared down at the map beneath their feet. After a tense moment of searching, Elsa spotted the red dot of light, its glow partially obscured by the rugged alpine topography. “Here!”

A location, finally—she’d found Aris, and he would lead her to the editbook.

Faraz picked his way over and examined the location. “They’re in the mountains outside the city of Trento. That whole region north of Venetia still belongs to the Austrian Empire.”

“Is that going to be a problem?” Elsa’s grasp of European politics was tenuous at best. For most of her life, she’d thought of existence as divided into two categories: Veldana and not-Veldana. The divisions between countries on Earth were trivial compared with this most important of distinctions, or so Jumi had encouraged her to think. At the moment, though, she was painfully aware that her ignorance of political matters was a weakness.

Faraz’s features settled into a thoughtful expression. “The border crossing could prove problematic, but Rosalinda may have a solution to that. I’d be surprised if the Carbonari didn’t have someone who could forge papers.”

“Papers?” Elsa asked, confused.

“Identification.”

“Oh,” she said, though she still wasn’t sure what exactly he meant. “Anyway, will you bring the news to Rosalinda for me?”

“Of course,” said Faraz. “But what will you do?”

The flood of elation at their success was gradually receding as Elsa focused on the next problem that needed to be solved. “The Carbonari are my way in, but I’ll also need a way out.” She took a deep breath. “And for that I’ll need Porzia.”