



HARRY POTTER AND THE METHODS OF RATIONALITY

BY LESSWRONG

CONTENTS

22. The Scientific Method	3
23. Belief in Belief.....	29
24. Machiavellian Intelligence Hypothesis	48
25. Hold Off on Proposing Solutions	62
26. Noticing Confusion	79
27. Empathy.....	97
28. Reductionism	125
29. Egocentric Bias	148
30. Working in Groups, Pt 1.....	166
31. Working in Groups, Pt 2.....	188
32. Interlude: Personal Financial Management	192
33. Coordination Problems, Pt 1	197
34. Coordination Problems, Pt 2.....	226
35. Coordination Problems, Pt 3.....	239
36. Status Differentials	253
37. Interlude: Crossing the Boundary	266

CHAPTER 22

THE SCIENTIFIC METHOD

Something, somewhere, somewhen, must have happened differently...

PETUNIA EVANS married Michael Verres, a Professor of Biochemistry at Oxford.

HARRY JAMES POTTER-EVANS-VERRES grew up in a house filled to the brim with books. He once bit a math teacher who didn't know what a logarithm was. He's read *Godel, Escher, Bach* and *Judgment Under Uncertainty: Heuristics and Biases* and volume one of *The Feynman Lectures on Physics*. And despite what everyone who's met him seems to fear, he doesn't want to become the next Dark Lord. He was raised better than that. He wants to discover the laws of magic and become a god.

HERMIONE GRANGER is doing better than him in every class except broomstick riding.

DRACO MALFOY is exactly what you would expect an eleven-year-old boy to be like if Darth Vader were his doting father.

PROFESSOR QUIRRELL is living his lifelong dream of teaching Defense Against the Dark Arts, or as he prefers to call his class, Battle Magic. His students are all wondering what's going to go wrong with the Defense Professor this time.

DUMBLEDORE is either insane, or playing some vastly deeper game which involved setting fire to a chicken.

DEPUTY HEADMISTRESS MINERVA MCGONAGALL needs to go off somewhere private and scream for a while.

Presenting:

HARRY POTTER AND THE METHODS OF RATIONALITY

You ain't guessin' where this one's going.

Some notes:

THE SCIENTIFIC METHOD

The opinions of characters in this story are not necessarily those of the author. What warm!Harry thinks is *often* meant as a good pattern to follow, especially if Harry thinks about how he can cite scientific studies to back up a particular principle. But not everything Harry does or thinks is a good idea. That wouldn't work as a story. And the less warm characters may sometimes have valuable lessons to offer, but those lessons may also be dangerously double-edged.

If you haven't visited **HPMOR DOT COM**, don't forget to do that at some point; otherwise you'll miss out on the fan art, how to learn everything Harry knows, and more.

If you haven't just enjoyed this fic, but learned something from it, then please consider blogging it or tweeting it. A work like this only does as much good as there are people who read it.

And now, back to your regularly scheduled fic...

The key to strategy is not to choose *a* path to J. K. Rowling, but to choose so that *all* paths lead to a J. K. Rowling.

A small study room, near but not in the Ravenclaw dorm, one of the many many unused rooms of Hogwarts. Gray stone the floors, red brick the walls, dark stained wood the ceiling, four glowing glass globes set into the four walls of the room. A circular table that looked like a wide slab of black marble set on thick black marble legs for columns, but which had proved to be very light (weight and mass both) and wasn't difficult to pick up and move around if necessary. Two comfortably cushioned chairs which had seemed at first to be locked to the floor in inconvenient places, but which would, the two of them had finally discovered, scoot around to where you stood as soon as you leaned over in a posture that looked like you were about to sit down.

There also seemed to be a number of bats flying around the room.

That was where, future historians would one day record - *if* the whole project ever actually amounted to anything - the scientific study of magic had begun, with two young first-year Hogwarts students.

Harry James Potter-Evans-Verres, theorist.

CHAPTER 22

And Hermione Jean Granger, experimenter and test subject.

Harry was doing better in classes now, at least the classes he considered interesting. He'd read more books, and not books for eleven-year-olds either. He'd practiced Transfiguration over and over during one of his extra hours every day, taking the other hour for beginning Occlumency. He was taking the worthwhile classes *seriously*, not just turning in his homework every day, but using his free time to learn more than was required, to read other books beyond the given textbooks, looking to master the subject and not just memorize a few test answers, to excel. You didn't see that much outside Ravenclaw. And now even *within* Ravenclaw, his only remaining competitors were Padma Patil (whose parents came from a non-English-speaking culture and thus had raised her with an actual work ethic), Anthony Goldstein (out of a certain tiny ethnic group that won 25% of the Nobel Prizes), and of course, striding far above everyone like a Titan strolling through a pack of puppies, Hermione Granger.

To run this particular experiment you needed the test subject to learn sixteen new spells, on their own, without help or correction. That meant the test subject was Hermione. Period.

It should be mentioned at this point that the bats flying around the room were *not* glowing.

Harry was having trouble accepting the implications of this.

"*Oogely boogely!*" Hermione said again.

Again, at the tip of Hermione's wand, there was the abrupt, transitionless appearance of a bat. One moment, empty air. The next moment, bat. Its wings seemed to be already moving in the instant when it appeared.

And it *still wasn't glowing*.

"Can I stop now?" said Hermione.

"Are you sure," Harry said through what seemed to be a block in his throat, "that maybe with a bit more practice you couldn't get it to glow?" He was violating the experimental procedure he'd written down beforehand, which was a sin, and he was violating it because he didn't like the results he was getting, which was a *mortal* sin, you could go to Science Hell for that, but it didn't seem to be mattering anyway.

THE SCIENTIFIC METHOD

"What did you change this time?" Hermione said, sounding a little weary.

"The durations of the *oo*, *eh*, and *ee* sounds. It's supposed to be 3 to 2 to 2, not 3 to 1 to 1."

"*Oogely boogely!*" said Hermione.

The bat materialized with only one wing and spun pathetically to the floor, flopping around in a circle on the gray stone.

"Now what is it really?" said Hermione.

"3 to 2 to 1."

"*Oogely boogely!*"

This time the bat didn't have any wings at all and fell with a plop like a dead mouse.

"3 to 1 to 2."

And lo the bat did materialize and it did fly up at once toward the ceiling, healthy and glowing a bright green.

Hermione nodded in satisfaction. "Okay, what next?"

There was a long pause.

"*Seriously?* You *seriously* have to say *Oogely boogely* with the duration of the *oo*, *eh*, and *ee* sounds having a ratio of 3 to 1 to 2, or the bat won't glow? *Why? Why? For the love of all that is sacred, why?*"

"Why not?"

"*AAAAAAAARRRRRRRGHHHH!*"

Thud. Thud. Thud.

Harry had thought about the nature of magic for a while, and then designed a series of experiments based on the premise that virtually everything wizards believed about magic was wrong.

You couldn't *really* need to say 'Wingardium Leviosa' in exactly the right way in order to levitate something, because, come on, 'Wingardium Leviosa'? The universe was going to check that you said 'Wingardium Leviosa' in exactly the right way and otherwise it wouldn't make the quill float?

No. Obviously no, once you thought about it seriously. Someone, quite possibly an actual preschool child, but at any rate some English-speaking magic user, who thought that 'Wingardium Leviosa' sounded all flyish and floaty, had originally spoken those words while casting the spell for the first time. And then told everyone else it was necessary.

CHAPTER 22

But (Harry had reasoned) it didn't *have* to be that way, it wasn't built into the universe, it was built into *you*.

There was an old story passed down among scientists, a cautionary tale, the story of Blondlot and the N-Rays.

Shortly after the discovery of X-Rays, an eminent French physicist named Prosper-Rene Blondlot - who had been first to measure the speed of radio waves and show that they propagated at the speed of light - had announced the discovery of an amazing new phenomenon, N-Rays, which would induce a faint brightening of a screen. You had to look hard to see it, but it was there. N-Rays had all sorts of interesting properties. They were bent by aluminium and could be focused by an aluminium prism into striking a treated thread of cadmium sulfide, which would then glow faintly in the dark...

Soon dozens of other scientists had confirmed Blondlot's results, especially in France.

But there were still other scientists, in England and Germany, who said they weren't quite sure they could see that faint glow.

Blondlot had said they were probably setting up the machinery wrong.

One day Blondlot had given a demonstration of N-Rays. The lights had turned out, and his assistant had called off the brightening and darkening as Blondlot performed his manipulations.

It had been a normal demonstration, all the results going as expected.

Even though an American scientist named Robert Wood had quietly stolen the aluminium prism from the center of Blondlot's mechanism.

And that had been the end of N-Rays.

Reality, Philip K. Dick had once said, *is that which, when you stop believing in it, doesn't go away*.

Blondlot's sin had been obvious in retrospect. He shouldn't have told his assistant what he was doing. Blondlot should have made sure the assistant *didn't* know what was being tried or when it was being tried, before asking him to describe the screen's brightness. It could have been that simple.

Nowadays it was called "blinding" and it was one of the things modern scientists took for granted. If you were doing a psychology experiment to see whether people got angrier when they were hit over

THE SCIENTIFIC METHOD

the head with red truncheons than with green truncheons, you didn't get to look at the subjects yourself and decide how "angry" they were. You would snap photos of them after they'd been hit with the truncheon, and send the photos off to a panel of raters, who would rate on a scale of 1 to 10 how angry each person looked, obviously *without* knowing what color of truncheon they'd been hit with. Indeed there was no good reason to tell the raters what the experiment was about, at all. You *certainly* wouldn't tell the experimental subjects that *you thought* they ought to be angrier when hit by red truncheons. You'd just offer them 20 pounds, lure them into a test room, hit them with a truncheon, color randomly assigned of course, and snap the photo. In fact the truncheon-hitting and photo-snapping would be done by an assistant who hadn't been told about the hypothesis, so he couldn't look expectant, hit harder, or snap the photo at just the right time.

Blondlot had destroyed his reputation with the sort of mistake that would get a failing grade and probably derisive laughter from the T.A. in a first-year undergraduate course on experimental design... in 1991.

But this had been a bit longer ago, in 1904, and so it had taken months before Robert Wood had formulated the obvious alternative hypothesis and figured out how to test it, and dozens of other scientists had been sucked in.

More than two centuries after science had gotten started. That late in scientific history, it still hadn't been obvious.

Which made it *entirely* plausible that in the tiny wizarding world, where science didn't seem much known at all, no one had ever tried the first, the simplest, the most obvious thing that any modern scientist would think to check.

The books were full of complicated instructions for all the things you had to do *exactly right* in order to cast a spell. And, Harry had hypothesized, the process of obeying those instructions, of checking that you were following them correctly, probably *did* do something. It *forced you to concentrate on the spell*. Being told to just wave your wand and wish probably *wouldn't* work as well. And once you believed the spell was supposed to work a certain way, once you had practiced it that way, you might not be able to convince yourself that it could work any *other* way...

CHAPTER 22

...if you did the simple but wrong thing, and tried to test alternative forms *yourself*.

But what if you *didn't know* what the original spell had been like?

What if you gave Hermione a list of spells she hadn't studied yet, taken from a book of silly prank spells in the Hogwarts library, and some of those spells had the correct and original instructions, while others had one changed gesture, one changed word? What if you kept the instructions constant, but told her that a spell supposed to create a red worm was supposed to create a blue worm instead?

Well, in that case, it had turned out...

...Harry was having trouble believing his results here...

...if you told Hermione to say "Oogely boogely" with the vowel durations in the ratio of 3 to 1 to 1, instead of the correct ratio of 3 to 1 to 2, you still got the bat but it wouldn't glow any more.

Not that belief was *irrelevant* here. Not that *only* the words and wand movements mattered.

If you gave Hermione completely incorrect information about what a spell was supposed to do, it would stop working.

If you didn't tell her at all what the spell was supposed to do, it would stop working.

If she knew in very vague terms what the spell was supposed to do, or she was only partially wrong, then the spell would work as originally described in the book, not the way she'd been told it should.

Harry was, at this moment, literally banging his head against the brick wall. Not hard. He didn't want to damage his precious brains. But if he didn't have some outlet for his frustration, he would spontaneously catch on fire.

Thud. Thud. Thud.

It seemed the universe actually *did* want you to say 'Wingardium Leviosa' and it wanted you to say it in a certain exact way and it didn't care what *you* thought the pronunciation should be any more than it cared how you felt about gravity.

WHYYYYYYYYYYYYYYYYYY?

The worst part of it was the smug, amused look on Hermione's face.

Hermione had *not* been okay with sitting around obediently following Harry's instructions without being told why.

THE SCIENTIFIC METHOD

So Harry had explained to her what they were testing.

Harry had explained why they were testing it.

Harry had explained why probably no wizard had tried it before them.

Harry had explained that he was actually fairly confident of his prediction.

Because, Harry had said, there was *no way* that the universe actually wanted you to say 'Wingardium Leviosa'.

Hermione had pointed out that this was not what her books said. Hermione had asked if Harry really thought he was smarter, at eleven years old and just over a month into his Hogwarts education, than all the other wizards in the world who disagreed with him.

Harry had said the following exact words:

"Of course."

Now Harry was staring at the red brick directly in front of him and contemplating how hard he would have to hit his head in order to give himself a concussion that would interfere with long-term memory formation and prevent him from remembering this later. Hermione wasn't laughing, but he could feel her *intent to laugh* radiating out from behind him like a dreadful pressure on his skin, sort of like knowing you were being stalked by a serial killer only *worse*.

"Say it," Harry said.

"I wasn't *going* to," said the kindly voice of Hermione Granger. "It didn't seem nice."

"Just get it over with," said Harry.

"Okay! So you gave me this *whole long lecture* about how hard it was to do basic science and how we might need to stay on the problem for *thirty-five years*, and then you went and expected us to make the greatest discovery in the history of magic in the first hour we were working together. You didn't just hope, you really expected it. You're silly."

"Thank you. Now -"

"I've read all the books you gave me and I still don't know what to call that. Overconfidence? Planning fallacy? Super duper Lake Wobegon effect? They'll have to name it after you. Harry Bias."

"All *right!*"

"But it *is* cute. It's such a boy thing to do."

"*Drop dead.*"

CHAPTER 22

"Aw, you say the most romantic things."

Thud. Thud. Thud.

"So what's next?" said Hermione.

Harry rested his head against the bricks. His forehead was starting to hurt where he'd been banging it. "Nothing. I have to go back and design different experiments."

Over the last month, Harry had carefully worked out, in advance, a course of experimentation for them that would have lasted until December.

It would have been a *great* set of experiments if the *very first test* had not falsified the basic premise.

Harry could not believe he had been this dumb.

"Let me correct myself," said Harry. "I need to design *one* new experiment. I'll let you know when we've got it, and we'll do it, and then I'll design the next one. How does that sound?"

"It sounds like *someone* wasted a *whole lot of effort*."

Thud. Ow. He'd done that a bit harder than he'd planned.

"So," said Hermione. She was leaning back in her chair and the smug look was back on her face. "What did we discover today?"

"I discovered," said Harry through gritted teeth, "that when it comes to doing truly basic research on a genuinely confusing problem where you have no clue what's going on, my books on scientific methodology aren't worth crap -"

"Language, Mr. Potter! Some of us are innocent young girls!"

"Fine. But if my books were worth a *carp*, that's a kind of fish not anything bad, they would have given me the following important piece of advice: When there's a confusing problem and you're just starting out and you have a falsifiable hypothesis, go test it. Find some simple, easy way of doing a basic check and do it right away. Don't worry about designing an elaborate course of experiments that would make a grant proposal look impressive to a funding agency. Just check as fast as possible whether your ideas are false before you start investing huge amounts of effort in them. How does that sound for a moral?"

"Mmm... okay," said Hermione. "But I was also hoping for something like 'Hermione's books aren't worthless. They're written by wise old

THE SCIENTIFIC METHOD

wizards who know way more about magic than I do. I should pay attention to what Hermione's books say.' Can we have that moral too?"

Harry's jaw seemed to be clenched too tightly to let any words out, so he just nodded.

"Great!" Hermione said. "I liked this experiment. We learned a lot from it and it only took me an hour or so."

"AAAAAAAAAAAAAAAAHHHHHHHHHHHHHHHH H!"

In the dungeons of Slytherin.

An unused classroom lit with eerie green light, much brighter this time and coming from a small crystal globe with a temporary enchantment, but eerie green light nonetheless, casting strange shadows from the dusty desks.

Two boy-sized figures in cowed grey cloaks (no masks) had entered in silence, and sat down in two chairs opposite the same desk.

It was the second meeting of the Bayesian Conspiracy.

Draco Malfoy hadn't been sure if he should look forward to it or not.

Harry Potter, judging by the expression on his face, didn't seem to have any doubts on the appropriate mood.

Harry Potter looked like he was ready to kill someone.

"Hermione Granger," said Harry Potter, just as Draco was opening his mouth. "*Don't ask.*"

He couldn't have gone on another date, could he? thought Draco, but that didn't make any sense.

"Harry," said Draco, "I'm sorry but I have to ask this anyway, did you *really* order the mudblood girl an expensive mokeskin pouch for her birthday?"

"Yes, I did. You've already worked out why, of course."

Draco reached up and raked fingers through his hair in frustration, his cowl brushing the back of his hand. He *hadn't* been quite sure why, but now he couldn't say so. And Slytherin *knew* he was courting Harry Potter, he'd made it obvious enough in Defense class. "Harry," said Draco, "people know I'm friends with you, they don't know about the Conspiracy of course, but they know we're friends, and it makes *me* look bad when you do that sort of thing."

CHAPTER 22

Harry Potter's face tightened. "Anyone in Slytherin who can't understand the concept of acting nice toward people you don't actually like should be ground up and fed to pet snakes."

"There are a lot of people in Slytherin who *don't*," Draco said, his voice serious. "Most people are stupid, and you have to look good in front of them anyway." Harry Potter *had* to understand that if he ever wanted to get anywhere in life.

"What do *you* care what other people think? Are you really going to live your life needing to explain everything you do to the dumbest idiots in Slytherin, letting *them* judge *you*? I'm sorry, Draco, but I'm not lowering my cunning plots to the level of what the dumbest Slytherins can understand, just because it might make you look bad otherwise. Not even your friendship is worth that. It would *take all the fun out of life*. Tell me *you* haven't ever thought the same thing when someone in Slytherin is being too stupid to breathe, that it's beneath the dignity of a Malfoy to have to pander to them."

Draco genuinely hadn't. Ever. Pandering to idiots was like breathing, you did it without thinking about it.

"Harry," Draco said at last. "Just doing whatever you want, without worrying about how it looks, isn't smart. The *Dark Lord* worried about how he looked! He was feared and hated, and he knew *exactly* what sort of fear and hate he wanted to create. *Everyone* has to worry about what other people think."

The cowed figure shrugged. "Perhaps. Remind me sometime to tell you about something called Asch's Conformity Experiment, you might find it quite amusing. For now I'll just note that it's dangerous to worry about what other people think on *instinct*, because you *actually care*, not as a matter of cold-blooded calculation. Remember, I was beaten and bullied by older Slytherins for fifteen minutes, and afterward I stood up and graciously forgave them. Just like the good and virtuous Boy-Who-Lived ought to do. But my cold-blooded calculations, Draco, tell me that I have *no use* for the dumbest idiots in Slytherin, since *I don't own a pet snake*. So I have no reason to care what they think about how I conduct my duel with Hermione Granger."

THE SCIENTIFIC METHOD

Draco did not clench his fists in frustration. "She's just some mudblood," Draco said, keeping his voice calm, rather than shouting. "If you don't like her, push her down the stairs."

"Ravenclaw would know -"

"Have Pansy Parkinson push her down the stairs! You wouldn't even have to manipulate her, offer her a Sickle and she'd do it!"

"I would know! Hermione beat me in a book-reading contest, she's getting better grades than me, I have to defeat her with my *brain* or it doesn't count!"

"*She's just a mudblood! Why do you respect her that much?*"

"*She's a power among Ravenclaws! Why do you care what some powerless idiot in Slytherin thinks?*"

"*It's called politics! And if you can't play it you can't have power!*"

"*Walking on the moon is power! Being a great wizard is power! There are kinds of power that don't require me to spend the rest of my life pandering to morons!*"

Both of them stopped, and, in almost perfect unison, began taking deep breaths to calm themselves.

"Sorry," Harry Potter said after a few moments, wiping sweat from his forehead. "Sorry, Draco. You've got a lot of political power and it makes sense for you to keep it. You *should* be calculating what Slytherin thinks. It's an important game and I shouldn't have insulted it. But you can't ask *me* to lower the level of my game in Ravenclaw, just so that you don't look bad by associating with me. Tell Slytherin you're gritting your teeth while you pretend to be my friend."

That was exactly what Draco *had* told Slytherin, and he still wasn't sure whether it was true.

"Anyway," Draco said. "Speaking of your image. I'm afraid I've got some bad news. Rita Skeeter heard some of the stories about you and she's been asking questions."

Harry Potter raised his eyebrows. "Who?"

"She writes for the *Daily Prophet*," Draco said. He tried to keep the worry out of his voice. The *Daily Prophet* was one of Father's primary tools, he used it like a wizard's wand. "That's the newspaper people actually pay attention to. Rita Skeeter writes about celebrities, and as she puts it, uses her quill to puncture their over-inflated reputations. If she can't find any rumors about you, she'll just make up her own."

CHAPTER 22

"I *see*," said Harry Potter. His green-lit face looked very thoughtful beneath the cowl.

Draco hesitated before saying what he had to say next. By now someone had certainly reported to Father that he was courting Harry Potter, and Father would also know that Draco hadn't written home about it, and Father would understand that Draco didn't think he could actually keep it a secret, which sent a clear message that Draco was practicing his own game now but still on Father's side, since if Draco had been tempted away, he would have been sending false reports.

It followed that Father had probably anticipated what Draco was about to say next.

Playing the game with Father for real was a rather unnerving sensation. Even if they were on the same side. It was, on the one hand, exhilarating, but Draco also knew that in the end it would turn out that Father had played the game better. There was no other way it could possibly go.

"Harry," Draco finally said. "This isn't a suggestion. This isn't my advice. Just the way it is. My father could almost certainly quash that article. But it would cost you."

That Father had been expecting Draco to tell Harry Potter exactly that was not something Draco said out loud. Harry Potter would work it out on his own, or not.

But instead Harry Potter shook his head, smiling beneath the cowl. "I have no intention of trying to quash Rita Skeeter."

Draco didn't even try to keep the incredulity out of his voice. "You *can't* tell me you don't care what the *newspaper* says about you!"

"I care less than you might think," said Harry Potter. "But I have my own ways of dealing with the likes of Skeeter. I don't need Lucius's help."

A worried look came over Draco's face before he could stop it. Whatever Harry Potter was about to do next, it would be something Father wasn't expecting, and Draco was feeling very nervous about where that might lead.

Draco also realized that his hair was getting sweaty underneath the cowl. He'd never actually worn one of those before, and hadn't realized that the Death Eaters' cloaks probably had things like Cooling Charms.

THE SCIENTIFIC METHOD

Harry Potter wiped some sweat from his forehead again, grimaced, took out his wand, pointed it upward, took a deep breath, and said "*Frigideiro!*"

Moments later Draco felt the cold draft.

"*Frigideiro! Frigideiro! Frigideiro! Frigideiro! Frigideiro!*"

Then Harry Potter lowered the wand, though his hand seemed a bit shaky, and put it back into his robes.

The whole room seemed perceptibly cooler. Draco could have done that too, but still, not bad.

"So," Draco said. "Science. You're going to tell me about blood."

"We're going to *find out* about blood," Harry Potter said. "By doing experiments."

"All right," Draco said. "What sort of experiments?"

Harry Potter smiled evilly beneath his cowl, and said, "You tell me."

Draco had heard of something called the Socratic Method, which was teaching by asking questions (named after an ancient philosopher who had been too smart to be a real Muggle and hence had been a disguised pureblood wizard). One of his tutors had used Socratic teaching a lot. It had been annoying but effective.

Then there was the Potter Method, which was insane.

To be fair, Draco had to admit that Harry Potter had tried the Socratic Method first and it hadn't been working too well.

Harry Potter had asked how Draco would go about *disproving* the blood purist hypothesis that wizards couldn't do the neat stuff now that they'd done eight centuries ago because they had interbred with Muggleborns and Squibs.

Draco had said that he did not understand how Harry Potter could sit there with a straight face and claim this was not a trap.

Harry Potter had replied, still with a straight face, that if it was a trap it would have been so pathetically obvious that *he* ought to be ground up and fed to pet snakes, but it was *not* a trap, it was simply a rule of how scientists operated that you had to try to disprove your own theories, and if you made an honest effort and failed, that was victory.

CHAPTER 22

Draco had tried to point out the staggering stupidity of this by suggesting that the key to surviving a duel was to cast Avada Kedavra on your own foot and miss.

Harry Potter had *nodded*.

Draco had shaken his head.

Harry Potter had then presented the idea that scientists watched ideas fight to see which ones won, and you *couldn't fight without an opponent*, so Draco needed to figure out opponents for the blood purist hypothesis to fight so that blood purism could win, which Draco understood a little better even though Harry Potter had said it with a rather distasteful look. Like, it was clear that if blood purism was the way the world really was, then the sky just had to be blue, and if some other theory was true, the sky just had to be green; and nobody had seen the sky yet; and then you went outside and looked and the blood purists won; and after this had happened six times in a row, people would start noticing the trend.

Harry Potter had then proceeded to claim that all the opponents Draco was inventing were too weak, so blood purism wouldn't get credit for defeating them because the battle wouldn't be impressive enough. Draco had understood that too. *Wizards have gotten weaker because house elves are stealing our magic* hadn't sounded impressive to him either.

(Though Harry Potter *had* said that one at least was testable, in that they could try to check if house elves had gotten stronger over time, and even draw a picture representing the increasing strength of house elves and another picture representing the decreasing strength of wizards and if the two pictures matched that would point to the house elves, all said in such completely serious tones that Draco had felt an impulse to ask Dobby a few pointed questions under Veritaserum before snapping out of it.)

And Harry Potter had finally said that Draco *couldn't* fix the battle, scientists weren't dumb, it would be *obvious* if you fixed the battle, it had to be a *real fight*, between two different theories that might both *really* be true, with a test that only the *true* hypothesis would win, something that actually *would* come out different ways depending on which hypothesis was actually correct, and there would be experienced scientists watching to make sure that was exactly what happened. Harry Potter had claimed that he himself just wanted to know *how blood really worked* and for that he

THE SCIENTIFIC METHOD

need to see blood purism *really win* and Draco wasn't going to fool *him* with theories that were just there to be knocked down.

Even having seen the point, Draco hadn't been able to invent any "plausible alternatives", as Harry Potter put it, to the idea that wizards were getting less powerful because they were mixing their blood with mud. It was too obviously true.

It was then that Harry Potter had said, rather frustrated, that he couldn't imagine Draco was *really* this bad at considering different viewpoints, *surely* there'd been Death Eaters who'd posed as enemies of blood purism and had come up with much more plausible-sounding arguments against their own side than Draco was offering. If Draco had been trying to pose as a member of Dumbledore's faction, and come up with the house elf hypothesis, he wouldn't have fooled anyone for a second.

Draco had been forced to admit this was a point.

Hence the Potter Method.

"Please, Dr. Malfoy," whined Harry Potter, "why won't you accept my paper?"

Harry Potter had needed to repeat the phrase "just pretend to be pretending to be a scientist" three times before Draco had understood.

In that moment Draco had realized that there was something deeply *wrong* with Harry Potter's brain, and anyone who tried Legilimency on it would probably never come back out again.

Harry Potter had then gone into further and considerable detail: Draco was to pretend to be a Death Eater who was posing as the editor of a scientific journal, Dr. Malfoy, who wanted to reject his enemy Dr. Potter's paper "On the Heritability of Magical Ability", and if the Death Eater didn't act like a real scientist would, he would be revealed as a Death Eater and executed, while Dr. Malfoy was also being watched by his own rivals and needed to *appear* to reject Dr. Potter's paper for neutral scientific reasons or he would lose his position as journal editor.

It was a wonder the Sorting Hat wasn't gibbering madly in St. Mungo's.

It was also the most complicated thing anyone had *ever* asked Draco to pretend and there was no possible way he could have refused the challenge.

CHAPTER 22

Right now they were, as Harry Potter had put it, getting in the mood.

"I'm afraid, Dr. Potter, that you wrote this in the wrong color of ink," Draco said. "Next!"

Dr. Potter's face did an excellent job of crumpling in despair, and Draco couldn't help but feel a flash of Dr. Malfoy's glee, even though the Death Eater was only pretending to be Dr. Malfoy.

This part was *fun*. He could have done this all day long.

Dr. Potter got up from the chair, slumped over in dismay, and trudged off, and turned into Harry Potter, who gave Draco a thumbs-up, and then turned back into Dr. Potter again, now approaching with an eager smile.

Dr. Potter sat down and presented Dr. Malfoy with a piece of parchment on which was written:

On the Heritability of Magical Ability

Dr. H. J. Potter-Evans-Verres, Institute for Sufficiently Advanced Science

My observation:

*Today's wizards can't do things as impressive as
what wizards used to do 800 years ago.*

My conclusion:

*Wizardkind has become weaker by mixing
their blood with Muggleborns and Squibs.*

"Dr. Malfoy," said Dr. Potter with a hopeful look, "I was wondering if the *Journal of Irreproducible Results* could consider for publication my paper entitled 'On the Heritability of Magical Ability'."

Draco looked at the parchment, smiling while he considered possible rejections. If he was a professor, he would have refused the essay as too short, so -

"It's too long, Dr. Potter," said Dr. Malfoy.

For a moment there was genuine incredulity on Dr. Potter's face.

"Ah..." said Dr. Potter. "How about if I get rid of the separate lines for observations and conclusions, and just put in a *therefore* -"

"Then it'll be too short. Next!"

Dr. Potter trudged off.

"All right," said Harry Potter, "you're getting *too* good at this. Two more times to practice, and then third time is for real, no interruptions between, I'll just come in straight at you and that time you'll reject the

THE SCIENTIFIC METHOD

paper based on the actual content, remember, your scientific rivals are watching."

Dr. Potter's next paper was perfect in every way, a marvel of its kind, but unfortunately had to be rejected because Dr. Malfoy's journal was having trouble with the letter E. Dr. Potter offered to rewrite it without those words, and Dr. Malfoy explained that it was really more of a vowel problem.

The paper after that was rejected because it was Tuesday.

It was, in fact, Saturday.

Dr. Potter tried to point this out and was told "Next!"

(Draco was starting to understand why Snape had used his hold over Dumbledore just to get a position that let him be awful to students.)

And then -

Dr. Potter was approaching with a superior smirk on his face.

"This is my latest paper, *On the Heritability of Magical Ability*," Dr. Potter stated confidently, and thrust out the parchment. "I have decided to allow your journal to publish it, and have prepared it in perfect accordance with your guidelines so that you may publish it quickly."

The Death Eater decided to track down and kill Dr. Potter after his mission was done. Dr. Malfoy kept a polite smile on his face, since his rivals were watching, and said...

(The pause stretched, with Dr. Potter looking at him impatiently.)

..."Let me look at that, please."

Dr. Malfoy took the parchment and perused it carefully.

The Death Eater was starting to get nervous about the fact that he wasn't a real scientist, and Draco was trying to remember how to talk like Harry Potter.

"You, ah, need to consider other possible explanations for your, um, observation, besides just this one -"

"Really?" interrupted Dr. Potter. "Like what, exactly? *House elves are stealing our magic*? My data admit of only one possible conclusion, Dr. Malfoy. There *are* no other plausible hypotheses."

Draco was trying furiously to order his brain to think, what would he say if he was posing as a member of Dumbledore's faction, what *did* they claim was the explanation for wizardkind's decline, Draco had never bothered to actually ask that...

CHAPTER 22

"If you can't think of any other way to explain my data, you'll have to publish my paper, *Dr. Malfoy*."

It was the sneer on Dr. Potter's face that did it.

"Oh yeah?" snapped Dr. Malfoy. "How do you know that magic itself isn't fading away?"

Time stopped.

Draco and Harry Potter exchanged looks of appalled horror.

Then Harry Potter spat something that was probably an extremely bad word if you'd been raised by Muggles. "*I didn't think of that!*" said Harry Potter. "And I should have. The magic goes away. *Damn, damn, damn!*"

The alarm in Harry Potter's voice was contagious. Without even thinking about it, Draco's hand went into his robes and clutched at his wand. He'd thought the House of Malfoy was *safe*, so long as you only married into families that could trace their bloodlines back four generations you were supposed to be *safe*, it had never occurred to him before that there might be nothing anyone could do to stop the end of magic. "Harry, what do we do?" Draco's voice was rising in panic. "*What do we do?*"

"*Let me think!*"

After a few moments, Harry grabbed from a nearby desk the same quill and roll of parchment he'd used to write his pretend paper, and started scribbling something.

"We'll figure it out," Harry said, his voice tight, "if magic is fading out of the world we'll figure out how fast it's fading and how much time we have left to do something, and then we'll figure out why it's fading, and then we'll do something about it. Draco, have wizarding powers been declining at a steady rate, or have there been sudden drops?"

"I... I don't know..."

"You told me that no one had matched the four founders of Hogwarts. So it's been going on for at least eight centuries, then? You can't remember hearing anything about the problems suddenly appearing five centuries ago or anything like that?"

Draco was trying frantically to think. "I always heard that nobody was as good as Merlin and then after that nobody was as good as the Founders of Hogwarts."

THE SCIENTIFIC METHOD

"All right," Harry said. He was still scribbling. "Because three centuries ago is when Muggles started to not believe in magic, which I thought might have something to do with it. And about a century and a half ago was when Muggles began using a kind of technology that stops working around magic and I was wondering if it might also go the other way around."

Draco exploded out of his chair, so angry he could hardly even speak. "It's the *Muggles* -"

"*Damn it!*" roared Harry. "Weren't you even listening to *yourself*? It's been going on for eight centuries at least and the Muggles weren't doing anything interesting then! *We have to figure out the real truth!* The Muggles *might* have something to do with this but if they *don't* and you go blaming everything on them and that stops us from figuring out what's *really* going on then one day you're going to wake up in the morning and find out that your wand is just a stick of wood!"

Draco's breath stopped in his throat. His father often said *our wands will break in our hands* in his speeches but Draco had never really thought before about what that *meant*, it wasn't going to happen to *him* after all. And now suddenly it seemed very real. *Just a stick of wood.* Draco could imagine just what it would be like to take out his wand and try to cast a spell and find that nothing was happening...

That could happen to *everyone*.

There would be no more wizards, no more magic, ever. Just Muggles who had a few legends about what their ancestors had been able to do. Some of the Muggles would be called Malfoy, and that would be all that was left of the name.

For the first time in his life, Draco realized why there were Death Eaters.

He'd always taken for granted that becoming a Death Eater was something you did when you grew up. Now Draco *understood*, he knew why Father and Father's friends had sworn to give their lives to prevent the nightmare from coming to pass, there were things you couldn't just stand by and watch happen. But what if it was going to happen *anyway*, what if all the sacrifices, all the friends they'd lost to Dumbledore, the *family* they'd lost, what if it had all been for *nothing*...

CHAPTER 22

"Magic *can't* be fading away," Draco said. His voice was breaking. "It wouldn't be *fair*."

Harry stopped scribbling and looked up. His face had an angry expression. "Your father never told you that life isn't fair?"

Father had said that every single time Draco used the word. "But, but, it's too awful to believe that -"

"Draco, let me introduce you to something I call the Litany of Tarski. It changes every time you use it. On this occasion it runs like so: *If magic is fading out of the world, I want to believe that magic is fading out of the world. If magic is not fading out of the world, I want not to believe that magic is fading out of the world. Let me not become attached to beliefs I may not want.* If we're living in a world where magic is fading, *that's what we have to believe*, we have to know what's coming, so we can stop it, or in the very worst case, be prepared to do what we can in the time we have left. Not believing it won't stop it from happening. So the *only* question we have to ask is whether magic is *actually* fading, and if that's the world we live in then that's what we want to believe. Litany of Gendlin: *What's true is already so, owning up to it doesn't make it worse.* Got that, Draco? I'm going to make you memorize it later. It's something you repeat to yourself any time you start wondering if it's a good idea to believe something that isn't actually true. In fact I want you to say it right now. *What's true is already so, owning up to it doesn't make it worse.* Say it."

"What's true is already so," repeated Draco, his voice trembling, "owning up to it doesn't make it worse."

"If magic is fading, I want to believe that magic is fading. If magic is not fading, I want not to believe that magic is fading. Say it."

Draco repeated back the words, the sickness churning in his stomach.

"Good," Harry said, "remember, it might *not* be happening, and then you won't have to believe it, either. *First* we just want to know what's actually going on, which world we actually live in." Harry turned back to his work, scribbled some more, and then turned the parchment so Draco could see it. Draco leaned over the desk and Harry brought the green light closer.

Observation:

Wizardry isn't as powerful now as it was when Hogwarts was founded.

Hypotheses:

THE SCIENTIFIC METHOD

1. *Magic itself is fading.*
2. *Wizards are interbreeding with Muggles and Squibs.*
3. *Knowledge to cast powerful spells is being lost.*
4. *Wizards are eating the wrong foods as children, or something else besides blood is making them grow up weaker.*
5. *Muggle technology is interfering with magic. (Since 800 years ago?)*
6. *Stronger wizards are having fewer children. (Draco = only child? Check if 3 powerful wizards, Quirrell / Dumbledore / Dark Lord, had any children.)*

Tests:

"All right," Harry said. His breathing sounded a little calmer. "Now when you're dealing with a confusing problem and you have no idea what's going on, the smart thing to do is figure out some really simple tests, things you can look at right away. We need fast tests that distinguish between these hypotheses. Observations that would come out a different way for at least one of them compared to all the other ones."

Draco stared at the list in shock. He was suddenly realizing that he knew an awful lot of purebloods who were only children. Himself, Vincent, Gregory, practically *everyone*. The two most powerful wizards everyone talked about were Dumbledore and the Dark Lord and neither had any children just like Harry had suspected...

"It's going to be really hard to distinguish between 2 and 6," Harry said, "it's in the blood either way, you'd have to try and track the decline of wizardry and compare that to how many kids different wizards were having and measure the abilities of Muggleborns compared to purebloods..." Harry's fingers were tapping nervously on the desk. "Let's just lump 6 in with 2 and call them the blood hypothesis for now. 4 is unlikely because then everyone would notice a sudden drop when the wizards switched to new foods, it's hard to see what would've changed steadily over 800 years. 5 is unlikely for the same reason, no sudden drop, Muggles weren't doing anything 800 years back. 4 looks like 2 and 5 looks like 1 anyway. So mainly we should be trying to distinguish between 1, 2, and 3." Harry turned the parchment to himself, drew an ellipse around those three numbers, turned it back. "Magic is fading, blood is weakening, knowledge is disappearing. What test comes out

CHAPTER 22

differently depending on which of those is true? What could we see that would mean any one of these was false?"

"I don't know!" blurted Draco. "Why are you asking me? You're the scientist!"

"Draco," Harry said, a note of pleading desperation in his voice, "I only know what Muggle scientists know! You grew up in the wizarding world, I didn't! You know more magic than I do and you know more *about* magic than I do and you thought of this whole idea in the first place, so start thinking like a scientist and solve this!"

Draco swallowed hard and stared at the paper.

Magic is fading... wizards are interbreeding with Muggles... knowledge is being lost...

"What does the world look like if magic is fading?" said Harry Potter. "You know more about magic, you should be the one guessing not me! Imagine you're telling a story about it, what happens in the story?"

Draco imagined it. "Charms that used to work stop working." *Wizards wake up and find that their wands are sticks of wood...*

"What does the world look like if the wizarding blood gets weaker?"

"People can't do things their ancestors could do."

"What does the world look like if knowledge is being lost?"

"People don't know how to cast the Charms in the first place..." said Draco. He stopped, surprised at himself. "That's a test, isn't it?"

Harry nodded decisively. "That's one." He wrote it down on the parchment under *Tests*:

A. Are there spells we know but can't cast (1 or 2) or are the lost spells no longer known (3)?

"So that distinguishes between 1 and 2 on the one hand, and 3 on the other hand," said Harry. "Now we need some way to distinguish between 1 and 2. Magic fading, blood weakening, how could we tell the difference?"

"What kind of Charms did students used to cast in their first year at Hogwarts?" said Draco. "If they used to be able to cast much more powerful Charms, the blood was stronger -"

Harry Potter shook his head. "Or magic itself was stronger. We have to figure out some way of telling the *difference*." Harry stood up from his chair, began pacing nervously through the classroom. "No, wait,

THE SCIENTIFIC METHOD

that might still work. Suppose different spells use up different amounts of magical energy. Then if the ambient magic weakened, the powerful spells would die first, but the spells everyone learns in their first year would stay the same..." Harry's nervous pacing sped up. "It's not a very good test, it's more about powerful wizardry being lost versus all wizardry being lost, someone's blood could be too weak for powerful wizardry but strong enough for easy spells... Draco, do you know if more powerful wizards within a *single* era, like powerful wizards from just this century, are more powerful as children? If the Dark Lord had cast the Cooling Charm when he was eleven, could he have frozen the whole room?"

Draco's face screwed up as he tried to recollect. "I can't remember hearing anything about the Dark Lord but I think Dumbledore's supposed to have done something amazing on his Transfiguration O.W.L.s in fifth year... I think other powerful wizards were good in Hogwarts too..."

Harry scowled, still pacing. "They could just be studying hard. Still, if first-year students learned the same spells and seemed about as powerful then as now, we could call that *weak* evidence favoring 1 over 2... wait, hold on." Harry stopped where he stood. "I have another test that might distinguish between 1 and 2. It would take a while to explain, it uses some things that scientists know about blood and inheritance, but it's an easy question to ask. And if we *combine* my test and your test and they both come out the same way, that's a strong hint at the answer." Harry almost ran back to the desk, took the parchment and wrote:

B. Did ancient first-year students cast the same sort of spells, with the same power, as now? (Weak evidence for 1 over 2, but blood could also be losing powerful wizardry only.)

C. Additional test that distinguishes 1 and 2 using scientific knowledge of blood, will explain later.

"Okay," said Harry, "we can at least try to tell the difference between 1 and 2 and 3, so let's go with this right away, we can figure out *more* tests after we do the ones we already have. Now it's going to look a little odd if Draco Malfoy and Harry Potter go around asking questions together, so here's my idea. You'll go through Hogwarts and find old portraits and ask them about what spells they learned to cast during their first years.

CHAPTER 22

'They're portraits so they won't know there's anything odd about Draco Malfoy doing that. I'll ask recent portraits and living people about spells we know but can't cast, no one will notice anything unusual if Harry Potter asks weird questions. And I'll have to do complicated research about forgotten spells, so I want you to be the one to gather the data I need for my own scientific question. It's a simple question and you should be able to find the answer by asking portraits. You might want to write this down, ready?"

Draco sat down again and scrabbled in his bookbag for parchment and quill. When it was laid down on the desk, Draco looked up, face determined. "Go ahead."

"Find portraits who knew a married Squib couple - don't make that face, Draco, it's important information. Just ask recent portraits who are Gryffindors or something. Find portraits who knew a married Squib couple well enough to know the names of all their children. Write down the name of each child and whether that child was a wizard, a Squib, or a Muggle. If they don't know whether the child was a Squib or a Muggle, write down 'non-wizard'. Write that down for *every* child the couple had, don't leave any out. If the portrait only knows the name of the wizarding children, not the names of *all* the children, then don't write down *any* data from that couple. It's very important that you only bring me data from someone who knows *all* the children a Squib couple had, well enough to know them all by name. Try to get at least forty names total, if you can, and if you have time for more, even better. Have you got all that?"

"Repeat it," Draco said, when he was done writing, and Harry repeated it.

"I've got it," Draco said, "but why -"

"It has to do with one of the secrets of blood that scientists already discovered. I'll explain when you get back. Let's split up and meet back here in an hour, 6:22pm that should be. Are we ready to go?"

Draco nodded decisively. It was all very rushed, but he'd long since been taught how to rush.

"Then *go!*" said Harry Potter and yanked off his cowed cloak and shoved it into his pouch, which began eating it, and, without even waiting for his pouch to finish, spun around and began striding rapidly

THE SCIENTIFIC METHOD

toward the classroom door, bumping into a desk and almost falling over in his haste.

By the time Draco had managed to get his own cloak off and stow it in his bookbag, Harry Potter was gone.

Draco almost ran out the door.

CHAPTER 23

BELIEF IN BELIEF

Everybody wants a rock to wind a piece of string around J. K. Rowling.

"And then Janet was a Squib," said the portrait of a short young woman with a gold-trimmed hat.

Draco wrote it down. That was only twenty-eight but it was time to go back and meet Harry.

He'd needed to ask other portraits to help translating, English had changed a lot, but the oldest portraits had described first-year spells that sounded an awful lot like the ones they had now. Draco had recognized around half of them and the other half didn't sound any more powerful.

The sick feeling in his stomach had grown with each answer until finally, unable to take it any more, he'd gone off and asked other portraits Harry Potter's strange question about Squib marriages, instead. The first five portraits hadn't known anyone and finally he'd asked those portraits to ask *their* acquaintances to ask *their* acquaintances and so managed to find some people who'd actually admit to being friends with Squibs.

(The first-year Slytherin had explained he was working on an important project with a Ravenclaw and the Ravenclaw had told him they needed this information and then run off without saying why. This had garnered many sympathetic looks.)

Draco's feet were heavy as he walked through the corridors of Hogwarts. He should have been running but he couldn't seem to muster the energy. He kept on thinking that he didn't want to know about this, he didn't want to be involved in any of this, he didn't want this to be his responsibility, just let Harry Potter do it, if magic was fading let Harry Potter take care of it...

But Draco knew that wasn't right.

Chill the dungeons of Slytherin, gray the stone walls, Draco usually liked the atmosphere, but now it seemed too much like fading.

His hand on the doorknob, Harry Potter already inside and waiting, wearing his cowed cloak.

"The ancient first-year spells," Harry Potter said. "What did you find?"

"They're no more powerful than the spells we use now."

Harry Potter's fist struck a desk, hard. "Damn it. All right. My own experiment was a failure, Draco. There's something called the Interdict of Merlin -"

Draco hit himself on the forehead, realizing.

"- which stops anyone from getting knowledge of powerful spells out of books, even if you find and read a powerful wizard's notes they won't make sense to you, it has to go from one living mind to another. I couldn't find any powerful spells that we had the instructions for but couldn't cast. But if you can't get them out of old books, why would anyone bother passing them on by word of mouth after they stopped working? Did you get the data on the Squib couples?"

Draco started to hand the parchment over -

But Harry Potter held up a hand. "Law of science, Draco. First I tell you the theory and the prediction. Then you show me the data. That way you know I'm not just making up a theory to fit; you know that the theory actually predicted the data in *advance*. I have to explain this to you anyway, so I have to explain it *before* you show me the data. That's the rule. So put on your cloak and let's sit down."

Harry Potter sat down at a desk with torn scraps of paper arranged across its surface. Draco drew his cloak out of his bookbag, drew it on, and sat down across from Harry on the other side, giving the paper scraps a puzzled look. They were arranged in two rows and the rows were about twenty scraps long.

"The secret of blood," said Harry Potter, an intense look on his face, "is something called deoxyribose nucleic acid. You don't say that name in front of anyone who's not a scientist. Deoxyribose nucleic acid is the recipe that tells your body how to grow, two legs, two arms, short or tall, whether you have brown eyes or green. It's a material thing, you can *see* it if you have microscopes, which are like telescopes only they look at

things that are very small instead of very far away. And that recipe has two copies of everything, always, in case one copy is broken. Imagine two long rows of pieces of paper. At each place in the row, there are two pieces of paper, and when you have children, your body selects one piece of paper at random from each place in the row, and the mother's body will do the same, and so the child also gets two pieces of paper at each place in the row. Two copies of everything, one from your mother, one from your father, and when you have children they get one piece of paper from you at random in each place."

As Harry spoke, his fingers ranged over the paired scraps of paper, pointing to one part of the pair when he said "from your mother", the other when he said "from your father". And as Harry talked about picking a piece of paper at random, his hand pulled a Knut out of his robes and flipped it; Harry looked at the coin, and then pointed to the top piece of paper. All without a pause in the speech.

"Now when it comes to something like being short or tall, there's a *lot* of places in the recipe that make *little* differences. So if a tall father marries a short mother, the child gets some pieces of paper saying 'tall' and some pieces of paper saying 'short', and usually the child ends up middle-sized. But not always. By luck, the child might get a lot of pieces saying 'tall', and not many papers saying 'short', and grow up pretty tall. You could have a tall father with five papers saying 'tall' and a tall mother with five papers saying 'tall' and by amazing luck the child gets *all ten* papers saying 'tall' and ends up taller than both of them. You see? Blood isn't a perfect fluid, it doesn't mix perfectly. Deoxyribose nucleic acid is made up of lots of little pieces, like a glass of pebbles instead of a glass of water. That's why a child isn't always exactly in the middle of the parents."

Draco listened with his mouth open. How in Merlin's name had the Muggles figured all this out? They could *see* the recipe?

"Now," Harry Potter said, "suppose that, just like with tallness, there's lots of little places in the recipe where you can have a piece of paper that says 'magic' or 'not magic'. If you have enough pieces of paper saying 'magic' you're a wizard, if you have a *lot* of pieces of paper you're a powerful wizard, if you have too few you're a Muggle, and in between you're a Squib. Then, when two Squibs marry, most of the time the

children should also be Squibs, but once in a while a child will get lucky and get most of the father's magic papers *and* most of the mother's magic papers, and be strong enough to be a wizard. But probably not a very powerful one. If you started out with a lot of powerful wizards and they married only each other, they would stay powerful. But if they started marrying Muggleborns who were just barely magical, or Squibs... you see? The blood wouldn't mix perfectly, it would be a glass of pebbles, not a glass of water, because that's just the way blood works. There would still be powerful wizards now and then, when they got a lot of magic papers by luck. But they wouldn't be as powerful as the most powerful wizards from earlier."

Draco nodded slowly. He'd never heard it explained that way before. There was a surprising beauty to how exactly it fit.

"*But,*" Harry said. "That's only *one* hypothesis. Suppose that instead there's only a *single* place in the recipe that makes you a wizard. Only *one* place where a piece of paper can say 'magic' or 'not magic'. And there are two copies of everything, always. So then there are only three possibilities. Both copies can say 'magic'. One copy can say 'magic' and one copy can say 'not magic'. Or both copies can say 'not magic'. Wizards, Squibs, and Muggles. Muggleborns wouldn't really be born to Muggles, they would be born to two Squibs, two parents each with one magic copy who'd grown up in the Muggle world. Now imagine a witch marries a Squib. Each child will get one paper saying 'magic' from the mother, always, it doesn't matter which piece gets picked at random, both say 'magic'. But like flipping a coin, half the time the child will get a paper saying 'magic' from the father, and half the time the child will get the father's paper saying 'not magic'. When a witch marries a Squib, the result won't be a lot of weak wizarding children. Half the children will be wizards and witches just as powerful as their mother, and half the children will be Squibs. Because if there's just *one* place in the recipe that makes you a wizard, then magic isn't like a glass of pebbles that can mix. It's like a single magical pebble, a sorcerer's stone."

Harry arranged three pairs of papers side by side. On one pair he wrote 'magic' and 'magic'. On another pair he wrote 'magic' on the top paper only. And the third pair he left blank.

CHAPTER 23

"In which case," Harry said, "either you have two stones or you don't. Either you're a wizard or not. Powerful wizards would get that way by studying harder and practicing more. And if wizards get *inherently* less powerful, not because of spells being lost but because people can't cast them... then maybe they're eating the wrong foods or something. But if it's gotten steadily worse over eight hundred years, then that could mean magic itself is fading out of the world."

Harry arranged another two pairs of papers side by side, and took out a quill. Soon each pair had one piece of paper saying 'magic' and the other paper blank.

"And that brings me to the prediction," said Harry. "What happens when two Squibs marry. Flip a coin twice. It can come up heads and heads, heads and tails, tails and heads, or tails and tails. So one quarter of the time you'll get two heads, one quarter of the time you'll get two tails, and half the time you'll get one heads and one tail. Same thing if two Squibs marry. One quarter of the children would come up magic and magic, and be wizards. One quarter would come up not-magic and not-magic, and be Muggles. The other half would be Squibs. It's a very old and very classic pattern. It was discovered by Gregor Mendel who is not forgotten, and it was the first hint ever uncovered for how the recipe worked. Anyone who knows anything about blood science would recognize that pattern in an instant. It wouldn't be exact, any more than if you flip a coin twice forty times you'll always get exactly ten pairs of two heads. But if it's seven or thirteen wizards out of forty children that'll be a strong indicator. That's the test I had you do. Now let's see your data."

And before Draco could even think, Harry Potter had taken the parchment out of Draco's hand.

Draco's throat was very dry.

Twenty-eight children.

He wasn't sure of the exact number but he was pretty sure around a fourth had been wizards.

"Six wizards out of twenty-eight children," Harry Potter said after a moment. "Well, that's that, then. And first-years were casting the same spells at the same power level eight centuries ago, too. Your test and my test both came out the same way."

There was a long silence in the classroom.

"What now?" Draco whispered.

He'd never been so terrified.

"It's not definite yet," said Harry Potter. "My experiment failed, remember? I need you to design another test, Draco."

"I, I..." Draco said. His voice was breaking. "I can't do this Harry, it's too much for me."

Harry's look was fierce. "Yes you can, because you have to. I thought about it myself, too, after I found out about the Interdict of Merlin. Draco, is there any way of observing the strength of magic directly? Some way that doesn't have anything to do with wizards' blood or the spells we learn?"

Draco's mind was just blank.

"Anything that affects magic affects wizards," said Harry. "But then we can't tell if it's the wizards or the magic. What does magic affect that *isn't* a wizard?"

"Magical creatures, obviously," said Draco without even thinking about it.

Harry Potter slowly smiled. "Draco, that's *brilliant*."

It's the sort of dumb question you'd only ask in the first place if you'd been raised by Muggles.

Then the sickness in Draco's stomach got even worse as he realized what it would mean if magical creatures *were* getting weaker. They would know for certain then that magic was fading, and there was a part of Draco that was already sure that was exactly what they would find. He didn't want to see this, he didn't want to know...

Harry Potter was already halfway to the door. "Come *on*, Draco! There's a portrait not far from here, we'll just ask them to go get someone old and find out right away! We're cloaked, if someone sees us we can just run away! Let's go!"

It didn't take long after that.

It was a wide portrait, but the three people in it were looking rather crowded. There was a middle-aged man from the twelfth century, dressed in black swathes of cloth; who spoke to a sad-looking young

woman from the fourteenth century, with hair that seemed to constantly frizz about her head as if she'd been charged up by a static spell; and she spoke to a dignified, wizened old man from the seventeenth century with a solid gold bowtie; and him they could understand.

'They had asked about Dementors.

'They had asked about phoenixes.

'They had asked about dragons and trolls and house elves.

Harry had frowned, pointed out that creatures which needed the most magic could just be dying out entirely, and had asked for the most powerful magical creatures known.

There wasn't anything unfamiliar on the list, except for a species of Dark creature called mind flayers which the translator noted had finally been exterminated by Harold Shea, and those didn't sound half as scary as Dementors.

Magical creatures were as powerful now as they'd ever been, apparently.

The sickness in Draco's stomach was easing, and now he just felt confused.

"Harry," Draco said in the middle of the old man translating a list of all eleven powers of a beholder's eyes, "what does this mean?"

Harry held up a finger and the old man finished the list.

Then Harry thanked all the portraits for helping - Draco, pretty much on automatic, did so as well and more graciously - and they headed back to the classroom.

And Harry brought out the original parchment with the hypotheses, and began scribbling.

Observation:

Wizardry isn't as powerful now as it was when Hogwarts was founded.

Hypotheses:

1. *Magic itself is fading.*
2. *Wizards are interbreeding with Muggles and Squibs.*
3. *Knowledge to cast powerful spells is being lost.*
4. *Wizards are eating the wrong foods as children, or something else besides blood is making them grow up weaker.*
5. *Muggle technology is interfering with magic. (Since 800 years ago?)*

6. Stronger wizards are having fewer children. (Draco = only child? Check if 3 powerful wizards, Quirrell / Dumbledore / Dark Lord, had any children.)

Tests:

A. Are there spells we know but can't cast (1 or 2) or are the lost spells no longer known (3)? Result: Inconclusive due to Interdict of Merlin. No known uncastable spell, but could simply have not been passed on.

B. Did ancient first-year students cast the same sort of spells, with the same power, as now? (Weak evidence for 1 over 2, but blood could also be losing powerful wizardry only.) Result: Same level of first-year spells then as now.

C. Additional test that distinguishes 1 and 2 using scientific knowledge of blood, will explain later. Result: There's only one place in the recipe that makes you a wizard, and either you have two papers saying 'magic' or you don't.

D. Are magical creatures losing their powers? Distinguishes 1 from (2 or 3). Result: Magical creatures seem to be as strong as they ever were.

"A failed," said Harry Potter. "B is weak evidence for 1 over 2. C falsifies 2. D falsifies 1. 4 was unlikely and B argues against 4 as well. 5 was unlikely and D argues against it. 6 is falsified along with 2. That leaves 3. Interdict of Merlin or not, I didn't actually find any known spell that couldn't be cast. So when you add it all up, it looks like knowledge is being lost."

And the trap snapped shut.

As soon as the panic went away, as soon as Draco understood that magic *wasn't* fading out, it took all of five seconds to realize.

Draco shoved himself away from the desk and stood up so hard that his chair skittered with a scraping noise across the floor and fell over.

"So it was all just a stupid trick, then."

Harry Potter stared at him for a moment, still sitting. When he spoke, his voice was quiet. "It was a fair test, Draco. If it had come out a different way, I would have accepted it. That's not something I would ever cheat on. Ever. I didn't look at your data before I made my predictions. I told you up front when the Interdict of Merlin invalidated the first experiment -"

"Oh," Draco said, the anger starting to come out into his voice, "you didn't know how the whole thing was going to come out?"

"I didn't *know* anything you didn't know," Harry said, still quietly. "I admit that I suspected. Hermione Granger was too powerful, she should

have been barely magical and she wasn't, how can a Muggleborn be the best spellcaster in Hogwarts? And she's getting the best grades on her essays too, it's too much coincidence for one girl to be the strongest magically *and* academically unless there's a single cause. Hermione Granger's existence pointed to there being only one thing that makes you a wizard, something you either have or you don't, and the power differences coming from how much we know and how much we practice. And there weren't different classes for purebloods and Muggleborns, and so on. There were too many ways the world didn't look the way it would look if you were right. But Draco, I didn't see anything you couldn't see too. I didn't perform any tests I didn't tell you about. I didn't cheat, Draco. I wanted us to work out the answer together. And I never thought that magic might be fading out of the world until you said it. It was a scary idea for me, too."

"Whatever," Draco said. He was working very hard to control his voice and not just start screaming at Harry. "You claim you're not going to run off and tell anyone else about this."

"Not without consulting you first," Harry said. He opened his hands in a pleading gesture. "Draco, I'm being as nice as I can but *the world turned out to just not be that way*."

"Fine. Then you and I are through. I'm going to just walk away and forget any of this ever happened."

Draco spun around, feeling the burning sensation in his throat, the sense of betrayal, and that was when he realized he really *had* liked Harry Potter, and that thought didn't slow him down for a moment as he strode toward the classroom door.

And Harry Potter's voice came, now louder, and worried:

"Draco... you *can't* forget. Don't you understand? That was your sacrifice."

Draco stopped in midstride and turned around. "*What* are you talking about?"

But there was already a freezing coldness in Draco's spine.

He knew even before Harry Potter said it.

"To become a scientist. You questioned one of your beliefs, not just a small belief but something that had great significance to you. You did experiments, gathered data, and the outcome proved the belief was

wrong. You saw the results and understood what they meant." Harry Potter's voice was faltering. "Remember, Draco, you can't sacrifice a *true* belief that way, because the experiments will confirm it instead of falsifying it. Your sacrifice to become a scientist was your *false* belief that wizard blood was mixing and getting weaker."

"*That's not true!*" said Draco. "I didn't sacrifice the belief. I still believe that!" His voice was getting louder, and the chill was getting worse.

Harry Potter shook his head. His voice came in a whisper. "Draco... I'm sorry, Draco, you *don't* believe it, not anymore." Harry's voice rose again. "I'll prove it to you. Imagine that someone tells you they're keeping a dragon in their house. You tell them you want to see it. They say it's an invisible dragon. You say fine, you'll listen to it move. They say it's an inaudible dragon. You say you'll throw some cooking flour into the air and see the outline of the dragon. They say the dragon is permeable to flour. And the telling thing is that they know, in *advance*, exactly which experimental results they'll have to explain away. They *know* everything will come out the way it does if there's no dragon, they know in *advance* just which excuses they'll have to make. So maybe they *say* there's a dragon. Maybe they *believe* they believe there's a dragon, it's called belief-in-belief. But they don't actually believe it. You can be mistaken about what you believe, most people never realize there's a difference between believing something and thinking it's good to believe it." Harry Potter had risen from the desk now, and taken a few steps toward Draco. "And Draco, you don't believe any more in blood purism, I'll show you that you don't. If blood purism is true, then Hermione Granger doesn't make sense, so what could explain her? Maybe she's a wizarding orphan raised by Muggles, just like I was? I could go to Granger and ask to see pictures of her parents, to see if she looks like them. Would you expect her to look different? Should we go perform that test?"

"They would have put her with relatives," Draco said, his voice trembling. "They'll still look the same."

"You see. You already know what experimental result you'll have to excuse. If you still believed in blood purism you would say, sure, let's go take a look, I bet she won't look like her parents, she's too powerful to be a real Muggleborn -"

CHAPTER 23

"They *would* have put her with relatives!"

"Scientists can do tests to check for sure if someone is the true child of a father. Granger would probably do it if I paid her family enough. *She* wouldn't be afraid of the results. So what do you expect that test to show? Tell me to run it and we will. But you already know what the test will say. You'll always know. You won't ever be able to forget. You might *wish* you believed in blood purism, but you'll always *expect to see happen* just exactly what would happen if there was only one thing that made you a wizard. That was your sacrifice to become a scientist."

Draco's breathing was ragged. "Do you realize *what you've done*?" Draco surged forward and he seized Harry by the collar of his robes. His voice rose to a scream, it sounded unbearably loud in the closed classroom and the silence. "*Do you realize what you've done?*"

Harry's voice was shaky. "You had a belief. The belief was false. I helped you see that. What's true is already so, owning up to it doesn't make it worse -"

The fingers on Draco's right hand clenched into a fist and that hand dropped down and blasted up unstoppably and punched Harry Potter in the jaw so hard that his body went crashing back into a desk and then to the floor.

"*Idiot!*" screamed Draco. "*Idiot! Idiot!*"

"Draco," whispered Harry from the floor, "Draco, I'm sorry, I didn't think this would happen for months, I didn't expect you to awaken as a scientist this quickly, I thought I would have longer to prepare you, teach you the techniques that make it hurt less to admit you're wrong -"

"What about Father?" Draco said. His voice trembled with rage. "Were you going to prepare *him* or did you just not *care* what happened after this?"

"You can't tell *him*!" Harry said, his voice rising in alarm. "He's not a scientist! You promised, Draco!"

For a moment the thought of Father not knowing came as a relief.

And then the real anger started to rise.

"So you planned for me to lie to him and tell him I still believe," Draco said, voice shaking. "I'll always have to lie to him, and now when I grow up I can't be a Death Eater, and I won't even be able to tell him why not."

"If your father really loves you," whispered Harry from the floor, "he'll still love you even if you don't become a Death Eater, and it sounds like your father *does* really love you, Draco -"

"*Your* stepfather is a scientist," Draco said. The words coming out like biting knives. "If *you* weren't going to be a scientist, he would still love you. But you'd be a *little less special* to him."

Harry flinched. The boy opened his mouth, as if to say 'I'm sorry', and then closed his mouth, seeming to think better of it, which was either very smart of him or very lucky, because Draco might have tried to kill him.

"You should have warned me," Draco said. His voice rose. "*You should have warned me!*"

"I... I did... every time I told you about the power, I told you about the price. I said, you have to admit you're wrong. I said this would be the hardest path for you. That this was the sacrifice anyone had to make to become a scientist. I said, what if the experiment says one thing and your family and friends say another -"

"*You call that a warning?*" Draco was screaming now. "*You call that a warning? When we're doing a ritual that calls for a permanent sacrifice?*"

"I... I..." The boy on the floor swallowed. "I guess maybe it wasn't clear. I'm sorry. But that which can be destroyed by the truth should be."

Hitting him wasn't enough.

"You're wrong about one thing," Draco said, his voice deadly. "Granger isn't the strongest student in Hogwarts. She just gets the best grades in class. You're about to find out the difference."

Sudden shock showed in Harry's face, and he tried to roll quickly to his feet -

It was already too late for him.

"*Expelliarmus!*"

Harry's wand flew across the room.

"*Gom jabbar!*"

A pulse of inky blackness struck Harry's left hand.

"That's a torture spell," said Draco. "It's for getting information out of people. I'm just going to leave it on you and lock the door behind me when I go. Maybe I'll set the locking spell to wear off after a few hours. Maybe it won't wear off until you die in here. Have fun."

CHAPTER 23

Draco moved smoothly backward, wand still on Harry. Draco's hand dipped down, picked up his bookbag, without his aim wavering.

The pain was already showing in Harry Potter's face as he spoke. "Malfoys are above the underage magic laws, I take it? It's not because your blood is stronger. It's because you already practiced. In the beginning you were as weak as any of us. Is my prediction wrong?"

Draco's hand whitened on his wand, but his aim stayed steady.

"Just so you know," Harry said through gritted teeth, "if you'd told me I was wrong I would have listened. *I* won't ever torture *you* when you show me that I'm wrong. And you *will*. Someday. You're awakened as a scientist now, and even if you never learn to use your power, you'll always," Harry gasped, "be looking, for ways, to test, your beliefs -"

Draco's backing away was less smooth, now, a little faster, and he had to work to keep his wand on Harry as he reached back to open the door and stepped back out of the classroom.

Then Draco shut the door again.

He cast the most powerful locking Charm he knew.

Draco waited until he heard Harry's first scream before casting the *Quietus*.

And then he walked away.

"*Aaabbbbbb! Finite Incantatem! Aaaabbbb!*"

Harry's left hand had been put into a pot of boiling cooking oil and left there. He'd put everything he had into the *Finite Incantatem* and it still wasn't working.

Some hexes required specific counters or you couldn't undo them, or maybe it was just that Draco was that much stronger.

"*Aaaaabbbbbb!*"

Harry's hand was really starting to hurt, now, and that was interfering with his attempts to think creatively.

But a few screams later, Harry realized what he had to do.

His pouch, unfortunately, was on the wrong side of his body, and it took some twisting to reach into it, especially with his other arm flailing around in a reflex, unstoppable attempt to fling off the source of pain.

By the time he managed it his other arm had managed to throw away his wand again.

"Medical *abbbbbb* kit! Medical kit!"

On the floor, the green light was too dim to see by.

Harry couldn't stand. He couldn't crawl. He rolled across the floor to where he thought his wand was, and it wasn't there, and with one hand he managed to raise himself high enough to see his wand, and he rolled there, and got the wand, and rolled back to where the medical kit was opened. There was also a good deal of screaming, and a bit of throwing up.

It took eight tries before Harry could cast *Lumos*.

And then, well, the package wasn't designed to be opened one-handed, because all wizards were idiots, that was why. Harry had to use his teeth and so it took a while before Harry finally managed to wrap the Numbcloth over his left hand.

When all feeling in his left hand was finally gone, Harry let his mind come apart, and lay motionless on the floor, and cried for a while.

Well, Harry's mind said silently into itself, when it had recovered enough to think in words again. *Was it worth it?*

Slowly, Harry's functional hand reached up to a desk.

Harry pulled himself to his feet.

Took a deep breath.

Exhaled.

Smiled.

It wasn't much of a smile, but it was a smile nonetheless.

Thank you, Professor Quirrell, I couldn't have lost without you.

He hadn't redeemed Draco yet, not even close. Contrary to what Draco himself might now believe, Draco was still the child of a Death Eater, through and through. Still a boy who'd grown up thinking "rape" was something the cool older kids did. But it was one heck of a start.

Harry couldn't claim it had all gone just as planned. It had all gone just as completely made up on the spot. The *plan* hadn't called for this to happen until December or thereabouts, after Harry had taught Draco the techniques not to deny the evidence when he saw it.

But he'd seen the look of fear on Draco's face, realized that Draco was *already* taking an alternative hypothesis seriously, and seized the

moment. One case of true curiosity had the same sort of redeeming power in rationality that one case of true love had in movies.

In retrospect, Harry had given himself hours to make the most important discovery in the history of magic, and months to break through the undeveloped mental barriers of an eleven-year-old boy. This could indicate that Harry had some sort of major cognitive deficit with respect to estimating task completion times.

Was Harry going to Science Hell for what he'd done? Harry wasn't sure. He'd contrived to keep Draco's mind on the possibility that magic was fading, made sure Draco would carry out the part of the experiment that would seem at first to point in that direction. He'd waited until after explaining genetics to prompt Draco into realizing about magical creatures (though Harry had thought in terms of ancient artifacts like the Sorting Hat, which no one could duplicate anymore, but which continued to function). But Harry hadn't actually exaggerated any evidence, hadn't distorted the meaning of any results. When the Interdict of Merlin had invalidated the test that should have been definitive, he'd told Draco up front.

And then there was the part *after* that...

But he hadn't actually *lied* to Draco. Draco had believed it, and *that would make it true*.

The end, admittedly, had not been fun.

Harry turned, and staggered toward the door.

Time to test Draco's locking spell.

The first step was simply trying to turn the doorknob. Draco could have been bluffing.

Draco hadn't been bluffing.

"*Finite Incantatem*." Harry's voice came out rather hoarse, and he could feel that the spell hadn't taken.

So Harry tried it again, and that time it felt true. But another twist at the doorknob showed it hadn't worked. No surprise there.

Time to bring out the big guns. Harry drew a deep breath. This spell was one of the most powerful he'd learned so far.

"*Alohomora*!"

Harry staggered a little after saying it.

And the classroom door still didn't open.

That shocked Harry. Harry hadn't been planning to go anywhere near Dumbledore's forbidden corridor, of course. But a spell to open magical locks had seemed like a useful sort of spell anyway, and so Harry had learned it. Was Dumbledore's forbidden corridor meant to lure people so stupid that they didn't notice the security was worse than what Draco Malfoy could put on it?

Fear was creeping back into Harry's system. The placard in the medical kit had said the Numbcloth could only safely be used for up to thirty minutes. After that it would come off automatically, and not be reusable for 24 hours. Right now it was 6:51pm. He'd put on the Numbcloth about five minutes ago.

So Harry took a step back, and considered the door. It was a solid panel of dark oaken wood, interrupted only by the brass metal doorknob.

Harry didn't know any explosive or cutting or smashing spells, and Transfiguring explosive would have violated the rule against Transfiguring things to be burned. Acid was a liquid and would have made fumes...

But that was no obstacle to a *creative thinker*.

Harry laid his wand against one of the door's brass hinges, and concentrated on the form of cotton as a pure abstraction apart from any material cotton, and also on the pure material apart from the pattern that made it a brass hinge, and brought the two concepts together, imposing shape on substance. An hour of Transfiguration practice every day for a month had gotten Harry to the point where he could Transfigure a subject of five cubic centimeters in just under a minute.

After two minutes the hinge hadn't changed at all.

Whoever had designed Draco's locking spell, they'd thought of that, too. Or the door was part of Hogwarts and the castle was immune.

A glance showed the walls to be solid stone. So was the floor. So was the ceiling. You couldn't separately Transfigure a part of something that was a solid whole; Harry would have needed to try Transfiguring the whole wall, which would have taken hours or maybe days of continuous effort, if he could have done it at all, and if the wall wasn't contiguous with the rest of the whole castle...

CHAPTER 23

Harry's Time-Turner wouldn't open until 9pm. After that he could go back to 6pm, before the door was locked.

How long would the torture spell last?

Harry swallowed hard. Tears were coming into his eyes again.

His brilliantly creative mind had just offered the ingenious suggestion that Harry could cut his hand off using the hacksaw in the toolset stored in his pouch, which would hurt, obviously, but might hurt a lot less than Draco's pain spell, since the nerves would be gone; and he had tourniquets in the healer's kit.

And that was obviously a hideously stupid idea that Harry would regret the rest of his entire life.

But Harry didn't know if he could hold out for two hours under torture.

He wanted *out* of this classroom, he wanted out of this classroom *now*, he didn't want to wait in here screaming for two hours until he could use the Time-Turner, he needed to *get out* and find someone to get the torture spell off his hand...

Think! Harry screamed at his brain. *Think! Think!*

The Slytherin dorm was mostly empty. People were at dinner. For some reason Draco himself wasn't feeling very hungry.

Draco closed the door to his private room, locked it, Charmed it shut, Quieted it, sat down on his bed, and started to cry.

It wasn't fair.

It wasn't fair.

It was the first time Draco had ever really *lost* before, Father had warned him that losing for real would hurt the first time it happened, but he'd lost *so much*, it wasn't fair, it wasn't fair for him to lose *everything* the very first time he lost.

Somewhere in the dungeons, a boy Draco had actually liked was screaming in pain. Draco had never hurt anyone he'd liked before. Punishing people who deserved it was supposed to be fun, but this just felt sick inside. Father hadn't warned him about that, and Draco wondered if it was a hard lesson everyone had to learn when they grew up, or if Draco was just weak.

Draco wished it were Pansy screaming. That would have felt better.

And the worst part was knowing that it might have been a mistake to hurt Harry Potter.

Who else was there for Draco now? Dumbledore? After what he'd done? Draco would sooner have been burned alive.

Draco would have to go back to Harry Potter because there was nowhere else for him to go. And if Harry Potter said he didn't want him, then Draco would be nothing, just a pathetic little boy who could never be a Death Eater, never join Dumbledore's faction, never learn science.

The trap had been perfectly set, perfectly executed. Father had warned Draco over and over that what you sacrificed to Dark rituals couldn't be regained. But Father hadn't known that the accursed Muggles had invented rituals that didn't need wands, rituals you could be tricked into doing without knowing it, and that was only one of the terrible secrets which scientists knew and which Harry Potter had brought with him.

Draco started crying harder, then.

He didn't want this, he *didn't want this* but there was no turning back. It was too late. He was already a scientist.

Draco knew he should go back and free Harry Potter and apologize. It would have been the smart thing to do.

Instead Draco stayed in his bed and sobbed.

He'd already hurt Harry Potter. It might be the only time Draco ever got to hurt him, and he would have to hold to that one memory for the rest of his life.

Let him keep screaming.

Harry dropped the remnants of his hacksaw to the ground. The brass hinges had proved impervious, not even scratched, and Harry was beginning to suspect that even the desperation act of trying to Transfigure acid or explosives would have failed to open this door. On the plus side, the attempt had destroyed the hacksaw.

His watch said it was 7:02pm, with less than fifteen minutes left, and Harry tried to remember if there were any other sharp things in his

CHAPTER 23

pouch that needed destroying, and felt another fit of tears welling up. If only, when his Time-Turner opened, he could go back and *prevent* -

And that was when Harry realized he was being *silly*.

It wasn't the first time he'd been locked in a room.

Professor McGonagall had already told him the correct way to do this.

...she'd also told him not to use the Time-Turner for this sort of thing.

Would Professor McGonagall realize that this occasion really *did* warrant a special exception? Or just take away the Time-Turner entirely?

Harry gathered up all his things, all the evidence, into his pouch. A *Scourgify* took care of the vomit on the floor, though not the sweat that had soaked his robes. He left the overturned desks overturned, it wasn't important enough to be worth doing with one hand.

When he was done, Harry glanced down at his watch. 7:04pm.

And then Harry waited. Seconds passed, feeling like years.

At 7:07pm, the door opened.

Professor Flitwick's puff-bearded face looked rather concerned. "Are you all right, Harry?" said the squeaky voice of Ravenclaw's Head of House. "I got a note saying you'd been locked in here -"

CHAPTER 24

MACHIAVELLIAN INTELLIGENCE HYPOTHESIS

J. K. Rowling coils and strikes, unseen; Orca circles, hard and lean.

Act 3:

Draco waited in a small windowed alcove he'd found near the Great Hall, stomach churning.

There would be a price, and it would not be small. Draco had known that as soon as he'd woken up and realized that he didn't dare enter the Great Hall for breakfast because he might see Harry Potter there and Draco didn't know what would happen after that.

Footsteps approached.

"Here ya go," said Vincent's voice. "Now da boss ain't in a good mood today, so ya'd better watch your step."

Draco was going to skin that idiot alive and send back the flayed body with a request for a more intelligent servant, like a dead gerbil.

One set of footsteps went off, and the other set of footsteps came closer.

The churning in Draco's stomach got worse.

Harry Potter came into sight. His face was carefully neutral, but his blue-trimmed robes looked oddly askew, as if they hadn't been put on quite right -

"*Your hand*," Draco said without thinking about it at all.

Harry raised his left arm, as though to look at it himself.

The hand dangled limply from it, like something dead.

"Madam Pomfrey said it's not permanent," Harry said quietly. "She said it should mostly recover by the time classes start tomorrow."

For a single instant the news came as a relief.

And then Draco realized.

"You went to Madam Pomfrey," whispered Draco.

CHAPTER 24

"Of course I did," said Harry Potter, as though stating the obvious. "My hand wasn't working."

It was slowly dawning on Draco what an *absolute* fool he'd been, far worse than the older Slytherins he'd chewed out.

He'd just taken for granted that no one would go to the authorities when a Malfoy did something to them. That no one would want Lucius Malfoy's eye on them, ever.

But Harry Potter wasn't a frightened little Hufflepuff trying to stay out of the game. He was already playing it, and Father's eye was already on him.

"What else did Madam Pomfrey say?" said Draco, his heart in his throat.

"Professor Flitwick said that the spell cast on my hand had been a Dark torture hex and extremely serious business, and that refusing to say who did it was absolutely unacceptable."

There was a long pause.

"And then?" Draco said in a shaking voice.

Harry Potter smiled slightly. "I apologized deeply, which made Professor Flitwick look *very* stern, and then I told Professor Flitwick that the whole thing was, indeed, extremely serious, secret, *delicate* business, and that I'd already informed the Headmaster about the project."

Draco gasped. "No! Flitwick isn't going to just accept that! He'll check with Dumbledore!"

"Indeed," said Harry Potter. "I was promptly hauled off to the Headmaster's office."

Draco was trembling now. If Dumbledore brought Harry Potter before the Wizengamot, willingly or otherwise, and had the Boy-Who-Lived testify under Veritaserum that Draco had tortured him... too many people loved Harry Potter, Father could *lose* that vote...

Father might be able to convince Dumbledore not to do that, but it would *cost*. Cost terribly. The game had rules now, you couldn't just threaten someone at random any more. But Draco had walked into Dumbledore's hands of his own free will. And Draco was a very valuable hostage.

Though since Draco couldn't be a Death Eater now, he wasn't as valuable as Father thought.

MACHIAVELLIAN INTELLIGENCE HYPOTHESIS

The thought tore at his heart like a Cutting Charm.

"Then what?" whispered Draco.

"Dumbledore deduced immediately that it was you. He knew we'd been associating."

The worst possible scenario. If Dumbledore hadn't guessed who did it, he might not have risked using Legilimency just to find out... but if Dumbledore *knew*...

"And?" Draco forced out the word.

"We had a little chat."

"And?"

Harry Potter grinned. "And I explained that it would be in his best interest not to do anything."

Draco's mind ran into a brick wall and splattered. He just stared at Harry Potter with his mouth hanging slack like a fool.

It took that long for Draco to remember.

Harry knew Dumbledore's mysterious secret, the one Snape used as his hold.

Draco could just see it now. Dumbledore looking all stern, concealing his eagerness as he explained to Harry what a terribly serious matter this was.

And Harry politely telling Dumbledore to keep his mouth shut if he knew what was good for him.

Father had warned Draco against people like this, people who could ruin you and still be so likable that it was hard to hate them properly.

"After which," Harry said, "the Headmaster told Professor Flitwick that this was, indeed, a secret and delicate matter of which he had already been informed, and that he did not think pressing it at this time would help me or anyone. Professor Flitwick started to say something about the Headmaster's usual plotting going much too far, and I had to interrupt at that point and explain that it had been my *own* idea and not anything the Headmaster forced me into, so Professor Flitwick spun around and started lecturing *me*, and the Headmaster interrupted *him* and said that as the Boy-Who-Lived I was doomed to have weird and dangerous adventures so I was safer if I got into them on purpose instead of waiting for them to happen by accident, and that was when Professor Flitwick threw up his little hands and started shrieking in a

high-pitched voice at *both* of us about how he didn't care what we were cooking up together, but this wasn't ever to happen again for as long as I was in Ravenclaw House or he would have me thrown out and I could go to Gryffindor which was where all this *Dumbledoreing* belonged -"

Harry was making it *very* hard for Draco to hate him.

"Anyway," Harry said, "I didn't want to be thrown out of Ravenclaw, so I promised Professor Flitwick that nothing like this would happen again, and if it did, I would just tell him who did it."

Harry's eyes should have been cold. They weren't. The voice should have made it a deadly threat. It wasn't.

And Draco saw the question that should have been obvious, and it killed the mood in an instant.

"Why... didn't you?"

Harry walked over to the window, into the small beam of sunlight shining into the alcove, and turned his head outward, toward the green grounds of Hogwarts. The brightness shone on him, on his robes, on his face.

"Why didn't I?" Harry said. His voice caught. "I guess because I just couldn't get angry at you. I knew I'd hurt you first. I won't even call it fair, because what I did to you was worse than what you did to me."

It was like running into another brick wall. Harry could have been speaking archaic Greek for all Draco understood him then.

Draco's mind scrabbled for patterns and came up flat blank. The statement was a concession that hadn't been in Harry's best interests. It wasn't even what Harry should say to make Draco a more loyal servant, now that Harry held power over him. For that Harry should be emphasizing how kindly he'd been, not how much he'd hurt Draco.

"Even so," Harry said, and now his voice was lower, almost a whisper, "please don't do that again, Draco. It hurt, and I'm not sure I could forgive you a second time. I'm not sure I'd be able to want to."

Draco just didn't get it.

Was Harry trying to be *friends* with him?

There was no way Harry Potter could be dumb enough to believe that was still possible after what he'd done.

MACHIAVELLIAN INTELLIGENCE HYPOTHESIS

You could be someone's friend and ally, like Draco had tried to do with Harry, or you could destroy their life and leave them no other options. Not both.

But then Draco didn't understand what else Harry *could* be trying.

And a strange thought came to Draco then, something Harry had kept talking about yesterday.

And the thought was: *Test it.*

You're awakened as a scientist now, Harry had said, *and even if you never learn to use your power, you'll always, be looking, for ways, to test, your beliefs...* Those ominous words, spoken in gasps of agony, had kept running through Draco's mind.

If Harry *was* pretending to be the repentant friend who had accidentally hurt someone...

"You *planned* what you did to me!" Draco said, managing to put a note of accusation in his voice. "You didn't do it because you got angry, you did it because you *wanted* to!"

Fool, Harry Potter would say, *of course I planned it, and now you're mine* -

Harry turned back toward Draco. "What happened yesterday *wasn't* the plan," Harry said, his voice seeming stuck in his throat. "The *plan* was that I would teach you why you were always better off knowing the truth, and then we would try together to discover the truth about blood, and whatever the answer was we would accept it. Yesterday I... rushed things."

"Always better off knowing the truth," Draco said coldly. "Like you did me a *favor*."

Harry nodded, blowing Draco's mind completely, and said, "What if Lucius comes up with the same idea I did, that the problem is stronger wizards having fewer children? He might start a program to pay the strongest purebloods to have more children. In fact, if blood purism *were* right, that's just what Lucius *should* be doing - addressing the problem on *his* side, where he can make things happen right away. Right now, Draco, you're the only friend Lucius has who would try to stop him from wasting the effort, because you're the only one who knows the *real* truth and can predict the real results."

The thought came to Draco that Harry Potter had been raised in a place so strange that he was now effectively a magical creature rather

CHAPTER 24

than a wizard. Draco simply couldn't guess what Harry would say or do next.

"*Why?*" Draco said. Putting pain and betrayal into his voice wasn't hard at all. "Why did you *do* this to me? What *was* your plan?"

"Well," Harry said, "you're Lucius's heir, and believe it or not, Dumbledore thinks I belong to him. So we could grow up and fight their battles with each other. Or we could do something else."

Slowly, Draco's mind wrapped around this. "You want to provoke a fight to the finish between them, then seize power after they're both exhausted." Draco felt cold dread in his chest. He would *have* to try and stop that no matter the cost to himself -

But Harry shook his head. "Stars above, *no!*"

"No...?"

"You wouldn't go along with that and neither would I," said Harry. "This is *our* world, we don't want to break it. But imagine, say, Lucius thought the Conspiracy was your tool and you were on his side, Dumbledore thought the Conspiracy was my tool and I was on his side, Lucius thought that you'd turned me and Dumbledore believed the Conspiracy was mine, Dumbledore thought that I'd turned you and Lucius believed the Conspiracy was yours, and so they both helped us out but only in ways that the other one wouldn't notice."

Draco did not have to fake being speechless.

Father had once taken him to see a play called *The Tragedy of Light*, about this *incredibly* clever Slytherin named Light who'd set out to purify the world of evil using an ancient ring that could kill anyone whose name and face he knew, and who'd been opposed by another incredibly clever Slytherin, a villain named Lawliet, who'd worn a disguise to conceal his true face; and Draco had shouted and cheered at all the right parts, especially in the middle; and then the play had ended sadly and Draco had been hugely disappointed and Father had gently pointed out that the word 'Tragedy' was right there in the title.

Afterward, Father had asked Draco if he understood why they had gone to see this play.

Draco had said it was to teach him to be as cunning as Light and Lawliet when he grew up.

MACHIAVELLIAN INTELLIGENCE HYPOTHESIS

Father had said that Draco couldn't possibly be more wrong, and pointed out that while Lawliet had cleverly concealed his face there had been no good reason for him to tell Light his *name*. Father had then gone on to demolish almost every part of the play, while Draco listened with his eyes growing wider and wider. And Father had finished by saying that plays like this were *always* unrealistic, because if the playwright had known what someone *actually* as smart as Light would *actually* do, the playwright would have tried to take over the world himself instead of just writing plays about it.

That was when Father had told Draco about the Rule of Three, which was that any plot which required more than three different things to happen would never work in real life.

Father had *further* explained that since only a fool would attempt a plot that was *as complicated as possible*, the real limit was two.

Draco couldn't even find words to describe the sheer gargantuan unworkability of Harry's master plan.

But it was *just* the sort of mistake you would make if you didn't have any mentors and thought you were clever and had learned about plotting by watching plays.

"So," said Harry, "what do you think of the plan?"

"It's clever..." Draco said slowly. Shouting *brilliant!* and gasping in awe would have looked too suspicious. "Harry, can I ask a question?"

"Sure," said Harry.

"Why did you buy Granger an expensive pouch?"

"To show no hard feelings," said Harry at once. "Though I expect she'll also feel awkward if she refuses any small requests I make over the next couple of months."

And that was when Draco realized that Harry actually *was* trying to be his friend.

Harry's move against Granger *had* been smart, maybe even brilliant. Make your enemy not suspect you, *and* put them into your debt in a friendly way so that you could maneuver them into position *just by asking them*. Draco couldn't have gotten away with that, his target would have been too suspicious, but the Boy-Who-Lived *could*. So the first step of Harry's plot was to give his enemy an expensive present, Draco wouldn't have thought of that, but it could *work*...

CHAPTER 24

If you were Harry's enemy, his plots might be hard to see through at first, they might even be stupid, but his reasoning would make *sense* once you understood it, you would comprehend that he was trying to hurt you.

The way Harry was acting toward Draco right now did *not* make sense.

Because if you were Harry's *friend*, then he tried to be friends with you in the alien, incomprehensible way he'd been raised by Muggles to do, even if it meant destroying your entire life.

The silence stretched.

"I know that I've abused our friendship terribly," Harry said finally. "But please realize, Draco, that in the end, I just wanted the two of us to find the truth together. Is that something you can forgive?"

A fork with two paths, but with only one path easy to go back on later if Draco changed his mind...

"I guess I understand what you were trying to do," Draco lied, "so yes."

Harry's eyes lit up. "I'm glad to hear that, Draco," he said softly.

The two students stood in that alcove, Harry still dipped in the lone sunbeam, Draco in shadow.

And Draco realized with a note of horror and despair, that although it was a terrifying fate indeed to be Harry's friend, Harry now had so many different avenues for threatening Draco that being his enemy would be even *worse*.

Probably.

Maybe.

Well, he could always switch to being enemies later...

He was doomed.

"So," Draco said. "Now what?"

"We study again next Saturday?"

"It better not go like the last one -"

"Don't worry, it won't," said Harry. "A few more Saturdays like *that* and you'd be ahead of *me*."

Harry laughed. Draco didn't.

MACHIAVELLIAN INTELLIGENCE HYPOTHESIS

"Oh, and before you go," Harry said, and grinned sheepishly. "I know this is a bad time, but I wanted to ask you for advice about something, actually."

"Okay," Draco said, still a bit distracted by that last statement.

Harry's eyes grew intent. "Buying that pouch for Granger used up most of the gold I managed to steal from my Gringotts vault -"

What.

"- and McGonagall has the vault key, or Dumbledore does now, maybe. And I was just about to launch a plot that might take some money, so I was wondering if you know how I can get access -"

"I'll loan you the money," said Draco's mouth in sheer existential reflex.

Harry looked taken aback, but in a pleased way. "Draco, you don't have to -"

"How much?"

Harry named the amount and Draco couldn't quite keep the shock from showing on his face. That was almost all the spending money Father had given Draco to last out the whole year, Draco would be left with just a few Galleons -

Then Draco mentally kicked himself. All he had to do was write Father and explain that the money was gone because he had managed to *loan it to Harry Potter*, and Father would send him a special congratulatory note written in golden ink, a giant Chocolate Frog that would take two weeks to eat, and ten times as many Galleons just in case Harry Potter needed another loan.

"It's way too much, isn't it," said Harry. "I'm sorry, I shouldn't have asked -"

"Excuse me, I *am* a Malfoy, you know," said Draco. "I was just surprised you *wanted* that much."

"Don't worry," Harry Potter said cheerfully. "It's nothing that threatens your family's interests, just me being evil."

Draco nodded. "No problem, then. You want to go get it right now?"

"Sure," said Harry.

As they left the alcove and started heading toward the dungeons, Draco couldn't help but ask, "So *can* you tell me which plot this is for?"

"Rita Skeeter."

CHAPTER 24

Draco thought some very bad words to himself, but it was far too late to say no.

By the time they'd reached the dungeons, Draco had started pulling together his thoughts again.

He *was* having trouble hating Harry Potter. Harry *had* been trying to be friendly, he was just insane.

And that wasn't going to stop Draco's revenge or even slow it down.

"So," Draco said, after looking around to make certain no one was nearby. Their voices would both be Blurred, of course, but it never hurt to be extra sure. "I've been thinking. When we bring new recruits into the Conspiracy, they're going to have to *think* we're equals. Otherwise it would only take *one* of them to blow the plot to Father. You already worked that out, right?"

"Naturally," said Harry.

"*Will* we be equals?" said Draco.

"I'm afraid not," Harry said. It was clear that he was trying to sound gentle, and also clear that he was trying to suppress a good deal of condescension and not quite succeeding. "I'm sorry, Draco, but you don't even know what the word *Bayesian* in *Bayesian Conspiracy* means right now. You're going to have to study for months before we take anyone else in, just so you can put up a *good front*."

"Because I don't know enough science," Draco said, carefully keeping his voice neutral.

Harry shook his head at that. "The problem isn't that you're ignorant of specific science things like deoxyribose nucleic acid. *That* wouldn't stop you from being my equal. The problem is that you aren't trained in the methods of rationality, the *deeper* secret knowledge behind how all those discoveries got made in the first place. I'll *try* to teach you those, but they're a lot harder to learn. Think of what we did yesterday, Draco. Yes, you did some of the work. But I was the only one in control. You answered some of the questions. I asked all of them. You helped push. I did the steering by myself. And without the methods of rationality, Draco, you can't possibly steer the Conspiracy where it needs to go."

"I see," said Draco, his voice sounding disappointed.

MACHIAVELLIAN INTELLIGENCE HYPOTHESIS

Harry's voice tried to gentle itself even more. "I'll try to respect your expertise, Draco, about things like people stuff. But you need to respect my expertise too, and there's just no *way* you could be my equal when it comes to steering the Conspiracy. You've only been a scientist for *one day*, you know *one* secret about deoxyribose nucleic acid, and you aren't trained in *any* of the methods of rationality."

"I understand," said Draco.

And he did.

People stuff, Harry had said. Seizing control of the Conspiracy probably wouldn't even be difficult. And afterward, he would kill Harry Potter just to be sure -

The memory rose up in Draco of how sick inside it had felt last night, knowing Harry was screaming.

Draco thought some more bad words.

Fine. He *wouldn't* kill Harry. Harry had been raised by Muggles, it wasn't his fault he was insane.

Instead, Harry would live on, just so that Draco could tell him that it had all been for Harry's own good, really, he ought to be grateful -

And with a sudden twitch of surprised pleasure, Draco realized that it actually *was* for Harry's own good. If Harry tried to carry out his plan of playing Dumbledore and Father for fools, he would *die*.

That made it *perfect*.

Draco would take all of Harry's dreams away from him, just as Harry had done to him.

Draco would tell Harry that it had been for his own good, and it would be absolutely true.

Draco would wield the Conspiracy and the power of science to purify the wizarding world, and Father would be as proud of him as if he'd been a Death Eater.

Harry Potter's evil plots would be foiled, and the forces of right would prevail.

The perfect revenge.

Unless...

Just pretend to be pretending to be a scientist, Harry had told him.

Draco didn't have words to describe exactly what was wrong with Harry's mind -

CHAPTER 24

(since Draco had never heard the term *depth of recursion*)

- but he could guess what sort of plots it implied.

...unless all that was exactly what Harry *wanted* Draco to do as part of some even *larger* plot which Draco would play *right into* by trying to foil this one, Harry might even *know* that his plan was unworkable, it might have no purpose *except* luring Draco to thwart it -

No. That way lay *madness*. There *had* to be a limit. The Dark Lord himself hadn't been *that* twisty. That sort of thing didn't happen in real life, only in Father's silly bedtime stories about foolish gargoyles who always ended up furthering the hero's plans every time they tried to stop him.

And beside Draco, Harry walked along with a smile on his face, thinking about the evolutionary origins of human intelligence.

In the beginning, before people had quite understood how evolution worked, they'd gone around thinking crazy ideas like *human intelligence evolved so that we could invent better tools*.

The reason why this was crazy was that only one person in the tribe had to invent a tool, and then everyone else would use it, and it would spread to other tribes, and still be used by their descendants a hundred years later. That was great from the perspective of scientific progress, but in evolutionary terms, it meant that the person who invented something didn't have much of a fitness *advantage*, didn't have all that many *more* children than everyone else. Only *relative* fitness advantages could increase the relative frequency of a gene in the population, and drive some lonely mutation to the point where it was universal and everyone had it. And brilliant inventions just weren't common enough to provide the sort of consistent selection pressure it took to promote a mutation. It was a natural guess, if you looked at humans with their guns and tanks and nuclear weapons and compared them to chimpanzees, that the intelligence was there to make the technology. A natural guess, but wrong.

Before people had quite understood how evolution worked, they'd gone around thinking crazy ideas like *the climate changed, and tribes had to migrate, and people had to become smarter in order to solve all the novel problems*.

MACHIAVELLIAN INTELLIGENCE HYPOTHESIS

But human beings had four times the brain size of a chimpanzee. 20% of a human's metabolic energy went into feeding the brain. Humans were *ridiculously* smarter than any other species. That sort of thing didn't happen because the environment stepped up the difficulty of its problems a little. Then the organisms would just get a little smarter to solve them. Ending up with that gigantic outsized brain must have taken some sort of *runaway* evolutionary process, something that would push and push without limits.

And today's scientists had a pretty good guess at what that runaway evolutionary process had been.

Harry had once read a famous book called *Chimpanzee Politics*. The book had described how an adult chimpanzee named Luit had confronted the aging alpha, Yeroen, with the help of a young, recently matured chimpanzee named Nikkie. Nikkie had not intervened directly in the fights between Luit and Yeroen, but had prevented Yeroen's other supporters in the tribe from coming to his aid, distracting them whenever a confrontation developed between Luit and Yeroen. And in time Luit had won, and become the new alpha, with Nikkie as the second most powerful...

...though it hadn't taken very long after that for Nikkie to form an alliance with the defeated Yeroen, overthrow Luit, and become the *new* new alpha.

It really made you appreciate what millions of years of hominids trying to outwit *each other* - an evolutionary arms race without limit - had led to in the way of increased mental capacity.

'Cause, y'know, a human would have totally seen that one coming.

And beside Harry, Draco walked along, suppressing his smile as he thought about his revenge.

Someday, maybe in years but someday, Harry Potter would learn just what it meant to underestimate a Malfoy.

Draco had awakened as a scientist in a single day. Harry had said that wasn't supposed to happen for months.

But of course if you were a Malfoy, you would be a more powerful scientist than anyone who wasn't.

CHAPTER 24

So Draco would learn all of Harry Potter's methods of rationality, and then when the time was ripe -

CHAPTER 25

HOLD OFF ON PROPOSING SOLUTIONS

To seek out new life, and J. K. Rowling!

Note: Since the science in this story is usually all correct, I include a warning that in Ch. 22-25 Harry overlooks many possibilities, the most important of which is that there are lots of magical genes but they're all on one chromosome (which wouldn't happen naturally, but the chromosome might have been engineered). In this case, the inheritance pattern would be Mendelian, but the magical chromosome could still be degraded by chromosomal crossover with its nonmagical homologue. (Harry has read about Mendel and chromosomes in science history books, but he hasn't studied enough actual genetics to know about chromosomal crossover. Hey, he's only eleven.) However, although a modern science journal would find a *lot* more nits to pick, everything Harry presents as strong evidence is in fact strong evidence - the other possibilities are *improbable*.

Act 2:

(The sun shone brilliantly into the Great Hall from the enchanted sky-ceiling above, illuminating the students as though they sat beneath the naked sky, gleaming from their plates and bowls, as, refreshed by a night's sleep, they inhaled breakfast in preparation for whatever plans they'd made for their Sunday.)

So. There was only one thing that made you a wizard.

That wasn't surprising, when you thought about it. What DNA mostly did was tell ribosomes how to chain amino acids together into proteins. Conventional physics seemed quite capable of describing amino acids, and no matter how many amino acids you chained together, conventional physics said you would never, ever get magic out of it.

And yet magic seemed to be hereditary, following DNA.

Then that probably *wasn't* because the DNA was chaining together nonmagical amino acids into magical proteins.

Rather the key DNA sequence did not, of itself, give you your magic at all.

Magic came from somewhere else.

(At the Ravenclaw table there was one boy who was staring off into space, as his right hand automatically spooned some unimportant food into his mouth from whatever was in front of him. You probably could have substituted a pile of dirt and he wouldn't have noticed.)

And for some reason the Source of Magic was paying attention to a particular DNA marker among individuals who were ordinary ape-descended humans in every other way.

(Actually there were quite a lot of boys and girls staring off into space. It was the *Ravenclaw* table, after all.)

There were other lines of logic leading to the same conclusion. *Complex* machinery was always universal within a sexually reproducing species. If gene B relied on gene A, then A had to be useful on its own, and rise to near-universality in the gene pool on its own, before B would be useful often enough to confer a fitness advantage. Then once B was universal you would get a variant A* that relied on B, and then C that relied on A* and B, then B* that relied on C, until the whole machine would fall apart if you removed a single piece. But it all had to happen *incrementally* - evolution never looked ahead, evolution would never start promoting B in *preparation* for A becoming universal later. Evolution was the simple historical fact that, whichever organisms did in fact have the most children, their genes would in fact be more frequent in the next generation. So each piece of a complex machine had to become nearly universal before other pieces in the machine would evolve to depend on its presence.

So *complex, interdependent* machinery, the powerful sophisticated protein machines that drove life, was always *universal* within a sexually reproducing species - except for a small handful of *non-interdependent variants* that were being selected on at any given time, as further complexity was slowly laid down. It was why all human beings had the same underlying brain design, the same emotions, the same facial

HOLD OFF ON PROPOSING SOLUTIONS

expressions wired up to those emotions; those adaptations were complex, so they *had* to be universal.

If magic had been like that, a big complex adaptation with lots of necessary genes, then a wizard mating with a Muggle would have resulted in a child with only half those parts and half the machine wouldn't do much. And so there would have been no Muggleborns, ever. Even if all the pieces had individually gotten into the Muggle gene pool, they'd never reassemble all in one place to form a wizard.

There hadn't been some genetically isolated valley of humans that had stumbled onto an evolutionary pathway leading to sophisticated magical sections of the brain. That complex genetic machinery, if wizards interbred with Muggles, would never have reassembled into Muggleborns.

So however your genes made you a wizard, it *wasn't* by containing the blueprints for complicated machinery.

That was the other reason Harry had guessed the Mendelian pattern would be there. If magical genes weren't complicated, why would there be more than one?

And yet magic itself seemed pretty complicated. A door-locking spell would prevent the door from opening *and* prevent you from Transfiguring the hinges *and* resist *Finite Incantatem* and *Alohomora*. Many elements all pointing in the same direction: you could call that goal-orientation, or in simpler language, purposefulness.

There were only two known causes of purposeful complexity. Natural selection, which produced things like butterflies. And intelligent engineering, which produced things like cars.

Magic didn't seem like something that had self-replicated into existence. Spells were purposefully complicated, but not, like a butterfly, complicated for the purpose of making copies of themselves. Spells were complicated for the purpose of serving their user, like a car.

Some intelligent engineer, then, had created the Source of Magic, and told it to pay attention to a particular DNA marker.

The obvious next thought was that this had something to do with "Atlantis".

CHAPTER 25

Harry had asked Hermione about that earlier - on the train to Hogwarts, after hearing Draco say it - and so far as she knew, nothing more was known than the word itself.

It might have been pure legend. But it was also plausible enough that a civilization of magic-users, especially one from *before* the Interdict of Merlin, would have managed to blow itself up.

The line of reasoning continued: Atlantis had been an isolated civilization that had somehow brought into being the Source of Magic, and told it to serve only people with the Atlantean genetic marker, the blood of Atlantis.

And by similar logic: The words a wizard spoke, the wand movements, those weren't complicated enough of themselves to build up the spell effects from scratch - not the way that the three billion base pairs of human DNA actually *were* complicated enough to build a human body from scratch, not the way that computer programs took up thousands of bytes of data.

So the words and wand movements were just triggers, levers pulled on some hidden and more complex machine. Buttons, not blueprints.

And just like a computer program wouldn't compile if you made a single spelling error, the Source of Magic wouldn't respond to you unless you cast your spells in exactly the right way.

The chain of logic was inexorable.

And it led inevitably toward a single final conclusion.

The ancient forebears of the wizards, thousands of years earlier, had told the Source of Magic to only levitate things if you said...

'Wingardium Leviosa.'

Harry slumped over at the breakfast table, resting his forehead wearily on his right hand.

There was a story from the dawn days of Artificial Intelligence - back when they were just starting out and no one had yet realized the problem would be difficult - about a professor who had delegated one of his grad students to solve the problem of computer vision.

Harry was beginning to understand how that grad student must have felt.

This could take a while.

HOLD OFF ON PROPOSING SOLUTIONS

Why did it take more effort to cast the Alohomora spell, if it was just like pressing a button?

Who'd been silly enough to build in a spell for *Avada Kedavra* that could only be cast using hatred?

Why did wordless Transfiguration require you to make a complete mental separation between the concept of form and concept of material?

Harry might not be done with this problem by the time he graduated Hogwarts. He could still be working on this problem when he was *thirty years old*. Hermione had been right, Harry *hadn't* realized that on a gut level before. He'd just given an inspiring speech about determination.

Harry's mind briefly considered whether to get on a gut level that he might never solve the problem at all, then decided that would be taking things much too far.

Besides, so long as he could get as far as immortality in the first few decades, he'd be fine.

What method had the Dark Lord used? Come to think, the fact that the Dark Lord had somehow managed to survive the death of his first body was almost *infinitely* more important than the fact that he'd tried to take over magical Britain -

"Excuse me," said an expected voice from behind him in very unexpected tones. "At your convenience, Mr. Malfoy requests the favor of a conversation."

Harry did not choke on his breakfast cereal. Instead he turned around and beheld Mr. Crabbe.

"Excuse *me*," said Harry. "Don't you mean 'Da boss wants ta talk wid youse?'"

Mr. Crabbe didn't look happy. "Mr. Malfoy instructed me to speak properly."

"I can't hear you," Harry said. "You're not speaking properly." He turned back to his bowl of tiny blue crystal snowflakes and deliberately ate another spoonful.

"Da boss wants to talk with youse," came a threatening voice from behind him. "Ya'd better come see him if ya know what's good for ya."

There. *Now* everything was going according to plan.

CHAPTER 25

Act 1:

"A *reason*?" said the old wizard. He restrained the fury from his face. The boy before him had been the victim, and certainly did not need to be frightened any further. "There is *nothing* that can excuse -"

"What I did to him was worse."

The old wizard stiffened in sudden horror. "Harry, *what have you done*?"

"I tricked Draco into believing that I'd tricked him into participating in a ritual that sacrificed his belief in blood purism. And that meant he couldn't be a Death Eater when he grew up. He'd lost everything, Headmaster."

There was a long quiet in the office, broken only by the tiny puffs and whistles of the fiddly things, which after enough time had come to seem like silence.

"Dear me," said the old wizard, "I *do* feel silly. And *here* I was expecting you might try to redeem the heir of Malfoy by, say, *showing him true friendship and kindness*."

"Ha! Yeah, like *that* would have worked."

The old wizard sighed. This was taking it too far. "Tell me, Harry. Did it even *occur* to you that there was something *incongruous* about setting out to redeem someone through lies and trickery?"

"I did it without telling any direct lies, and since we're talking about Draco Malfoy here, I think the word you're looking for is *congruous*." The boy looked rather smug.

The old wizard shook his head in despair. "And *this* is the hero. We're all doomed."

Act 5:

The long, narrow tunnel of rough stone, unlit except by a child's wand, seemed to stretch on for miles.

The reason for this was simple: It *did* stretch on for miles.

The time was three in the morning, and Fred and George were starting the long way down the secret passage that led from a statue of a one-eyed witch in Hogwarts, to the cellar of the Honeydukes candyshop in Hogsmeade.

"How's it doing?" said Fred in a low voice.

HOLD OFF ON PROPOSING SOLUTIONS

(Not that there'd be anyone listening, but there was something odd about talking in a normal voice when you were going through a secret passage.)

"Still on the fritz," said George.

"Both, or -"

"Intermittent one fixed itself again. Other one's same as ever."

The Map was an extraordinarily powerful artifact, capable of tracking every sentient being on the school grounds, in real time, by name. Almost certainly, it had been created during the original raising of Hogwarts. It was *not good* that errors were starting to pop up. Chances were that no one except Dumbledore could fix it if it was broken.

And the Weasley twins weren't about to turn the Map over to Dumbledore. It would have been an unforgivable insult to the Marauders - the four unknowns who'd managed to steal part of the *Hogwarts security system*, something probably forged by Salazar Slytherin himself, and twist it into *a tool for student pranking*.

Some might have considered it disrespectful.

Some might have considered it criminal.

The Weasley twins firmly believed that if Godric Gryffindor had been around to see it, he would have approved.

The brothers walked on and on and on, mostly in silence. The Weasley twins talked to each other when they were thinking through new pranks, or when one of them knew something the other didn't. Otherwise there wasn't much point. If they already knew the same information, they tended to think the same thoughts and make the same decisions.

(Back in the old days, whenever magical identical twins were born, it had been the custom to kill one of them after birth.)

In time, Fred and George clambered out into a dusty cellar, strewn with barrels and racks of strange ingredients.

Fred and George waited. It wouldn't have been polite to do anything else.

Before too long a thin old man in black pajamas clambered down the steps that led into the cellar, yawning. "Hello, boys," said Ambrosius Flume. "I wasn't expecting you tonight. Out of stock already?"

Fred and George decided that Fred would speak.

CHAPTER 25

"Not exactly, Mr. Flume," said Fred. "We were hoping you could help us with something considerably more... interesting."

"Now, boys," said Flume, sounding severe, "I hope you didn't wake me up just so I could tell you again that I'm not selling you any merchandise that could get you into real trouble. Not until you're sixteen, anyways -"

George drew forth an item from his robes, and wordlessly passed it to Flume. "Have you seen this?" said Fred.

Flume looked at yesterday's edition of the *Daily Prophet* and nodded, scowling. The headline on the paper read THE NEXT DARK LORD? and showed a young boy which some student's camera had managed to catch in an uncharacteristically cold and grim expression.

"I can't believe that Malfoy," Flume snapped. "Going after the boy when he's only eleven! The man ought to be ground up and used to make chocolates!"

Fred and George blinked in unison. *Malfoy* was behind Rita Skeeter? Harry Potter hadn't warned them about that... which surely meant that Harry didn't know. He never would have brought them in if he did...

Fred and George exchanged glances. Well, Harry didn't *need* to know until after the job was done.

"Mr. Flume," Fred said quietly, "the Boy-Who-Lived needs your help."

Flume looked at them both.

Then he let out his breath with a sigh.

"All right," said Flume, "what do you want?"

Act 6:

When Rita Skeeter was intent on a tasty prey, she didn't tend to notice the scurrying ants who constituted the rest of the universe, which was how she almost bumped into the balding young man who'd stepped into her pathway.

"Miss Skeeter," said the man, sounding rather severe and cold for someone whose face looked that young. "Fancy running into you here."

"Out of my way, buster!" snapped Rita, and tried to step around him.

HOLD OFF ON PROPOSING SOLUTIONS

The man in her pathway matched the movement so perfectly that it was like neither of them had moved at all, just stood still while the street shifted around them.

Rita's eyes narrowed. "Who do you think you are?"

"How very foolish," the man said dryly. "It would have been wise to memorize the face of the disguised Death Eater training Harry Potter to be the next Dark Lord. After all," a thin smile, "*that* certainly sounds like someone you wouldn't want to run into on the street, especially after doing a hatchet job on him in the newspaper."

Rita took a moment to place the reference. *This* was Quirinus Quirrell? He looked too young and too old at the same time; his face, if it relaxed from its severe and condescending pose, would belong to someone in his late thirties. And his hair was already falling out? Couldn't he afford a healer?

No, that wasn't important, she had a time and a place and a beetle to be. She'd just received an anonymous tip about Madam Bones making time with one of her younger assistants. That would be worth quite a bonus if she could manage to verify it, Bones was high on the hit list. The tipster had said that Bones and her young assistant were due to eat lunch in a special room at Mary's Place, a very popular room for certain purposes; a room which, she'd found, was secure against all listening devices, but not proof against a beautiful blue beetle nestled up against one wall...

"Out of my *way*!" Rita said, and tried to push Quirrell from her path. Quirrell's arm brushed her own, deflecting, and Rita staggered as the thrust went into the thin air.

Quirrell pulled up the sleeve of his left robe, showing his left arm. "Observe," said Quirrell, "no Dark Mark. I would like your paper to publish a retraction."

Rita let out an incredulous laugh. Of course the man wasn't a real Death Eater. The paper wouldn't have published it if he was. "Forget it, buster. Now take a hike."

Quirrell stared at her for a moment.

Then he smiled.

CHAPTER 25

"Miss Skeeter," said Quirrell, "I had hoped to find some lever that would prove persuasive. Yet I find that I cannot deny myself the pleasure of simply crushing you."

"It's been tried. Now get out of my way, buster, or I'll find some Aurors and have you arrested for obstruction of journalism."

Quirrell swept her a small bow, and then walked past. "Goodbye, Rita Skeeter," said his voice from behind her.

As Rita bulled on ahead, she noted in the back of her mind that the man was whistling a tune as he walked away.

Like *that* would scare her.

Act 4:

"Sorry, count me out," said Lee Jordan. "I'm more the giant spider type."

The Boy-Who-Lived had said that he had *important* work for the Order of Chaos, something serious and secret, more significant and difficult than their usual run of pranks.

And then Harry Potter had launched into a speech that was inspiring, yet vague. A speech to the effect that Fred and George and Lee had tremendous potential if they could just learn to be *weirder*. To make people's lives *surreal*, instead of just surprising them with the equivalents of buckets of water propped above doors. (Fred and George had exchanged interested looks, they'd never thought of that one.) Harry Potter had invoked a picture of the prank they'd pulled on Neville - which, Harry had mentioned with some remorse, the Sorting Hat had chewed him out on - but which must have made Neville *doubt his own sanity*. For Neville it would have felt like being suddenly transported into an alternate universe. The same way everyone else had felt when they'd seen Snape apologize. That was the *true power of pranking*.

Are you with me? Harry Potter had cried, and Lee Jordan had answered no.

"Count us *in*," said Fred, or possibly George, for there was no doubt that Godric Gryffindor would have said yes.

HOLD OFF ON PROPOSING SOLUTIONS

Lee Jordan gave a regretful grin, and stood up, and left the deserted and Quieted corridor where the four members of the Order of Chaos had met and sat down in a conspiratorial circle.

The three members of the Order of Chaos got down to business.

(It wasn't *that* sad. Fred and George would still work with Lee on giant spider pranks, same as ever. They'd only started calling it the Order of Chaos in order to recruit Harry Potter, after Ron had told them about Harry being weird and evil, and Fred and George had decided to save Harry by showing him true friendship and kindness. Thankfully this no longer seemed necessary - although they weren't *quite* sure about that...)

"So," said one of the twins, "what's this about?"

"Rita Skeeter," said Harry. "Do you know who she is?"

Fred and George nodded, frowning.

"She's been asking questions about me."

That wasn't good news.

"Can you guess what I want you to do?"

Fred and George looked at each other, a bit puzzled. "You want us to slip her some of our more interesting candies?"

"No," said Harry. "No, no, *no!* That's giant-spider thinking! Come on, what would *you* do if you heard that Rita Skeeter was looking for rumors about *you*?"

That made it obvious.

Grins slowly started on the faces of Fred and George.

"Start rumors about ourselves," they replied.

"*Exactly*," said Harry, grinning widely. "But these can't be just *any* rumors. I want to teach people never to believe what the newspaper says about Harry Potter, any more than Muggles believe what the newspaper says about Elvis. At first I just thought about flooding Rita Skeeter with so many rumors that she wouldn't know what to believe, but then she'll just cherry-pick the ones that sound plausible and bad. So what I want you to do is create a fake story about me, and get Rita Skeeter to believe it somehow. But it has to be something that, afterward, everyone will *know* was fake. We want to fool Rita Skeeter and her editors, and *afterward* have the proof come out that it was false. And of course - given that those are the requirements - the story has to be as *ridiculous* as it can

possibly be, and still get printed. Do you understand what I want you to do?"

"Not exactly..." Fred or George said slowly. "You want us to *invent* the story?"

"I want you to do *all* of it," Harry Potter said. "I'm sort of busy right now, plus I want to be able to say truthfully that I had no idea what was coming. Surprise me."

For a moment there was a very evil grin on the faces of Fred and George.

Then they turned serious. "But Harry, we don't really know how to do anything like that -"

"So figure it out," Harry said. "I have confidence in you. Not *total* confidence, but if you *can't* do it, *tell* me that, and I'll try someone else, or do it myself. If you have a really good idea - for both the ridiculous story, and how to convince Rita Skeeter and her editors to print it - then you can go ahead and do it. But don't go with something mediocre. If you can't come up with something *awesome*, just say so."

Fred and George exchanged worried glances.

"I can't think of anything," said George.

"Neither can I," said Fred. "Sorry."

Harry stared at them.

And then Harry began to explain how you went about thinking of things.

It had been known to take longer than two seconds, said Harry.

You *never* called *any* question impossible, said Harry, until you had taken an actual clock and thought about it for five minutes, by the motion of the minute hand. Not five minutes metaphorically, five minutes by a physical clock.

And *furthermore*, Harry said, his voice emphatic and his right hand thumping hard on the floor, you did *not* start out immediately looking for solutions.

Harry then launched into an explanation of a test done by someone named Norman Maier, who was something called an organizational psychologist, and who'd asked two different sets of problem-solving groups to tackle a problem.

HOLD OFF ON PROPOSING SOLUTIONS

The problem, Harry said, had involved three employees doing three jobs. The junior employee wanted to just do the easiest job. The senior employee wanted to rotate between jobs, to avoid boredom. An efficiency expert had recommended giving the junior person the easiest job and the senior person the hardest job, which would be 20% more productive.

One set of problem-solving groups had been given the instruction "Do not propose solutions until the problem has been discussed as thoroughly as possible without suggesting any."

The other set of problem-solving groups had been given no instructions. And those people had done the natural thing, and reacted to the presence of a problem by proposing solutions. And people had gotten attached to those solutions, and started fighting about them, and arguing about the relative importance of freedom versus efficiency and so on.

The first set of problem-solving groups, the ones given instructions to *discuss* the problem first and *then* solve it, had been far more likely to hit upon the solution of letting the junior employee keep the easiest job and rotating the other two people between the other two jobs, for what the expert's data said would be a 19% improvement.

Starting out by looking for solutions was taking things *entirely out of order*. Like starting a meal with dessert, only *bad*.

(Harry also quoted someone named Robyn Dawes as saying that the harder a problem was, the more likely people were to try to solve it immediately.)

So Harry was going to leave this problem to Fred and George, and they would discuss all the aspects of it and brainstorm anything they thought might be remotely relevant. And they shouldn't try to come up with an actual solution until they'd finished doing that, unless of course they *did* happen to randomly think of something awesome, in which case they could write it down for afterward and then go back to thinking. And he didn't want to hear back from them about any so-called *failures to think of anything* for at least a week. Some people spent *decades* trying to think of things.

"Any questions?" said Harry.

Fred and George stared at each other.

"I can't think of any."

"Neither can I."

Harry coughed gently. "You didn't ask about your budget."

Budget? they thought.

"I could just tell you the amount," Harry said. "But I think *this* will be more *inspiring*."

Harry's hands dipped into his robe, and brought forth -

Fred and George almost fell over, even though they were sitting down.

"Don't spend it for the sake of spending it," Harry said. On the stone floor in front of them gleamed an absolutely ridiculous amount of money. "Only spend it if awesomeness requires; and what awesomeness does require, don't hesitate to spend. If there's anything left over, just return it afterward, I trust you. Oh, and you get ten percent of what's there, regardless of how much you end up spending -"

"We *can't*!" blurted one of the twins. "We don't accept money for that sort of thing!"

(The twins never took money for doing anything illegal. Unknown to Ambrosius Flume, they were selling all of his merchandise at zero percent markup. Fred and George wanted to be able to testify - under Veritaserum if necessary - that they had not been profiteering criminals, just providing a public service.)

Harry frowned at them. "But I'm asking you to put in some real work here. A grownup would get paid for doing something like this, and it would *still* count as a favor for a friend. You can't just hire people for this sort of thing."

Fred and George shook their heads.

"Fine," Harry said. "I'll just get you expensive Christmas presents, and if you try returning them to me I'll burn them. Now you don't even *know* how much I'm going to spend on you, except, obviously, that it's going to be more than if you'd just taken the money. And I'm going to buy you those presents *anyway*, so think about *that* before you tell me *you can't think of anything awesome*."

Harry stood up, smiling, and turned to go while Fred and George were still gaping in shock. He strode a few steps away, and then turned back.

HOLD OFF ON PROPOSING SOLUTIONS

"Oh, one last thing," Harry said. "Leave Professor Quirrell out of whatever you do. He doesn't like publicity. I know it'd be easier to get people to believe weird things about the Defense Professor than anyone else, and I'm sorry to have to get in your way like that, but please, leave Professor Quirrell out of it."

And Harry turned again and took a few more steps -
Looked back one last time, and said, softly, "Thank you."
And left.

There was a long pause after he'd departed.

"So," said one.

"So," said the other.

"The Defense Professor doesn't like publicity, does he."

"Harry doesn't know us very well, does he."

"No, he doesn't."

"But we won't use his money for that, of course."

"Of course not, that wouldn't be right. We'll do the Defense Professor separately."

"We'll get some Gryffindors to write Skeeter, and say..."

"...his sleeve lifted up one time in Defense class, and they saw the Dark Mark..."

"...and he's probably teaching Harry Potter all sorts of dreadful things..."

"...and he's the worst Defense Professor anyone remembers even in Hogwarts, he's not just *failing* to teach us, he's getting everything wrong, the complete opposite of what it should be..."

"...like when he claimed that you could only cast the Killing Curse using love, which made it pretty much useless."

"I like that one."

"Thanks."

"I bet the Defense Professor likes it too."

"He does have a sense of humor. He wouldn't have called us what he did if he didn't have a sense of humor."

"But are we really going to be able to do Harry's job?"

"Harry said to discuss the problem before trying to solve it, so let's do that."

CHAPTER 25

The Weasley twins decided that George would be the enthusiastic one while Fred doubted.

"It all seems sort of contradictory," said Fred. "He wants it to be ridiculous enough that everyone laughs at Skeeter and knows it's wrong, and he wants Skeeter to believe it. We can't do both things at the same time."

"We'll have to fake up some evidence to convince Skeeter," said George.

"Was that a solution?" said Fred.

They considered this.

"Maybe," said George, "but I don't think we should be all *that* strict about it, do you?"

The twins shrugged helplessly.

"So then the fake evidence has to be good enough to convince Skeeter," said Fred. "Can we really do that on our own?"

"We don't have to do it on our own," said George, and pointed to the pile of money. "We can hire other people to help us."

The twins got a thoughtful look on their face.

"That could use up Harry's budget pretty fast," said Fred. "This is a lot of money for us, but it's not a lot of money for someone like Flume."

"Maybe people will give discounts if they know it's for Harry," said George. "But most importantly of all, whatever we do, it has to be *impossible*."

Fred blinked. "What do you mean, *impossible*?"

"So impossible that we don't get in trouble, because no one believes we could have done it. So impossible that even Harry starts wondering. It has to be surreal, it has to make people doubt their own sanity, it has to be... *better than Harry*."

Fred's eyes were wide in astonishment. This happened sometimes, between them, but not often. "But why?"

"They were pranks. They were *all* pranks. The pie was a prank. The Remembrall was a prank. Kevin Entwhistle's cat was a prank. *Snape* was a prank. *We're* the best pranksters in Hogwarts, are we going to roll over and give up without a fight?"

"He's the Boy-Who-Lived," said Fred.

HOLD OFF ON PROPOSING SOLUTIONS

"And *we're* the Weasley twins! He's *challenging* us. He said we could do what he does. But I bet he doesn't think we'll ever be as good as *him*."

"He's right," said Fred, feeling rather nervous. The Weasley twins did *sometimes* disagree even when they had all the same information, but every time they did it seemed unnatural, like at least one of them must be doing something wrong. "This is *Harry Potter* we're talking about. He can do the impossible. We can't."

"Yes we can," said George. "And we have to be *more* impossible than him."

"But -" said Fred.

"It's what Godric Gryffindor would do," said George.

That settled it, and the twins snapped back into... whatever it was that was normal for them.

"All right, then -"

"- let's think about it."

CHAPTER 26

NOTICING CONFUSION

Yakka foob mog. Grug pubbawup zink wattooom gazork. Chumble spuzz J. K. Rowling.

Professor Quirrell's office hours consisted of 11:40 to 11:55 AM on Thursday. That was for all of his students in all years. It cost a Quirrell point just to knock on the door, and if he didn't think your reason was worth his time, you would lose another fifty.

Harry knocked on the door.

There was a pause. Then a biting voice said, "I suppose you may as well come in, Mr. Potter."

And before Harry could touch the doorknob, the door slammed open, hitting the wall with a sharp crack that sounded like something might have broken in the wood, or the stone, or both.

Professor Quirrell was leaning back in his chair and reading a suspiciously old-looking book, bound in night-blue leather with silver runes on the spine. His eyes had not moved from the pages. "I am not in a good mood, Mr. Potter. And when I am not a good mood, I am not a pleasant person to be around. For your own sake, conduct your business quickly and depart."

A cold chill seeped from the room, as though it contained something that cast darkness the way lamps cast light, and which hadn't been fully shaded.

Harry was a bit taken aback. *Not in a good mood* didn't quite seem to cover it. What could be bothering Professor Quirrell this much...?

Well, you didn't just walk out on friends when they were feeling down. Harry cautiously advanced into the room. "Is there anything I can do to help -"

"No," said Professor Quirrell, still not looking up from the book.

NOTICING CONFUSION

"I mean, if you've been dealing with idiots and want someone sane to talk to..."

There was a surprisingly long pause.

Professor Quirrell slammed the book shut and it vanished with a small whispering sound. He looked up, then, and Harry flinched.

"I suppose an intelligent conversation would be pleasant for *me* at this point," said Professor Quirrell in the same biting tone that had invited Harry to enter. "*You* are not likely to find it so, be warned."

Harry drew a deep breath. "I promise I won't mind if you snap at me. What happened?"

The cold in the room seemed to deepen. "A sixth-year Gryffindor cast a curse at one of my more promising students, a sixth-year Slytherin."

Harry swallowed. "What... sort of curse?"

And the fury on Professor Quirrell's face was no longer contained. "Why bother to ask an unimportant question like that, Mr. Potter? Our friend the sixth-year Gryffindor did not think it was important!"

"Are you *serious*?" Harry said before he could stop himself.

"No, I'm in a terrible mood today for no particular reason. *Yes I'm serious, you fool!* He didn't know. He *actually didn't know*. I didn't believe it until the Aurors confirmed it under Veritaserum. He is in his *sixth year at Hogwarts* and he cast a high-level Dark curse *without knowing what it did*."

"You don't mean," Harry said, "that he was *mistaken* about what it did, that he somehow read the wrong spell description -"

"All he knew was that it was meant to be directed at an enemy. He *knew* that was all he knew."

And that had been enough to cast the spell. "I do not understand how anything with that small a brain could walk upright."

"Indeed, Mr. Potter," said Professor Quirrell.

There was a pause. Professor Quirrell leaned forward and picked up the silver inkwell from his desk, turning it around in his hands, staring at it as though wondering how he could go about torturing an inkwell to death.

"Was the sixth-year Slytherin seriously hurt?" said Harry.

"Yes."

"Was the sixth-year Gryffindor raised by Muggles?"

CHAPTER 26

"Yes."

"Is Dumbledore refusing to expel him because the poor boy didn't know?"

Professor Quirrell's hands whitened on the inkwell. "*Do you have a point, Mr. Potter, or are you just stating the obvious?*"

"Professor Quirrell," said Harry gravely, "all the Muggle-raised students in Hogwarts need a safety lecture in which they are told the things so ridiculously obvious that no wizardborn would ever think to mention them. Don't cast curses if you don't know what they do, if you discover something dangerous don't tell the world about it, don't brew high-level potions without supervision in a bathroom, the reason why there are underage magic laws, all the basics."

"Why?" said Professor Quirrell. "Let the stupid ones die before they breed."

"If you don't mind losing a few sixth-year Slytherins along with them."

The inkwell caught fire in Professor Quirrell's hands and burned with a terrible slowness, hideous black-orange flames tearing at the metal and seeming to take tiny bites from it, the silver twisting as it melted, as though it were trying and failing to escape. There was a tinny shrieking sound, as though the metal were screaming.

"I suppose you are right," Professor Quirrell said with a resigned smile. "I shall design a lecture to ensure that Muggleborns who are too stupid to live do not take anyone valuable with them as they depart."

The inkwell went on screaming and burning in Professor Quirrell's hands, tiny droplets of metal, still on fire, now dripping to the desk, as though the inkwell were crying.

"You're not running away," observed Professor Quirrell.

Harry opened his mouth -

"If you're about to say you're not scared of me," said Professor Quirrell, "*don't.*"

"You are the scariest person I know," Harry said, "and one of the top reasons for that is your control. I simply can't imagine hearing that you'd hurt someone you had not made a deliberate decision to hurt."

The fire in Professor Quirrell's hands winked out, and he carefully placed the ruined inkwell on his desk. "You say the nicest things, Mr.

NOTICING CONFUSION

Potter. Have you been taking lessons in flattery? From, perhaps, Mr. Malfoy?"

Harry kept his expression blank, and realized one second too late that it might as well have been a signed confession. Professor Quirrell didn't care what your expression looked like, he cared which states of mind made it likely.

"I see," said Professor Quirrell. "Mr. Malfoy is a useful friend to have, Mr. Potter, and there is much he can teach you, but I hope you have not made the mistake of trusting him with too many confidences."

"He knows nothing which I fear becoming known," said Harry.

"Well done," said Professor Quirrell, smiling slightly. "So what was your original business here?"

"I think I'm done with the preliminary exercises in Occlumency and ready for the tutor."

Professor Quirrell nodded. "I shall conduct you to Gringotts this Sunday." He paused, looking at Harry, and smiled. "And we might even make it a little outing, if you like. I've just had a pleasant thought."

Harry nodded, smiling back.

As Harry left the office, he heard Professor Quirrell humming a small tune.

Harry was glad he'd been able to cheer him up.

That Sunday there seemed to be a rather large number of people whispering in the hallways, at least when Harry Potter walked past them.

And a lot of pointed fingers.

And a great deal of female giggling.

It had started at breakfast, when someone had asked Harry if he'd heard the news, and Harry had quickly interrupted and said that if the news was written by Rita Skeeter then he didn't want to *hear* about it, he wanted to read it in the paper himself.

It had then developed that not many students at Hogwarts got copies of the *Daily Prophet*, and that the copies which had not already been bought up from their owners were being passed around in some sort of complicated order and nobody really knew who had one at the moment...

CHAPTER 26

So Harry had used a Quieting Charm and gone on to eat his breakfast, trusting to his seat-mates to wave off the many, many questioners, and doing his best to ignore the incredulity, the laughter, the congratulatory smiles, the pitying looks, the fearful glances, and the dropped plates as new people came down for breakfast and heard.

Harry was feeling *rather* curious, but it *really* wouldn't have done to spoil the artistry by hearing it secondhand.

He'd done homework in the safety of his trunk for the next couple of hours, after telling his dormmates to come get him if anyone found him an original newspaper.

Harry was still ignorant at 10AM, when he'd left Hogwarts in a carriage with Professor Quirrell, who was in the front right, and currently slumped over in zombie-mode. Harry was sitting diagonally across, as far away as the carriage allowed, in the back left. Even so, Harry had a constant feeling of doom as the carriage rattled over a small path through a section of non-forbidden forest. It made it a bit hard to read, especially since the material was difficult, and Harry suddenly wished he was reading one of his childhood science fiction books instead -

"We're outside the wards, Mr. Potter," said Professor Quirrell's voice from the front. "Time to go."

Professor Quirrell carefully disembarked from the carriage, bracing himself as he stepped down. Harry, on his own side, jumped off.

Harry was wondering exactly how they'd get there when Professor Quirrell said "Catch!" and threw a bronze Knut at him, and Harry caught it without thinking.

A giant intangible hook caught at Harry's abdomen and yanked him back, hard, only without any sense of acceleration, and an instant later Harry was standing in the middle of Diagon Alley.

(Excuse me, what? said his brain.)

(We just teleported, explained Harry.)

(That didn't used to happen in the ancestral environment, Harry's brain complained, and disoriented him.)

Harry staggered as his feet adjusted to the brick of the street instead of the dirt of the forest corridor they had been traversing. He straightened, still dizzy, with the bustling witches and wizards seeming

NOTICING CONFUSION

to sway slightly, and the cries of the shopkeepers seeming to move around in his hearing, as his brain tried to place a world to be located in.

Moments later, there was a sort of sucking-popping sound from a few paces behind Harry, and when Harry turned to look Professor Quirrell was there.

"Do you mind -" said Harry, at the same time as Professor Quirrell said, "I'm afraid I -"

Harry stopped, Professor Quirrell didn't.

"- need to go off and set something in motion, Mr. Potter. As it has been thoroughly explained to me that I am responsible for anything whatsoever that happens to you, I'll be leaving you with -"

"Newsstand," Harry said.

"Pardon?"

"Or anywhere I can buy a copy of the *Daily Prophet*. Put me there and I'll be happy."

Shortly after, Harry had been delivered into a bookstore, accompanied by several quietly spoken, ambiguous threats. And the shopkeeper had gotten *less* ambiguous threats, judging by the way he had cringed, and how his eyes now kept darting between Harry and the entrance.

If the bookstore burned down, Harry was going to stick around in the middle of the fire until Professor Quirrell got back.

Meanwhile -

Harry took a quick glance around.

The bookstore seemed rather small and shoddy, with only four rows of bookcases visible, and the nearest shelf Harry's eyes had jumped to seemed to deal with narrow, cheaply bound books with grim titles like *The Massacre of Albania in the Fifteenth Century*.

First things first. Harry stepped over to the seller's counter.

"Pardon me," said Harry, "One copy of the *Daily Prophet*, please."

"Five Sickles," said the shopkeeper. "Sorry, kid, I've only got three left."

Five Sickles dropped onto the counter. Harry had the feeling he could have bargained him down a couple of points, but at this point he didn't really care.

CHAPTER 26

The shopkeeper's eyes widened and he seemed to really notice Harry for the first time. "*You!*"

"*Me!*"

"Is it *true*? Are you *really* -"

"*Shut up!* Sorry, I've been waiting *all day* to read this in the original newspaper instead of hearing about it secondhand, so please just *hand it over*, all right?"

The shopkeeper stared at Harry for a moment, then wordlessly reached under the counter and passed over one folded copy of the *Daily Prophet*.

The headline read:

HARRY POTTER
SECRETLY BETROTHED
TO GINEVRA WEASLEY

Harry stared.

He lifted the newspaper off the counter, softly, reverently, like he was handling an original Escher artwork, and unbent it to read...

...about the evidence that had convinced Rita Skeeter.

...and some interesting further details.

...and yet more evidence.

Fred and George had cleared it with their sister first, surely? Yes, of course they had. There was a picture of Ginevra Weasley sighing longingly over what Harry could see, looking closely, was a photo of himself. That had to have been staged.

But *how* on *Earth*...?

Harry was sitting in a cheap folding chair, rereading the newspaper for the fourth time, when the door whispered softly and Professor Quirrell came back into the shop.

"My apologies for - *what* in Merlin's name are you reading?"

"It would seem," said Harry, awe in his voice, "that one Mr. Arthur Weasley was placed under the Imperius Curse by a Death Eater whom my father killed, thus creating a debt to House Potter, which my father demanded be repaid by the hand in marriage of the recently born Ginevra Weasley. Do people actually do that sort of thing around here?"

"How could Miss Skeeter *possibly* be fool enough to believe -"

And Professor Quirrell's voice cut off.

NOTICING CONFUSION

Harry had been reading the newspaper held vertically and unfolded, which meant that Professor Quirrell, from where he was standing, could see the text underneath the headline.

The look of shock on Professor Quirrell's face was a work of art almost on par with the newspaper itself.

"Don't worry," said Harry cheerfully, "it's all fake."

From elsewhere in the store, he heard the shopkeeper gasp. There was the sound of a stack of books falling over.

"Mr. Potter..." Professor Quirrell said slowly, "are you *sure* of that?"

"Quite sure. Shall we go?"

Professor Quirrell nodded, looking rather abstracted, and Harry folded the newspaper back up, and followed him out of the door.

For some reason Harry didn't seem to be hearing any street noises now.

They walked in silence for thirty seconds before Professor Quirrell spoke. "Miss Skeeter viewed the original proceedings of the restricted Wizengamot session."

"Yes."

"The *original proceedings of the Wizengamot*."

"Yes."

"I would have trouble doing that."

"Really?" said Harry. "Because if my suspicions are correct, this was done by a Hogwarts student."

"That is beyond impossible," Professor Quirrell said flatly. "Mr. Potter... I regret to say that this young lady expects to marry you."

"But *that* is improbable," said Harry. "To quote Douglas Adams, the impossible often has a kind of integrity which the merely improbable lacks."

"I see your point," Professor Quirrell said slowly. "But... no, Mr. Potter. It may be impossible, but I can *imagine* tampering with the Wizengamot proceedings. It is *unimaginable* that the Grand Manager of Gringotts should affix the seal of his office in witness to a false betrothal contract, and Miss Skeeter personally verified that seal."

"Indeed," said Harry, "you would expect the Grand Manager of Gringotts to get involved with that much money changing hands. It

CHAPTER 26

seems Mr. Weasley was greatly in debt, and so demanded an additional payment of ten thousand Galleons -"

"*Ten thousand Galleons for a Weasley?* You could buy the daughter of a Noble House for that!"

"Excuse me," Harry said. "I really have to ask at this point, do people actually do that sort of thing around here -"

"Rarely," said Professor Quirrell, with a frown on his face. "And not at all, I suspect, since the Dark Lord departed. I suppose that according to the newspaper, your father just paid it?"

"He didn't have any choice," said Harry. "Not if he wanted to fulfill the conditions of the prophecy."

"*Give me that,*" said Professor Quirrell, and the newspaper leaped out of Harry's hand so fast that he got a paper cut.

Harry automatically put the finger in his mouth to suck on, feeling rather shocked, and turned to remonstrate with Professor Quirrell -

Professor Quirrell had stopped short in the middle of the street, and his eyes were flickering rapidly back and forth as an invisible force held the newspaper suspended before him.

Harry watched, gaping in open awe, as the newspaper opened to reveal pages two and three. And not much long after, four and five. It was like the man had cast off a pretense of mortality.

And after a troublingly short time, the paper neatly folded itself up again. Professor Quirrell plucked it from the air and tossed it to Harry, who caught it in sheer reflex; and then Professor Quirrell started walking again, and Harry automatically trudged after.

"No," said Professor Quirrell, "that prophecy didn't sound quite right to me either."

Harry nodded, still stunned.

"The centaurs could have been put under an *Imperius*," Professor Quirrell said, frowning, "*that* seems understandable. What magic can make, magic can corrupt, and it is not unthinkable that the Great Seal of Gringotts could be twisted to another's hand. The Unspeakable could have been impersonated with Polyjuice, likewise the Bavarian seer. And with *enough* effort it might be possible to tamper with the proceedings of the Wizengamot. Do you have any idea how that was done?"

NOTICING CONFUSION

"I do not have one single plausible hypothesis," said Harry. "I do know it was done on a total budget of forty Galleons."

Professor Quirrell stopped short and whirled on Harry. His expression was now completely incredulous. "Forty Galleons will pay a competent ward-breaker to open a path into a home you wish to burglarize! Forty *thousand* Galleons *might* pay a team of the greatest professional criminals in the world to tamper with the proceedings of the Wizengamot!"

Harry shrugged helplessly. "I'll remember that the next time I want to save thirty-nine thousand, nine hundred and sixty Galleons by finding the right contractor."

"I do not say this often," said Professor Quirrell. "I am impressed."

"Likewise," said Harry.

"And who is this incredible Hogwarts student?"

"I'm afraid I couldn't say."

Somewhat to Harry's surprise, Professor Quirrell made no objection to this.

They walked in the direction of the Gringotts building, thinking, for they were neither of them the sort of person who would give up on the problem without considering it for at least five minutes.

"I have a feeling," Harry said finally, "that we're coming at this from the wrong angle. There's a tale I once heard about some students who came into a physics class, and the teacher showed them a large metal plate near a fire. She ordered them to feel the metal plate, and they felt that the metal nearer the fire was cooler, and the metal further away was warmer. And she said, write down your guess for why this happens. So some students wrote down 'because of how the metal conducts heat', and some students wrote down 'because of how the air moves', and no one said 'this just seems impossible', and the real answer was that before the students came into the room, the teacher turned the plate around."

"Interesting," said Professor Quirrell. "That does sound similar. Is there a moral?"

"That your strength as a rationalist is your ability to be more confused by fiction than by reality," said Harry. "If you're equally good at explaining any outcome, you have zero knowledge. The students thought they could use words like 'because of heat conduction' to

CHAPTER 26

explain anything, even a metal plate being cooler on the side nearer the fire. So they didn't notice how confused they were, and that meant they couldn't be more confused by falsehood than by truth. If you tell me that the centaurs were under the *Imperius* Curse, I still have the feeling of something being not quite right. I notice that I'm still confused even after hearing your explanation."

"Hm," said Professor Quirrell.

They walked on further.

"I don't suppose," said Harry, "that it's possible to *actually* swap people into alternate universes? Like, this isn't our own Rita Skeeter, or they temporarily sent her somewhere else?"

"If *that* was possible," Professor Quirrell said, his voice rather dry, "would I still be *here*?"

And just as they were almost to the huge white front of the Gringotts building, Professor Quirrell said:

"Ah. Of *course*. I see it now. Let me guess, the Weasley twins?"

"*What*?" said Harry, his voice going up another octave in pitch. "*How*?"

"I'm afraid I couldn't say."

"...That is *not* fair."

"I think it is extremely fair," said Professor Quirrell, and they entered through the bronze doors.

The time was just before noon, and Harry and Professor Quirrell were seated at the foot and head of a wide, long, flat table, in a sumptuously appointed private room with thoroughly cushioned couches and chairs along the walls, and soft curtains hanging everywhere.

They were about to eat lunch in Mary's Place, which Professor Quirrell had said was known to him as one of the best restaurants in Diagon Alley, especially for - his voice had dropped meaningfully - *certain purposes*.

It was the nicest restaurant that Harry had ever been in, and it was really eating away at Harry that Professor Quirrell was treating *him* to the meal.

NOTICING CONFUSION

The first part of the mission, to find an Occlumency instructor, had been a success. Professor Quirrell, smiling evilly, had told Griphook to recommend the best he knew, and not worry about the expense, since Dumbledore was paying it; and the goblin had smiled in return. There might have been a certain amount of smiling on Harry's part as well.

The second part of the plan had been a complete failure.

Harry was not allowed to take money out of his vault without Headmaster Dumbledore or some other school official present, and Professor Quirrell had not been given the vault key. Harry's Muggle parents could not authorize it because they were Muggles, and Muggles had around the same legal standing as children or kittens: they were cute, so if you tortured them in public you could get arrested, but they weren't *people*. Some reluctant provision had been made for recognizing the parents of Muggleborns as human in a limited sense, but Harry's adoptive parents did not fall into that legal category.

It seemed that Harry was effectively an orphan in the eyes of the wizarding world. As such, the Headmaster of Hogwarts, or his designees *within* the school system, were Harry's guardians until he graduated. Harry *could* breathe without Dumbledore's permission, but only so long as the Headmaster did not specifically prohibit it.

Harry had then asked if he could simply *tell* Griphook how to diversify his investments beyond stacks of gold coins sitting in his vault.

Griphook had stared blankly and asked what 'diversify' meant.

Banks, it seemed, did not make investments. Banks stored your gold coins in secure vaults for an annual fee.

The wizarding world did not have a concept of stock. Or equity. Or corporations. Businesses were run by families out of their personal vaults.

Loans were made by rich people, not banks. Though Gringotts would witness the contract, for a fee, and enforce its collection, for a much larger fee.

Good rich people let their friends borrow money and pay it back whenever. *Bad* rich people charged you *interest*.

There was no secondary market in loans.

Evil rich people charged you annual interest rates of at least 20%.

Harry had stood up, turned away, and rested his head against the wall.

CHAPTER 26

Harry had asked if he needed the Headmaster's permission before he could start a bank.

Professor Quirrell had interrupted at this point, saying that it was time for lunch, and swiftly conducted a fuming Harry out of the bronze doors of Gringotts, through Diagon Alley, and to a fine restaurant called Mary's Place, where a room had been reserved for them. The owner had looked shocked at seeing Professor Quirrell accompanied by Harry Potter, but had conducted them to the room without complaint.

And Professor Quirrell had quite deliberately announced that he would pay the bill, seeming to rather enjoy the look on Harry's face.

"No," said Professor Quirrell to the waitress, "we will not require menus. I will have the daily special accompanied by a bottle of Chianti, and Mr. Potter will have the Diracawl soup to start, followed by a plate of Roopo balls, and treacle pudding for dessert."

The waitress, clad in robes that still looked severe and formal while being rather shorter than usual, bowed respectfully and departed, shutting the door behind her.

Professor Quirrell waved a hand in the direction of the door, and a bolt slid shut. "Note the bolt on the inside. This room, Mr. Potter, is known as Mary's Room. It happens to be proof against all scrying, and I do mean *all*; Dumbledore himself could detect nothing of what happens here. Mary's Room is used by two kinds of people. The first sort are engaged in illicit dalliances. And the second sort lead interesting lives."

"Really," said Harry.

Professor Quirrell nodded.

Harry's lips were parted in anticipation. "It would be a waste to just sit here and eat lunch, then, without doing anything special."

Professor Quirrell grinned, then took out his wand and flicked it in the direction of the door. "Of course," he said, "people who lead interesting lives take precautions more *thorough* than the dalliers. I have just sealed us in. Nothing will now pass in or out of this room - through the crack under the door, for example. And..."

Professor Quirrell then spoke no fewer than four different Charms, none of which Harry recognized.

"Even that does not *really* suffice," said Professor Quirrell. "If we were doing anything of truly great import, it would be necessary to

NOTICING CONFUSION

perform another twenty-three checks besides those. If, say, Rita Skeeter knew or guessed that we would come here, it is possible that she could be in this room wearing the true Cloak of Invisibility. Or she could be an Animagus with a tiny form, perhaps. There are tests to rule out such rare possibilities, but to perform all of them would be arduous. Still, I wonder if I should do them anyway, just so as not to teach you bad habits?" And Professor Quirrell tapped a finger on his cheek, looking abstracted.

"It's fine," Harry said, "I understand, and I'll remember." Though he was a little disappointed that they weren't doing anything of truly great import.

"Very well," Professor Quirrell said. He leaned back in his chair, smiling broadly. "You wrought quite well today, Mr. Potter. The basic notion was yours, I'm sure, even if you delegated the execution. I don't think we'll be hearing much more from Rita Skeeter after this. Lucius Malfoy will not be pleased with her failure. If she's smart, she'll flee the country the instant she realizes she's been fooled."

A sinking sensation began to dawn in Harry's stomach. "Lucius was behind Rita Skeeter...?"

"Oh, you didn't realize that?" said Professor Quirrell.

Harry hadn't thought about what would happen to Rita Skeeter afterward.

At all.

Not in the slightest.

But she would get fired from her job, *of course* she would be fired, she might have children going through Hogwarts for all Harry knew, and now it was worse, much worse -

"Is Lucius going to have her killed?" Harry said in a barely audible voice. Somewhere in his head, the Sorting Hat was screaming at him.

Professor Quirrell smiled dryly. "If you have not dealt with journalists before, take it from me that the world gets a little brighter every time one dies."

Harry jumped out of his chair with a convulsive movement, he had to find Rita Skeeter and warn her before it was too late -

"*Sit down*," Professor Quirrell said sharply. "*No*, Lucius won't kill her. But Lucius makes life *extremely* unpleasant for those who serve him ill.

CHAPTER 26

Miss Skeeter will flee and start her life over with a new name. *Sit down*, Mr. Potter; there is nothing you can do at this point, and you have a lesson to learn."

Harry sat down, slowly. There was a disappointed, annoyed look on Professor Quirrell's face that was doing more to stop him than the words.

"There are times," Professor Quirrell said, his voice cutting, "when I worry that your brilliant Slytherin mind is simply wasted on you. Repeat after me. Rita Skeeter was a vile, disgusting woman."

"Rita Skeeter was a vile, disgusting woman," Harry said. He wasn't comfortable saying it, but there didn't seem to be any other possible actions, none at all.

"Rita Skeeter tried to destroy my reputation, but I executed an ingenious plan and destroyed *her* reputation first."

"Rita Skeeter challenged me. She lost the game, and I won."

"Rita Skeeter was an obstacle to my future plans. I had no choice but to deal with her if I wanted those plans to succeed."

"Rita Skeeter was my enemy."

"I cannot possibly get anything done in life if I am not willing to defeat my enemies."

"I have defeated one of my enemies today."

"I am a good boy."

"I deserve a special reward."

"Ah," said Professor Quirrell, who had been grinning a benevolent smile for the last few lines, "I see I have succeeded in catching your attention."

That was true. And while Harry felt like he was being railroaded into something - no, that wasn't just a feeling, he *had* been railroaded - he couldn't deny that saying those things, and seeing Professor Quirrell's smile, *did* make him feel better.

Professor Quirrell reached into his robes, the gesture slow and deliberately significant, and drew forth...

...a *book*.

It was different from any book Harry had ever seen, the edges and corners visibly misshapen; *rough-hewn* was the phrase that came to mind, like it had been hacked out of a book mine.

NOTICING CONFUSION

"What is it?" breathed Harry.

"A diary," said Professor Quirrell.

"Whose?"

"That of a famous person." Professor Quirrell was smiling broadly.

"Okay..."

Professor Quirrell's expression became more serious. "Mr. Potter, one of the requisites for becoming a powerful wizard is an excellent memory. The key to a puzzle is often something you read twenty years ago in an old scroll, or a peculiar ring you saw on the finger of a man you met only once. I mention this to explain how I managed to remember this item, and the placard attached to it, after meeting you a good deal later. You see, Mr. Potter, over the course of my life, I have viewed a number of private collections held by individuals who are, perhaps, not quite deserving of all that they have -"

"You *stole* it?" Harry said incredulously.

"That is correct," said Professor Quirrell. "Very recently, in fact. I think you will appreciate this particular item much more than the vile little man who held it for no other purpose than impressing his equally vile friends with its rarity."

Harry was simply gaping now.

"But if you feel that my actions were incorrect, Mr. Potter, I suppose you needn't accept your special present. Though of course I shan't go to the trouble of stealing it *back*. So which is it to be?"

Professor Quirrell tossed the book from one hand to another, causing Harry to reach out involuntarily with a look of dismay.

"Oh," said Professor Quirrell, "don't worry about a little rough handling. You could toss this diary in a fireplace and it would emerge unscathed. In any case, I await your decision."

Professor Quirrell casually threw the book up into the air and caught it again, grinning.

No, said Gryffindor and Hufflepuff.

Yes, said Ravenclaw. *What part of the word 'book' did you two not understand?*

The theft part, said Hufflepuff.

Oh, come on, said Ravenclaw, *you can't seriously ask us to say no and spend the rest of our life wondering what it was.*

CHAPTER 26

It sounds like a net positive from a utilitarian standpoint, said Slytherin. *Think of it as an economic transaction which generates gains from trade, only without the trade part. Plus, we didn't steal it and it won't help anyone to have Professor Quirrell keep it.*

He's trying to turn you Dark! shrieked Gryffindor, and Hufflepuff nodded firmly.

Don't be a naive little boy, said Slytherin, *he's trying to teach you Slytherin.*

Yeah, said Ravenclaw. *Whoever owned the book originally was probably a Death Eater or something. It belongs with us.*

Harry's mouth opened, then halted that way, an agonized look on his face.

Professor Quirrell seemed to be quite enjoying himself. He had balanced the book on its corner, on one finger, and was keeping it upright while humming a little tune.

There came a knock at the door.

The book vanished back into Professor Quirrell's robes, and he rose up from his chair. Professor Quirrell started to walk over to the door -

- and staggered, suddenly lurching into the wall.

"It's all right," said Professor Quirrell's voice, which suddenly sounded a lot weaker than usual. "Sit down, Mr. Potter, it's just a dizzy spell. Sit down."

Harry's fingers gripped the edge of his chair, uncertain as to what he should do, what he *could* do. Harry couldn't even get too close to Professor Quirrell, not unless he wanted to defy that sense of Doom -

Professor Quirrell straightened, then, his breathing seeming a bit heavy, and opened the door.

The waitress came in, bearing a platter of food; and as she distributed the plates, Professor Quirrell walked slowly back to the table.

But by the time the waitress had bowed her way out, Professor Quirrell was sitting upright and smiling again.

Still, the brief episode of whatever-it-was had decided Harry. He couldn't say no, not after Professor Quirrell had gone to that much trouble.

"Yes," Harry said.

NOTICING CONFUSION

Professor Quirrell held up a cautioning finger, then took out his wand again, locked the door again, and repeated three of the same Charms from earlier.

Then Professor Quirrell took the book back out of his robes and tossed it to Harry, who almost dropped it into his soup.

Harry shot Professor Quirrell a look of helpless indignation. You weren't supposed to *do* that with books, enchanted or not.

Harry opened the book with ingrained, instinctive care. The pages seemed too thick, with a texture unlike either Muggle paper or wizarding parchment. And the contents were...

...blank?

"Am I supposed to be seeing -"

"Look nearer the beginning," said Professor Quirrell, and Harry (again with that helpless, ingrained care) turned a block of pages back.

The lettering was obviously handwritten, and very hard to read, but Harry thought the words might be Latin.

"What *is* this?" said Harry.

"That," said Professor Quirrell, "is a record of the magical researches of a Muggleborn who never came to Hogwarts. He refused his letter, and conducted his own small investigations, which never did get very far without a wand. From the description on the placard, I expect that his name bears rather more significance to you than to me. That, Harry Potter, is the diary of Roger Bacon."

Harry almost fainted.

Nestled up against the wall, where Professor Quirrell had stumbled, glistened the crushed remains of a beautiful blue beetle.

CHAPTER 27

EMPATHY

J. K. Rowling is 87% confident you will burst into flames.

Roger Bacon lived in the 13th century and is credited as one of the earliest advocates of the scientific method. Giving a scientist his experimental diary is sort of like giving a writer the pen, not of Shakespeare, but of someone who helped invent writing.

It wasn't every day you got to see Harry Potter beg.

"*Pleeeaaase*," whined Harry Potter.

Fred and George shook their heads again, smiling.

There was an agonized look on Harry Potter's face. "But I *told* you how I did the one with Kevin Entwhistle's cat, and Hermione and the vanishing soda, and I *can't* tell you about the Sorting Hat or the Remembrall or Professor Snape..."

Fred and George shrugged and turned to leave.

"If you ever do figure it out," said the Weasley twins, "be sure to let us know."

"*You're evil! You're both evil!*"

Fred and George firmly closed the door to the empty classroom behind them, and made sure to keep the grin on their faces for a while, just in case Harry Potter could see through doors.

Then they turned a corner and their faces sagged.

"I don't suppose Harry's guesses -"

"- gave you any ideas?" they said to each other at the same time, and then their shoulders slumped further.

Their last relevant memory was of Flume refusing to help them, though they couldn't remember *what* they'd asked him to do...

...but they must have looked elsewhere and found *someone* to help them do *something* illegal, or they wouldn't have agreed to be Obliviated afterward.

How had they *possibly* been able to get all that done on just forty Galleons?

At first they'd worried that they'd forged evidence so good that Harry actually *would* end up married to Ginny... but they'd thought of that too, it seemed. The Wizengamot proceedings had been tampered with *again* to put them back the way they'd been originally, the fake betrothal contract had vanished from its dragon-guarded vault in Gringotts, and so on. It was pretty scary, actually. Most people now thought the *Daily Prophet* had just made the whole thing up for unguessable reasons, and the *Quibbler* had helpfully twisted the knife deeper with the next day's headline, HARRY POTTER SECRETLY BETROTHED TO LUNA LOVEGOOD.

Whoever they'd hired would tell them after the statute of limitations expired, they desperately hoped. But meanwhile it was awful, they'd pulled their greatest prank ever, maybe the greatest prank in the history of pranking, and they *couldn't remember how*. It was crazy, they'd been able to think of a way the *first* time, so why couldn't they see it now after *knowing* everything they'd done?

Their only consolation was that Harry didn't know they didn't know.

Not even Mum had questioned them about it, despite the obvious Weasley connection. Whatever had been done, it was far out of the reach of any Hogwarts student... except possibly *one*, who, if certain rumors were true, might have done it by snapping his fingers. *Harry* had been questioned under Veritaserum, he'd told them... with Dumbledore present and giving the Aurors scary looks. The Aurors had asked just enough to determine that Harry hadn't pulled the prank himself or disappeared anyone, and then gotten the heck out of Hogwarts.

Fred and George had wondered whether to feel insulted about Harry Potter being questioned by the Aurors for *their* prank, but the look on *Harry's* face, probably for exactly the same reason, made everything worth it.

Unsurprisingly, Rita Skeeter and the editor of the *Daily Prophet* had both vanished and were probably in another country by now. They *would've* liked to be able to tell their family about that part. Dad would have congratulated them, they thought, after Mum had finished killing them and Ginny had burned the remains.

CHAPTER 27

But everything was still all right, they'd tell Dad someday, and meanwhile...

...meanwhile Dumbledore had happened to sneeze while passing them in the hallway, and a small package had accidentally dropped out of his pockets, and inside had been two matched wardbreaker's monocles of *incredible* quality. The Weasley twins had tested their new monocles on the "forbidden" third-floor corridor, making a quick trip to the magic mirror and back, and they hadn't been able to see *all* the detection webs clearly, but the monocles had shown a *lot* more than they'd seen the first time.

Of course they would have to be very careful never to get caught with the monocles in their possession, or they would end up in the Headmaster's office getting a stern lecture and maybe even threats of expulsion.

It was good to know that not everyone who got Sorted into Gryffindor grew up to be Professor McGonagall.

Harry was in a white room, windowless, featureless, sitting before a desk, facing an expressionless man in formal robes of solid black.

The room was screened against detection, and the man had performed exactly twenty-seven spells before saying so much as "Hello, Mr. Potter."

It was oddly appropriate that the man in black was about to try reading Harry's mind.

"Prepare yourself," the man said tonelessly.

A human mind, Harry's Occlumency book had said, was only exposed to a Legilimens along certain *surfaces*. If you failed to defend your surfaces, the Legilimens would go *through* and be able to access any part of you which their own mind was able to comprehend...

...which tended not to be much. Human minds, it seemed, were hard for humans to understand on any level but the shallowest. Harry had wondered if knowing lots of cognitive science could make him an incredibly powerful Legilimens, but repeated experience had *finally* driven into him the lesson that he needed to get a little less excited in

his anticipations about this sort of thing. It wasn't as if any cognitive scientist understood humans well enough to make one.

To learn the counter, Occlumency, the first step was to imagine yourself to be a different person, pretending it as thoroughly as you could, immersing yourself entirely in that alternate persona. You wouldn't always have to do that, but in the beginning, it was how you learned where your surfaces were. The Legilimens would try to read you, and you would feel it happening if you paid close enough attention, you would sense them trying to enter. And your job was to make sure that they always touched your imaginary persona and not the real one.

When you were good enough at that, you could imagine being a very *simple* sort of person, pretend to be a rock, and make a habit of leaving the pretense in place where all your surfaces were. That was a standard Occlumency barrier. Pretending to be a rock was hard to learn, but easy to do afterward, and the exposed surface of a mind was much shallower than its interior, so with enough practice you could keep it up as a background habit.

Or if you were a *perfect Occlumens*, you could race *ahead* of any probes, answering queries as fast as they were asked, so that the Legilimens would enter through your surfaces and see a mind indistinguishable from whoever you were pretending to be.

Even the best Legilimens could be fooled that way. If a perfect Occlumens claimed they were dropping their Occlumency barriers, there was no way to know if they were lying. Worse, you might not know you were dealing with a perfect Occlumens. They were rare, but the fact that they existed meant you couldn't trust Legilimency on *anyone*.

It was a sad commentary on how little human beings understood each other, how little any wizard comprehended the depths lying beneath the mind's surface, that you could fool the best human telepaths by pretending to be someone else.

But then human beings only understood each other in the first place by pretending. You didn't make predictions about people by modeling the hundred trillion synapses in their brain as separate objects. Ask the best social manipulator on Earth to build you an Artificial Intelligence from scratch, and they'd just give you a dumb look. You predicted people by telling *your* brain to act like theirs. You *put yourself in their place*.

CHAPTER 27

If you wanted to know what an angry person would do, you activated your own brain's anger circuitry, and whatever that circuitry output, that was your prediction. What did the neural circuitry for anger actually look like inside? Who knew? The best social manipulator on Earth might not know what neurons *were*, and neither might the best Legilimens.

Anything a Legilimens could *understand*, an Occlumens could *pretend* to be. It was the same trick either way - probably implemented by the same neural circuitry in both cases, a single set of control circuits for reconfiguring your own brain to act as a model of someone else's.

And so the race between telepathic offense and telepathic defense had been a decisive win for defense. Otherwise the entire magical world, maybe even the whole Earth, would have been a very different place...

Harry took a deep breath, and concentrated. There was a slight smile on his face.

For *once*, just *once*, Harry hadn't gotten shortchanged in the mysterious powers department.

After almost a month of work, and more on a whim than any real hunch, Harry had decided to make himself coldly angry and then try the book's Occlumency exercises again. At that point he'd mostly given up hope on that sort of thing, but it had still seemed worth a quick try -

He'd run through all the book's hardest exercises in two hours, and the next day he'd gone and told Professor Quirrell he was ready.

His dark side, it had turned out, was very, *very* good at pretending to be other people.

Harry thought of his standard trigger, from the first time he'd gone over entirely to his dark side...

Severus paused, looking quite pleased with himself. "And that will be... five points? No, let us make it an even ten points from Ravenclaw for backchat."

Harry's smile grew chillier, and he regarded the black-robed man who thought he was going to read Harry's mind.

And then Harry turned into someone else entirely, someone who had seemed appropriate to the occasion.

...in a white room, windowless, featureless, sitting before a desk, facing an expressionless man in formal robes of solid black.

EMPATHY

Kimball Kinnison regarded the black-robed man who thought he was going to read the mind of a Second-Stage Lensman of the Galactic Patrol.

To say that Kimball Kinnison was confident of the outcome would be an understatement. He had been trained by Mentor of Arisia, the most powerful mind known to this or any other universe, and the mere wizard sitting across from him would see precisely what the Gray Lensman wanted him to see...

...the mind of the boy he was currently disguised as, an innocent child named Harry Potter.

"I'm ready," said Kimball Kinnison in nervous tones that were exactly appropriate for an eleven-year-old boy.

"*Legilimens*," said the black-robed wizard.

There was a pause.

The black-robed wizard blinked, as if he'd seen something so shocking that it had been enough to make even *his* eyelids move. His voice wasn't quite toneless as he said, "The Boy-Who-Lived has a *mysterious dark side*?"

The heat slowly crept up into Harry's cheeks.

"Well," the man said. His face had now settled back into perfect calm. "Excuse me. Mr. Potter, it is good to know your advantages, but that is not the same as being wildly overconfident in them. You may indeed be able to learn Occlumency at eleven years of age. This astounds me. I had thought Mr. Dumbledore was pretending to be insane again. Your dissociative talent is so strong that I am surprised to find no other signs of childhood abuse, and you may become a perfect Occlumens in time. But there is a considerable difference between that and expecting to put up a successful Occlumency barrier on your first attempt. That is merely ridiculous. Did you feel anything as I read your mind?"

Harry shook his head, now blushing furiously.

"Then pay closer attention next time. The goal is not to create a perfect image on your first day of lessons. The goal is to learn where your surfaces are. Prepare yourself."

Harry tried to pretend to be Kimball Kinnison again, tried to pay more attention, but his thoughts were a little scattered and he was suddenly aware of all the things he shouldn't be thinking about...

CHAPTER 27

Oh, this was going to suck.

Harry gritted his teeth. At least the instructor would be Obliviated afterward.

"*Legilimens*."

There was a pause -

...in a white room, windowless, featureless, sitting before a desk, facing an expressionless man in formal robes of solid black.

It was their fourth day, on a Sunday evening. When you paid this much, you got your sessions any darned time you wanted, never mind the concept of weekends.

"Hello, Mr. Potter," the telepath said tonelessly, having cast the full suite of privacy spells.

"Hello, Mr. Bester," Harry said wearily. "Let's just get the initial shock out of the way, shall we?"

"You managed to surprise me?" the man said, now sounding slightly interested. "Well then." He pointed his wand and stared into Harry's eyes. "*Legilimens*."

There was a pause, and then the black-robed wizard jerked as if someone had touched him with a cattle prod.

"The Dark Lord is *alive*?" he choked. His eyes were suddenly wild. "*Dumbledore turns himself invisible and sneaks into girls' dorm rooms?*"

Harry sighed and looked down at his watch. In about another three seconds...

"So," the man said. He hadn't quite recovered his tonelessness. "You genuinely believe you're going to discover the secret rules of magic and become all-powerful."

"That's right," Harry said evenly, still looking at his watch. "I'm *that* overconfident."

"I wonder. It seems the Sorting Hat thinks you'll be the next Dark Lord."

"And *you* know I'm trying pretty hard *not* to be, and you saw that we already had a long discussion about whether you were willing to teach me Occlumency, and in the end you decided to do it, so can we just get this over with?"

"All right," said the man exactly six seconds later, same as last time. "Prepare yourself." He paused, and then said, his voice rather wistful, "Though I *do* wish I could remember that trick with the gold and silver."

Harry was finding himself very disturbed by how reproducible human thoughts were when you reset people back to the same initial conditions and exposed them to the same stimuli. It was dispelling illusions that a good reductionist wasn't supposed to have in the first place.

Harry was in a rather bad mood as he stomped out of his Herbology class the next Monday morning.

Hermione was seething alongside him.

The other children were still inside, a bit slow to assemble their things because they were gibbering excitedly to each other about Ravenclaw winning the year's second Quidditch match.

It seemed that last night after dinner, a girl had flown around on a broomstick for thirty minutes and then caught some sort of giant mosquito. There were other facts about what had happened during this match, but they were irrelevant.

Harry had missed this exciting sports event due to his Occlumency lesson, and also having a life.

He had then avoided all conversations in the Ravenclaw dorm, weren't Quieting Charms and magical trunks wonderful. He had eaten breakfast at the Gryffindor table.

But Harry couldn't avoid Herbology, and the Ravenclaws had talked about it before class, and after class, and *during class*, until Harry had looked up from the baby furcot whose diaper he was changing, and announced loudly that some of them were trying to learn about *plants* and Snitches didn't grow on anything so could they all *please* shut up about Quidditch. Everyone else present had given him shocked looks, except Hermione, who'd looked like she wanted to applaud, and Professor Sprout, who had awarded him a point for Ravenclaw.

A point for Ravenclaw.

One point.

The seven idiots on their idiot brooms playing their idiot game had earned *one hundred and ninety points* for Ravenclaw.

CHAPTER 27

It seemed that Quidditch scores *added directly onto the House points total*.

In other words, catching a golden mosquito was worth 150 House points.

Harry couldn't even *imagine* what he would have to do to earn one hundred and fifty House points.

Besides, y'know, rescuing *a hundred and fifty Hufflepuffs*, or coming up with *fifteen ideas as good as putting protective shells on time machines*, or inventing *one thousand five hundred creative ways to kill people*, or being Hermione Granger for the *entire year*.

"We should kill them," Harry said to Hermione, who was walking beside him with an equally offended air.

"Who?" said Hermione. "The Quidditch team?"

"I was thinking of everyone involved in any way with Quidditch anywhere, but the Ravenclaw team would be a start, yes."

Hermione's lips were pursed disapprovingly. "You *do* know that killing people is wrong, Harry?"

"Yes," Harry said.

"Okay, just checking," Hermione said. "Let's get the Seeker first. I've read some Agatha Christie mysteries, do you know how we can get her onto a train?"

"Two students plotting murder," said a dry voice. "How shocking."

From around a nearby corner strolled a man in lightly spotted robes, his greasy hair falling long and unkempt about his shoulders. Deadly danger seemed to radiate out from him, filling the hallway with improperly mixed potions and accidental falls and people dying in bed of what the Aurors would rule to be natural causes.

Without thinking about it at all, Harry stepped in front of Hermione.

There was an intake of breath from behind him, and then a moment later Hermione brushed past and stepped in front of *him*. "Run, Harry!" she said. "Boys shouldn't have to be in danger."

Severus Snape smiled mirthlessly. "Amusing. I request a moment of your time, Potter, if you can tear yourself away from your flirtations with Miss Granger."

Suddenly there was a very worried look on Hermione's face. She turned to Harry and opened her mouth, then paused, looking distressed.

EMPATHY

"Oh, don't worry, Miss Granger," said Severus's silky voice. "I promise to return your beau unmaimed." His smile vanished. "Now Potter and I are about to go off and have a private conversation, just by ourselves. I hope it is clear that you are not invited, but just in case, consider that an order from a Hogwarts professor. I'm sure a good little girl like you won't disobey."

And Severus turned and walked back around the corner. "Coming, Potter?" his voice said.

"Um," Harry said to Hermione. "Can I just sort of go off and follow him and let *you* work out what I should say to make sure you're not all worried and offended?"

"No," Hermione said, her voice trembling.

Severus's laughter echoed from around the corner.

Harry bowed his head. "Sorry," he said lowly, "really," and he went off after the Potions Master.

"So," Harry said. There were no other sounds now but two pairs of legs, the long and the short, padding across a random stone corridor. The Potions Master was striding quickly but not too fast for Harry to keep up, and insofar as Harry could apply the concept of directionality to Hogwarts, they were moving away from the frequented areas. "What's this about?"

"I don't suppose you could explain," Severus said dryly, "why the two of you were plotting to murder Cho Chang?"

"I don't suppose *you* could explain," Harry said dryly, "in your capacity as an official of the Hogwarts school system, why catching a golden mosquito is deemed an academic accomplishment worthy of a hundred and fifty House points?"

A smile crossed Severus's lips. "Dear me, and I thought you were supposed to be perceptive. Are you truly so incapable of understanding your classmates, Potter, or do you dislike them too much to try? If Quidditch scores did not count toward the House Cup then none of them would care about House points at all. It would merely be an obscure contest for students like you and Miss Granger."

It was a shockingly good answer.

CHAPTER 27

And that shock brought Harry's mind fully awake.

In retrospect it shouldn't have been surprising that Severus understood his students, understood them very well indeed.

He had been reading their minds.

And...

...the book said that a successful Legilimens was extremely rare, rarer than a perfect Occlumens, because almost no one had enough mental discipline.

Mental discipline?

Harry had collected stories about a man who routinely lost his temper in class and blew up at young children.

...but this same man, when Harry had spoken of the Dark Lord still being alive, had responded instantly and perfectly - reacting in precisely the way that someone completely ignorant would react.

The man stalked about Hogwarts with the air of an assassin, radiating danger...

...which was exactly *not* what a real assassin should do. Real assassins should look like meek little accountants until they killed you.

He was the Head of House for proud and aristocratic Slytherin, and he wore a robe with spotted stains from bits of potions and ingredients, which two minutes of magic could have removed.

Harry noticed that he was confused.

And his threat estimate of the *Head of House Slytherin* shot up astronomically.

Dumbledore had seemed to think Severus was his, and there'd been nothing to contradict that; the Potions Master had been "scary but not abusive", as promised. So, Harry had reasoned earlier, this was Fellowship business. If Severus had been planning harm, surely he wouldn't have come to get Harry in front of Hermione, a witness, when he could have simply waited for some time when Harry was alone...

Harry quietly bit his lip.

"I once knew a boy who truly adored Quidditch," said Severus Snape. "He was an utter pillock. Just as you and I would expect, we two."

"What *is* this?" Harry said slowly.

"Patience, Potter."

Severus turned his head, and then glided with his assassin's bearing into a nearby opening in the corridor walls, a smaller and narrower hallway leading off.

Harry followed him, wondering if it would be smarter to simply run away.

They turned and made another turn, and came to a dead end, a simple blank wall. If Hogwarts had actually been built, rather than conjured or summoned or birthed or whatever, Harry would have had some sharp words for the architect about paying people to build hallways that didn't go anywhere.

"*Quietus*," said Severus, and a few other things as well.

Harry leaned back, folded his arms across his chest, and watched Severus's face.

"Looking me in the eyes, Potter?" said Severus Snape. "Your Occlumency lessons cannot have progressed far enough for you to block Legilimency. But then perhaps they have progressed far enough for you to detect it. Since I cannot know otherwise, I will not risk trying." The man smiled thinly. "And the same will hold for Dumbledore, I think. Which is why we are *now* having this little talk."

Harry's eyes widened involuntarily.

"To begin with," Severus said, eyes glittering, "I should like you to promise not to speak of our conversations to *anyone*. So far as the school is concerned, we are discussing your Potions homework. Whether or not they believe that is unimportant. So far as Dumbledore and McGonagall are concerned, I am violating Draco Malfoy's confidences in me, and neither of us think it proper to speak further of the particulars."

Harry's brain tried to calculate the ramifications and implications of this and ran out of swap space.

"Well?" said the Potions Master.

"All right," Harry said slowly. It was hard to see how having a conversation and being unable to tell anyone could be more constraining than *not* having it, in which case you *also* couldn't tell anyone the contents. "I promise."

Severus was watching Harry intently. "You said once in the Headmaster's office that you would not tolerate bullying or abuse.

CHAPTER 27

And so I wonder, Harry Potter. Just how much do you resemble your father?"

"Unless we're talking about Michael Verres-Evans," Harry said, "the answer is that I know very little about James Potter."

Severus nodded, as though to himself. "There is a fifth-year Slytherin. A boy named Lesath Lestrangle. He is being bullied by Gryffindors. I am... constrained, in my ability to deal with such situations. *You* could help him, perhaps. If you wished. I am not asking you for a favor, and will not owe you one. It is simply an opportunity to do as you will."

Harry stared at Severus, thinking.

"Wondering if it's a trap?" said Severus, a faint smile crossing his lips. "It is not. It *is* a test. Call it curiosity on my part. But Lesath's troubles are real, as are my own difficulties in intervening."

That was the trouble with other people knowing you were a good guy. Even if you knew they knew, you still couldn't ignore the bait.

And if his father had protected students from bullies too... it didn't matter if Harry knew why Severus had told him. It still made him feel warm inside, and proud, and made it impossible to walk away.

"Fine," Harry said. "Tell me about Lesath. Why is he being bullied?"

Severus's face lost the faint smile. "You think there are *reasons*, Potter?"

"Perhaps not," Harry said quietly. "But the thought had occurred to me that he might have pushed some unimportant mudblood girl down the stairs."

"Lesath Lestrangle," Severus said, his voice now cold, "is the son of Bellatrix Black, the most fanatic and evil servant of the Dark Lord. Lesath is the acknowledged bastard of Rabastan Lestrangle. Shortly after the Dark Lord's death, Bellatrix and Rabastan and Rabastan's brother Rodolphus were captured while torturing Alice and Frank Longbottom. All three are in Azkaban for life. The Longbottoms were driven insane by repeated Cruciatus and remain in St. Mungo's incurable ward. Is any of that a good reason to bully him, Potter?"

"It is no reason at all," Harry said, still quietly. "And Lesath himself has done no wrong that you know?"

The faint smile crossed Severus's lips again. "He is no more a saint than anyone else. But he has pushed no mudblood girls down the stairs, not that I ever heard."

"Or saw in his mind," said Harry.

Severus's expression was chill. "I did not invade his privacy, Potter. I looked within the Gryffindors, rather. He is simply a convenient target for their little satisfactions."

A cold wash of anger ran down Harry's spine, and he had to remind himself that Severus might not be a trustworthy source of information.

"And you think," Harry said, "that an intervention by Harry Potter, the Boy-Who-Lived, might prove effective."

"Indeed," said Severus Snape, and told Harry when and where the Gryffindors were planning their next little game.

There is a main hallway running through the middle of Hogwarts's second floor on the north-south axis, and near the center of this hallway there is an opening into a short corridor which goes a dozen paces back before turning at a right angle, making an L-shape, and then goes a dozen paces more before it ends at a bright, wide window, looking out from three stories above upon the light drizzle falling over the east grounds of Hogwarts. Standing by the window you can hear nothing of the main hallway, and no one in the hallway would hear what went on by the window. If you think there is anything odd about this, you haven't been in Hogwarts very long.

Four boys in red-trimmed robes are laughing, and a boy in green-trimmed robes is screaming and grabbing frantically onto the edges of the opened window with his hands, as the four boys make as though to push him out. It's just a joke, of course, and besides, a fall from that height wouldn't kill a wizard. All good fun. If you think there is anything odd about this -

"What are you doing?" says a sixth boy's voice.

The four boys in red-trimmed robes spin around with sudden starts, and the boy in green-trimmed robes frantically pushes himself away from the window and falls to the floor, face streaked with tears.

CHAPTER 27

"Oh," says the most handsome of the boys in red-trimmed robes, sounding relieved, "it's *you*. Hey, Lessy, you know who this is?"

There isn't any answer from the boy on the floor, who's trying to get his sniffing under control, and the boy in the red-trimmed robes draws back his leg for a kick -

"*Stop it!*" shouts the sixth boy.

The boy in the red-trimmed robes wobbles as he aborts the kick. "Um," he says, "do *you* know who this is?"

The sixth boy's breathing sounds strange. "Lesath Lestrangle," he says, his breath coming in short pants, "and *he* didn't do anything to my parents, he was five years old."

Neville Longbottom stared at the four huge fifth-year bullies in front of him, trying very hard to control his trembling.

He should have just told Harry Potter no.

"Why are *you* defending him?" said the handsome one, slowly, sounding puzzled with the first hints of offense. "He's a *Slytherin*. And a *Lestrangle*."

"He's a boy who lost his parents," said Neville Longbottom. "I know how that is." He didn't know where the words had come from. It sounded too cool, like something Harry Potter would say.

The trembling went on, though.

"*Who* do you think you *are*?" said the handsome one, starting to sound angry.

I am Neville, the last scion of the Noble and Most Ancient House of Longbottom

-

Neville couldn't say it.

"I think he's a *traitor*," said one of the other Gryffindors, and there was a sudden sinking sensation in Neville's stomach.

He'd known it, he'd just known it. Harry Potter had been wrong after all. Bullies wouldn't stop only because Neville Longbottom told them to stop.

The handsome one took a step forward, and the three others followed.

"So that's how it is for you," Neville said, amazed at how steady his voice was. "It doesn't matter to you if it's Lesath Lestrangle or Neville Longbottom."

Lesath Lestrangle let out a sudden gasp, from where he was lying on the floor.

"Evil is evil," snarled the same boy who'd spoken before, "and if you're friends with evil, you're evil too."

The four took another step forward.

Lesath rose, wobbling, to his feet. His face was gray, and he took a few steps forward, and leaned against the wall, and didn't say anything. His eyes were fixed on the turn in the hallway, the way out.

"Friends," Neville said. Now his voice was going up a bit in pitch. "Yes, I have friends. One of them is the Boy-Who-Lived."

A couple of the Gryffindors looked suddenly worried. The handsome one didn't flinch. "Harry Potter isn't here," he said, his voice hard, "and if he was, I don't think he'd like to see a Longbottom defending a Lestrangle."

And the Gryffindors took another long step forward, and behind them, Lesath crept along the wall, waiting for his chance.

Neville swallowed, and raised his right hand with his thumb and forefinger pressed together.

He shut his eyes, because Harry Potter had made him promise not to peek.

If this didn't work, he was never trusting anyone again.

His voice came out surprisingly clear, considering.

"Harry James Potter-Evans-Verres. Harry James Potter-Evans-Verres. Harry James Potter-Evans-Verres. By the debt that you owe me and the power of your true name I summon you, I open the way for you, I call upon you to manifest yourself before me."

Neville snapped his fingers.

And then Neville opened his eyes.

Lesath Lestrangle was staring at him.

The four Gryffindors were staring at him.

The handsome one started to chuckle, and that set off the other three.

CHAPTER 27

"Was Harry Potter supposed to step around the corner or something?" said the handsome one. "Aw. Looks like you've been stood up."

The handsome one took a menacing step forward toward Neville.

The other three followed in lockstep.

"Ahem," said Harry Potter from behind them, leaning against the wall by the window, in the dead end of the hallway, where nobody could possibly have gotten to without being seen.

If watching people scream always felt this good, Neville could sort of understand why people became bullies.

Harry Potter stalked forward, placing himself between Lesath Lestrange and the others. He swept his icy gaze across the boys in red-trimmed robes, and then his eyes came to rest on the handsome one, the ringleader. "Mr. Carl Sloper," said Harry Potter. "I believe I have comprehended this situation fully. If Lesath Lestrange has ever committed a single evil himself, rather than being born to the wrong parents, the fact is not known to *you*. If I am mistaken in this, Mr. Sloper, I suggest you inform me at once."

Neville saw the fear and awe on the other boys' faces. He was feeling it himself. Harry had *claimed* it would all be a trick, but how could it be?

"But he's a *Lestrange*," said the ringleader.

"He's a boy who *lost his parents*," Harry Potter said, his voice growing even colder.

This time all three of the other Gryffindors flinched.

"So," said Harry Potter. "You saw that Neville didn't want you tormenting an innocent boy on behalf of the Longbottoms. This failed to move you. If I tell you that the Boy-Who-Lived *also* thinks you are in the wrong, that what you did today was a terrible mistake, does that make a difference?"

The ringleader took a step toward Harry.

The others did *not* follow him.

"Carl," one of them said, swallowing. "Maybe we should go."

"They say you're going to be the next Dark Lord," the ringleader said, staring at Harry.

A grin crossed Harry Potter's face. "They also say I'm secretly betrothed to Ginevra Weasley and there's a prophecy about us

conquering France." The smile faded. "Since you're determined to force the issue, Mr. Carl Sloper, let me make things clear. *Leave Lesath alone*. I will know if you don't."

"So Lessy snarked to you," said the ringleader coldly.

"Sure," said Harry Potter dryly, "and he also told me what you did today after you left Charms class, in a private secluded place where no one could see you, with a certain Hufflepuff girl wearing a white ribbon in her hair -"

The ringleader's jaw dropped in shock.

"Eep," said one of the other Gryffindors in a high-pitched voice, and spun on his heels and ran around the corner. His footsteps rapidly pattered away and faded.

And then there were six.

"Ah," said Harry Potter, "there goes a slightly intelligent young man. The rest of you could stand to learn from Bertram Kirke's example, before you get into, shall we say, trouble."

"Are you threatening to snark on us?" said the handsome Gryffindor, his voice trying to be angry, and rather wavering. "Bad things happen to snarkers."

The other two Gryffindors started slowly moving back.

Harry Potter started laughing. "Oh, you did not just say that. Are you *really* trying to intimidate me? *Me*? Now honestly, do you think you're scarier than Peregrine Derrick, Severus Snape or for that matter You-Know-Who?"

Even the ringleader flinched at that.

Harry Potter raised his hand, fingers poised, and all three of the Gryffindors leaped backward, and one of them blurted "Don't - !"

"See," said Harry Potter, "this is where I snap my fingers and you become part of a hilariously amusing story that will be told with much nervous laughter at dinner tonight. But the thing is, people I trust keep telling me not to do that. Professor McGonagall told me I was taking the easy way out of everything and Professor Quirrell says I need to learn how to lose. So you remember that story where I let myself get beaten up by some older Slytherins? We could do that. You could bully me for a while and I could let you. Only you remember that part at the end where

CHAPTER 27

I tell my many, many friends inside this school not to do anything about it? This time we'll skip that part. So go ahead. Bully me."

Harry Potter stepped forward, his arms opened wide in invitation.

The three Gryffindors broke and ran, and Neville had to sidestep quickly to avoid getting run over.

There was silence, as their footsteps faded, and then more silence after that.

And then there were three.

Harry Potter drew a deep breath, then exhaled. "Whew," he said. "How are you doing, Neville?"

Neville's voice came out in a high-pitched squeak. "Okay, *that* was really cool."

A grin flashed across Harry Potter's face. "*You* were pretty cool too, you know."

Neville knew that Harry Potter was just saying that, trying to make him feel good, and it still started a warm glow inside his chest.

Harry turned toward Lesath Lestrangle -

"Are you okay, Lestrangle?" said Neville before Harry could open his mouth.

Now there was something you didn't expect to find yourself saying, ever.

Lesath Lestrangle turned slowly, and stared at Neville, his face tight, no longer crying, tears glistening as they dried.

"You think you know how it is?" said Lesath, his voice high and shaking. "*You think you know?* My parents are in *Azkaban*, I try not to think about it and they always remind me, they think it's *great* that Mother is there in the cold and the dark with the Dementors sucking away her life, I wish I was like Harry Potter, at least his parents aren't hurting, my parents are always hurting, every second of every day, I wish I was like you, at least you can see your parents sometimes, at least you know they loved you, if Mother ever loved me the Dementors will have eaten that thought by now -"

Neville's eyes were wide with shock. He hadn't expected this.

Lesath turned to Harry Potter, whose eyes were full of horror.

Lesath flung himself on the floor in front of Harry Potter, touched his forehead to the ground, and whispered, "Help me, Lord."

EMPATHY

There was an awful silence. Neville couldn't think of a single thing to say, and from the naked shock on Harry's face, he couldn't think of anything either.

"They say you can do anything, please, please my Lord, get my parents out of Azkaban, I'll be your loyal servant forever, my life will be yours and my death as well, only please -"

"Lesath," Harry said, his voice breaking, "Lesath, I can't, I can't really do things like that, it's all just stupid tricks."

"It's *not!*" said Lesath, his voice high and desperate. "I *saw* it, the stories are true, you *can!*"

Harry swallowed. "Lesath, I set the whole thing up with Neville, we planned it all out in advance, ask him!"

They had, though Harry hadn't said *how* he was going to do any of it...

When Lesath looked up from the floor his face was ghastly, and his voice came out in a shriek that hurt Neville's ears. "*You son of a mudblood! You could get her out, you just won't! I got down on my knees and begged you and you still won't help! I should have known, you're the Boy-Who-Lived, you think she belongs there!*"

"I *can't!*" Harry said, his voice as desperate as Lesath's. "It's not a question of what I want, I don't have the *power!*"

Lesath rose to his feet, and spat on the floor in front of Harry, and then turned and walked away. When he was around the corner the sound of his feet sped up, and as they faded Neville thought he heard a single sob.

And then there were two.

Neville looked at Harry.

Harry looked at Neville.

"Wow," Neville said quietly. "He didn't seem very grateful for being rescued."

"He thought I could help him," Harry said, his voice hoarse. "He had hope for the first time in years."

Neville swallowed, and said it. "I'm sorry."

"Wha?" said Harry, sounding totally confused.

"I wasn't grateful when you helped me -"

"Every single thing you said before was completely right," said the Boy-Who-Lived.

CHAPTER 27

"No," Neville said, "it wasn't."

They simultaneously gave brief sad smiles, each condescending to the other.

"I know this wasn't real," said Neville, "I know I couldn't have done anything if you hadn't been here, but thanks for letting me pretend."

"Give me a break," said Harry.

Harry had turned from Neville, and was staring out the window at the gloomy clouds.

A completely ridiculous thought came to Neville. "Are you feeling guilty because you can't get Lesath's parents out of Azkaban?"

"No," said Harry.

A few seconds went by.

"Yes," said Harry.

"You're silly," said Neville.

"I am aware of this," said Harry.

"Do you have to do literally *anything* anyone asks you?"

The Boy-Who-Lived turned back and looked at Neville again. "*Do?* No. Feel guilty about not doing? Yes."

Neville was having trouble finding words. "Once the Dark Lord died, Bellatrix Black was literally the most evil person in the entire world and that was *before* she went to Azkaban. She tortured my mother and father into insanity because she wanted to find out what happened to the Dark Lord -"

"I know," Harry said quietly. "I get that, but -"

"No! You *don't!* She had a *reason* for doing that, and my parents were both Aurors! It's not even *close* to the worst thing she's ever done!" Neville's voice was shaking.

"Even so," said the Boy-Who-Lived, his eyes distant as they stared off into somewhere else, some other place that Neville couldn't imagine. "There might be some incredibly clever solution that makes it possible to save everyone and let them all live happily ever after, and if only I was smart enough I would have thought of it by now -"

"You have problems," said Neville. "You think you ought to be what Lesath Lestrange thinks you are."

EMPATHY

"Yeah," said the Boy-Who-Lived, "that pretty much nails it. Every time someone cries out in prayer and I can't answer, I feel guilty about not being God."

Neville didn't quite understand that, but... "That doesn't sound good."

Harry sighed. "I understand that I have a problem, and I know what I need to do to solve it, all right? I'm working on it."

Harry watched Neville leave.

Of course Harry hadn't said what the solution was.

The solution, obviously, was to hurry up and become God.

Neville's footsteps moved off, and soon could no longer be heard.

And then there was one.

"Ahem," said Severus Snape's voice from directly behind him.

Harry let out a small scream and instantly hated himself.

Slowly, Harry turned around.

The tall greasy man in the spotted robes was leaning against the wall in the same position Harry had occupied.

"A fine invisibility cloak, Potter," drawled the Potions Master. "Much is explained."

Oh, bloody crap.

"And perhaps I have been in Dumbledore's company too long," said Severus, "but I cannot help but wonder if that is *the* Cloak of Invisibility."

Harry immediately turned into someone who'd never heard of the Cloak of Invisibility and who was *exactly* as smart as Harry thought Severus thought Harry was.

"Oh, possibly," said Harry. "I trust you realize the implications, if it is?"

Severus's voice was condescending. "You have no idea what I'm talking about, do you, Potter? A rather clumsy try at fishing."

(Professor Quirrell had remarked over their lunch that Harry really needed to conceal his state of mind better than putting on a blank face when someone discussed a dangerous topic, and had explained about one-level deceptions, two-level deceptions, and so on. So either Severus *was* in fact modeling Harry as a one-level player, which made Severus

CHAPTER 27

himself two-level, and Harry's three-level move had been successful; or Severus was a four-level player and wanted Harry to *think* the deception had been successful. Harry, smiling, had asked Professor Quirrell what level *he* played at, and Professor Quirrell, also smiling, had responded, *One level higher than you.*)

"So you were watching this whole time," said Harry. "Disillusionment, I think it's called."

A thin smile. "It would have been foolish of me to take the slightest risk that you came to harm."

"And you wanted to see the results of your test firsthand," said Harry. "So. Am I like my father?"

A strange sad expression came over the man, one that looked foreign to his face. "I should sooner say, Harry Potter, that you resemble -"

Severus stopped short.

He stared at Harry.

"Lestrangle called you a son of a mudblood," Severus said slowly. "It didn't seem to bother you much."

Harry furrowed his eyebrows. "Not under those circumstances, no."

"You'd just helped him," Severus said. His eyes were intent on Harry. "And he threw it back in your face. Surely that isn't something you'd just forgive?"

"He'd just been through a pretty harrowing experience," Harry said. "And I don't think being rescued by first-years helped his pride much, either."

"I suppose it was easy enough to forgive," Severus said, and his voice was odd, "since Lestrangle means nothing to you. Just some strange Slytherin. If it was a friend, perhaps, you would have felt far more injured by what he said."

"If he were a friend," Harry said, "all the more reason to forgive him."

There was a long silence. Harry felt, and he couldn't have said why or from where, that the air was filling up with a dreadful tension, like water rising, and rising, and rising.

Then Severus smiled, looking suddenly relaxed once more, and all the tension vanished.

EMPATHY

"You are a very forgiving person," Severus said, still smiling. "I suppose your stepfather, Michael Verres-Evans, was the one who taught it to you."

"More like Dad's science fiction and fantasy collection," said Harry. "Sort of my fifth parent, really. I've lived the lives of all the characters in all my books, and all their mighty wisdom thunders in my head. Somewhere in there was someone like Lesath, I expect, though I couldn't say who. It wasn't hard to put myself in his shoes. And it was my books that told me what to do about it, too. The good guys forgive."

Severus gave a light, amused laugh. "I'm afraid I wouldn't know much about what good people do."

Harry looked at him. That was kind of sad, actually. "I'll lend you some novels with good people in them, if you like."

"I should like to ask your advice about something," Severus said, his voice casual. "I know of another fifth-year Slytherin who was being bullied by Gryffindors. He was wooing a beautiful Muggleborn girl, who came across him being bullied, and tried to rescue him. And he called her a mudblood, and that was the end for them. He apologized, many times, but she never forgave him. Have you any thoughts for what he could have said or done, to win from her the forgiveness you gave Lestranger?"

"Erm," Harry said, "based on only that information, I'm not sure *he* was the main one who had a problem. I'd have told him not to date someone that incapable of forgiveness. Suppose they'd gotten married, can you imagine life in that household?"

There was a pause.

"Oh, but she *could* forgive," Severus said with amusement in his voice. "Why, afterward, she went off and became the girlfriend of the bully. Tell me, why would she forgive the bully, and not the bullied?"

Harry shrugged. "At a wild guess, because the bully had hurt someone *else* very badly, and the bullied had hurt *her* just a little, and to her that just felt far more unforgivable somehow. Or, not to put too fine a point on it, was the bully handsome? Or for that matter, rich?"

There was another pause.

"Yes to both," said Severus.

CHAPTER 27

"And there you have it," said Harry. "Not that I've ever been through high school myself, but my books give me to understand that there's a certain kind of teenage girl who'll be outraged by a single insult if the boy is plain or poor, yet who can somehow find room in her heart to forgive a rich and handsome boy his bullying. She was shallow, in other words. Tell whoever it was that she wasn't worthy of him and he needs to get over it and move on and next time date girls who are deep instead of pretty."

Severus stared at Harry in silence, his eyes glittering. The smile had faded, and though Severus's face twitched, it did not return.

Harry was starting to feel a bit nervous. "Um, not that I've got any experience in the area myself, obviously, but I think that's what a wise adviser from my books would say."

There was more silence and more glittering.

It was probably a good time to change the subject.

"So," Harry said. "Did I pass your test, whatever it was?"

"I think," Severus said, "that there should be no more conversations between us, Potter, and you would be exceedingly wise never to speak of this one."

Harry blinked. "Would you mind telling me what I did wrong?"

"You offended me," said Severus. "And I no longer trust your cunning."

Harry stared at Severus, taken rather aback.

"But you have given me well-meant advice," said Severus Snape, "and so I will give you true advice in return." His voice was almost perfectly steady. Like a string stretched almost perfectly horizontal, despite the massive weight hanging from its middle, by a million tons of tension pulling at either end. "You almost died today, Potter. In the future, never share your wisdom with anyone unless you know exactly what you are both talking about."

Harry's mind finally made the connection.

"*You* were that -"

Harry's mouth snapped shut as the *almost died* part sank in, two seconds too late.

"Yes," said Severus, "I was."

EMPATHY

And the terrible tension flooded back into the room like water pressurized at the bottom of the ocean.

Harry couldn't breathe.

Lose. Now.

"I didn't know," Harry whispered. "I'm s-"

"No," said Severus. Just that one word.

Harry stood there in silence, his mind frantically searching for options. Severus stood between him and the window, which was a real pity, because a fall from that height wouldn't kill a wizard.

"Your books betrayed you, Potter," said Severus, still in that voice stretched tight by a million tons of pull. "They did not tell you the one thing you needed to know. You cannot learn from stories what it is like to lose the one you love. That is something you could never understand without feeling it yourself."

"My father," Harry whispered. It was his best guess, the one thing that might save him. "My father tried to protect you from the bullies."

A ghostly smile stretched across Severus's face, and the man moved toward Harry.

And past him.

"Goodbye, Potter," said Severus, not looking back on his way out. "We shall have little to say to each other from today on."

And at the corner, the man stopped, and without turning, spoke one final time.

"Your father was the bully," said Severus Snape, "and what your mother saw in him was something I never did understand until this day."

He left.

Harry turned and walked toward the window. His shaking hands went onto the ledge.

Never give anyone wise advice unless you know exactly what you're both talking about. Got it.

Harry stared out at the clouds and the light drizzle for a while. The window looked out on the east grounds, and it was afternoon, so if the sun was visible through the clouds at all, Harry couldn't see it.

His hands had stopped shaking, but there was a tight feeling in Harry's chest, like it was being compressed by metal bands.

So his father had been a bully.

CHAPTER 27

And his mother had been shallow.

Maybe they'd grown up later. Good people like Professor McGonagall did seem to think the world of them, and it might not be *only* because they were heroic martyrs.

Of course, that was scant consolation when you were eleven and about to turn into a teenager, and wondering what sort of teenager you might become.

So very terrible.

So very sad.

Such an awful life Harry led.

Learning that his genetic parents hadn't been perfect, why, he ought to spend awhile moping about that, feeling sorry for himself.

Maybe he could complain to Lesath Lestrangle.

Harry had read about Dementors. Cold and darkness surrounded them, and fear, they sucked away all your happy thoughts and in that absence all your worst memories rose to the surface.

He could imagine himself in Lesath's shoes, knowing that his parents were in Azkaban for life, that place from which no one had ever escaped.

And Lesath would be imagining himself in his mother's place, in the cold and the darkness and the fear, alone with all of her worst memories, even in her dreams, every second of every day.

For an instant Harry imagined his own Mum and Dad in Azkaban with the Dementors sucking out their life, draining away the happy memories of their love for him. Just for an instant, before his imagination blew a fuse and called an emergency shutdown and told him never to imagine that again.

Was it right to do that to anyone, even the second most evil person in the world?

No, said the wisdom of Harry's books, *not if there's any other way, any other way at all.*

And unless the wizarding justice system was as perfect as their prisons - and that sounded rather improbable, all things considered - somewhere in Azkaban was a person who was entirely innocent, and probably more than one.

EMPATHY

There was a burning sensation in Harry's throat, and moisture gathering in his eyes, and he wanted to teleport all of Azkaban's prisoners to safety and call down fire from the sky and blast that terrible place down to bedrock. But he couldn't, because he wasn't God.

And Harry remembered what Professor Quirrell had said beneath the starlight: *Sometimes, when this flawed world seems unusually hateful, I wonder whether there might be some other place, far away, where I should have been... But the stars are so very, very far away... And I wonder what I would dream about, if I slept for a long, long time.*

Right now this flawed world seemed unusually hateful.

And Harry couldn't understand Professor Quirrell's words, it might have been an alien that had spoken, or an Artificial Intelligence, something built along such different lines from Harry that his brain couldn't be forced to operate in that mode.

You couldn't leave your home planet while it still contained a place like Azkaban.

You had to stay and fight.

CHAPTER 28

REDUCTIONISM

Whatever can go Rowling will go Rowling.

This should *again* go *without saying*, but views expressed by Severus Snape are not necessarily those of the author.

"Okay," Harry said, swallowing. "Okay, Hermione, it's enough, you can stop."

The white sugar pill in front of Hermione still hadn't changed shape or color at all, even though she was concentrating harder than Harry had ever seen, her eyes squeezed shut, beads of sweat on her forehead, hand trembling as it gripped the wand -

"Hermione, *stop!* It's not going to work, Hermione, I don't think we can make things that don't exist yet!"

Slowly, Hermione's hand relaxed its grasp on the wand.

"I thought I felt it," she said in a bare whisper. "I thought I felt it start to Transfigure, just for a second."

There was a lump in Harry's throat. "You were probably imagining it. Hoping too hard."

"I probably was," she said. She looked like she wanted to cry.

Slowly, Harry took his mechanical pencil in his hand, and reached over to the sheet of paper with all the items crossed out, and drew a line through the item that said 'ALZHEIMER'S CURE'.

They couldn't have fed anyone a Transfigured pill. But Transfiguration, at least the kind they could do, didn't enchant the targets - it wouldn't Transfigure a regular broomstick into a flying one. So if Hermione had been able to make a pill at all, it would have been a *nonmagical* pill, one that worked for ordinary material reasons. They could have secretly made pills for a Muggle science lab, let them *study* the pills and try to reverse-engineer them before the Transfiguration wore

REDUCTIONISM

off... no one in either world would need to know that magic had been involved, it would just be another scientific breakthrough...

It hadn't been the sort of thing a wizard would think of, either. They didn't respect mere *patterns of atoms* that much, they didn't think of unenchanted *material* things as objects of power. If it wasn't magical, it wasn't interesting.

Earlier, Harry had *very* secretly - he hadn't even told Hermione - tried to Transfigure nanotechnology a la Eric Drexler. (He'd tried to produce a desktop nanofactory, of course, not tiny self-replicating assemblers, Harry wasn't insane.) It would have been godhood in a single shot if it'd worked.

"That was it for today, right?" said Hermione. She was slumped back in her chair, leaning her head against the back; and her face showed her tiredness, which was very unusual for Hermione. She liked to pretend she was limitless, at least when Harry was around.

"One more," Harry said cautiously, "but that one's small, plus it might actually work. I saved it for last because I was hoping we could end on an up note. It's real stuff, not like phasers. They've already made it in the laboratory, not like the Alzheimer's cure. And it's a generic substance, not specific like the lost books you tried to Transfigure copies of. I made a diagram of the molecular structure to show you. We just want to make it *longer* than it's ever been made before, and with all the tubes aligned, and the endpoints embedded in diamond." Harry produced a sheet of graph paper.

Hermione sat back up, took it, and studied it, frowning. "These are *all* carbon atoms? And Harry, what's the name? I can't Transfigure it if I don't know what it's called."

Harry made a disgusted face. He was still having trouble getting used to that sort of thing, it shouldn't matter what something was *named* if you knew what it *was*. "They're called buckytubes, or carbon nanotubes. It's a kind of fullerene that was discovered just this year. It's about a hundred times stronger than steel and a sixth of the weight."

Hermione looked up from the graph paper, her face surprised. "That's *real*?"

"Yeah," Harry said, "just hard to make the Muggle way. If we could get enough of the stuff, we could use it to build a space elevator all the

CHAPTER 28

way up to geosynchronous orbit or higher, and in terms of delta-v that's halfway to anywhere in the Solar System. Plus we could throw out solar power satellites like confetti."

Hermione was frowning again. "Is this stuff *safe*?"

"I don't see why it wouldn't be," Harry said. "A buckytube is just a graphite sheet wrapped into a circular tube, basically, and graphite is the same stuff used in pencils -"

"I *know* what graphite is, Harry," Hermione said. She brushed her hair back absentmindedly, her eyebrows furrowed as she stared at the sheet of paper.

Harry reached into a pocket of his robes, and produced a white thread tied to two small gray plastic rings at either end. He'd added drops of superglue where the thread met either ring, to make it all a single object that could be Transfigured as a whole. Cyanoacrylate, if Harry remembered correctly, worked by covalent bonds, and that was as close to being a "solid object" as you ever got in a world ultimately composed of tiny individual atoms. "When you're ready," Harry said, "try to Transfigure this into a set of aligned buckytube fibers embedded in two solid diamond rings."

"All right..." Hermione said slowly. "Harry, I feel like I just missed something."

Harry shrugged helplessly. *Maybe you're just tired*. He knew better than to say it out loud, though.

Hermione laid her wand against one plastic ring, and stared for a while.

Two small circles of glittering diamond lay on the table, connected by a long black thread.

"It changed," said Hermione. She sounded like she was trying to be enthusiastic but had run out of energy. "Now what?"

Harry felt a bit deflated by his research partner's lack of passion, but did his best not to show it; maybe the same process would work in reverse to cheer her up. "Now I test it to see if it holds weight."

There was an A-frame Harry had rigged up to do an earlier experiment with diamond rods - you could make solid diamond objects easily, using Transfiguration, they just wouldn't last. The earlier experiment had measured whether Transfiguring a long diamond rod

into a shorter diamond rod would allow it to lift a suspended heavy weight as it contracted, i.e., could you Transfigure against tension, which you in fact could.

Harry carefully looped one circle of glittering diamond over the thick metal hook at the top of the rig, then attached a thick metal hanger to the bottom ring, and then started attaching weights to the hanger.

(Harry had asked the Weasley twins to Transfigure the apparatus for him, and the Weasley twins had given him an incredulous look, like they couldn't figure out what sort of prank he could *possibly* want that for, but they hadn't asked any questions. And their Transfigurations, according to them, lasted for around three hours, so Harry and Hermione still had a while left.)

"One hundred kilograms," Harry said about a minute later. "I don't think a steel thread this thin would hold that. It should go up much higher, but that's all the weight I've got."

There was a further silence.

Harry straightened up, and went back to their table, and sat down in his chair, and ceremoniously made a check mark next to 'Buckytubes'. "There," Harry said. "*That* one worked."

"But it's not really *useful*, Harry, is it?" Hermione said from where she was sitting with her head resting in her hands. "I mean, even if we gave it to a scientist they couldn't learn how to make lots of buckytubes from studying ours."

"They might be able to learn *something*," Harry said. "Hermione, *look* at it, that little tiny thread holding up all that weight, we just made something that no Muggle laboratory could make -"

"But any other witch could make it," Hermione said. Her exhaustion was coming into her voice, now. "Harry, I don't think this is working out."

"You mean our relationship?" Harry said. "Great! Let's break up."

That got a slight grin out of her. "I mean our research."

"Oh, Hermione, how *could* you?"

"You're sweet when you're mean," she said. "But Harry, this is nuts, I'm twelve, you're eleven, it's *silly* to think we're going to discover anything that no one's ever figured out before."

CHAPTER 28

"Are you really saying we should give up on unraveling the secrets of magic after trying for less than one *month*?" Harry said, trying to put a note of challenge into his voice. Honestly he was feeling some of the same fatigue as Hermione. None of the *good* ideas ever worked. He'd made just one discovery worth mentioning, the Mendelian pattern, and he couldn't tell Hermione about it without breaking his promise to Draco.

"No," Hermione said. Her young face was looking very serious and adult. "I'm saying right now we should be *studying* all the magic that wizards already know, so we can do this sort of thing after we graduate from Hogwarts."

"Um..." Harry said. "Hermione, I hate to put it this way, but imagine we'd decided to hold off on research until later, and the first thing we tried after we graduated was Transfiguring an Alzheimer's cure, and it *worked*. We'd feel... I don't think the word *stupid* would adequately describe how we'd feel. What if there's something else like that and it does work?"

"That's not *fair*, Harry!" Hermione said. Her voice was trembling like she was on the verge of breaking out crying. "You can't *put* that on people! It's not our *job* to do that sort of thing, we're *kids*!"

For a moment Harry wondered what would happen if someone told Hermione she had to fight an immortal Dark Lord, if she would turn into one of the whiny self-pitying heroes that Harry could never stand reading about in his books.

"Anyway," Hermione said. Her voice shook. "I don't want to keep doing this. I don't believe children can do things that grownups can't, that's only in stories."

There was silence in the classroom.

Hermione started to look a little scared, and Harry knew that his own expression had gotten colder.

It might not have hurt so much if the same thought hadn't already come to Harry - that, while thirty might be old for a scientific revolutionary and twenty about right, while there were people who got doctorates when they were seventeen and fourteen-year-old heirs who'd been great kings or generals, there wasn't really anyone who'd made the history books at eleven.

"All right," Harry said. "Figure out how to do something a grownup can't. Is that your challenge?"

"I didn't mean it like that," Hermione said, her voice coming out in a frightened whisper.

With an effort, Harry wrenched his gaze away from Hermione. "I'm not angry at *you*," Harry said. His voice was cold, despite his best efforts. "I'm angry at, I don't know, everything. But I'm not willing to lose, Hermione. Losing isn't always the right thing to do. I'll figure out how to do something a grown wizard can't do, and then I'll get back to you. How's that?"

There was more silence.

"Okay," said Hermione, her voice wavering a little. She pushed herself up out of her chair, and went over to the door of the abandoned classroom they'd been working in. Her hand went onto the doorknob. "We're still friends, right? And if you can't figure out anything -"

Her voice halted.

"Then we'll study together," Harry said. His voice was even colder now.

"Um, bye for now, then," Hermione said, and she quickly went out of the room and shut the door behind her.

Sometimes Harry hated having a dark side, even when he was inside it.

And the part of him that had thought exactly the same thing as Hermione, that no, children *couldn't* do what grownups couldn't, was saying all the things that Hermione had been too frightened to say, like, *That's one hell of a difficult challenge you just grabbed for yourself and boy are you going to end up with egg on your face this time and at least this way you'll know you've failed.*

And the part of him that didn't enjoy losing replied, in a very cold voice, *Fine, you can shut up and watch.*

It was almost lunchtime, and Harry didn't care. He hadn't even bothered grabbing a snack bar from his pouch. His stomach could stand a little starving.

CHAPTER 28

The wizarding world was tiny, they didn't think like scientists, they didn't know science, they didn't question what they'd grown up with, they hadn't put protective shells on their time machines, they played Quidditch, all of magical Britain was smaller than a small Muggle city, the greatest wizarding school only educated up to the age of seventeen, *silly* wasn't challenging that at eleven, *silly* was *assuming* wizards knew what they were doing and had already exhausted all the low-hanging fruit a scientific polymath would see.

Step One had been to make a list of every magical constraint Harry could remember, all the things you supposedly couldn't do.

Step Two, mark the constraints that seemed to make the *least* sense from a scientific perspective.

Step Three, prioritize constraints that a wizard would be unlikely to question if they *didn't* know science.

Step Four, come up with avenues for attacking them.

Hermione still felt a little shaky as she sat down next to Mandy at the Ravenclaw table. Hermione's lunch had two fruits (tomato slices and peeled tangerines), three vegetables (carrots, carrots, and more carrots), one meat (fried Diricawl drumsticks whose unhealthy coating she would carefully remove), and one little piece of chocolate cake that she would earn by eating the other parts.

It hadn't been as bad as Potions class, sometimes she still had *nightmares* about that. But this time *she* had made it happen and *she'd felt like its target*. Just for a moment, before the terrible cold darkness looked away and said it wasn't angry with her, because it hadn't wanted to scare her.

And she still had that feeling like she'd missed something earlier, something really important.

But they hadn't violated any of the rules of Transfiguration... had they? They hadn't made any liquids, any gases, they hadn't taken orders from the Defense Professor...

The *pill*! That had been something to be eaten!

...well, no, nobody would just eat a pill lying around, it hadn't *worked* actually, they could have just *Finite Incantatem*ed it if it had, but she would

still have to tell Harry about that and make sure they didn't mention it in front of Professor McGonagall, in case they were never allowed to study Transfiguration again...

Hermione was starting to get a really sick feeling in her stomach. She pushed back her plate from the table, she couldn't eat lunch like this.

And she closed her eyes and began to mentally recite the rules of Transfiguration.

"I will never Transfigure anything into liquid or gas."

"I will never Transfigure anything that looks like food or anything else that goes inside a human body."

No, they really *shouldn't* have tried to Transfigure the pill, or they should've at least *realized*... she'd been so caught up in Harry's brilliant idea that she hadn't *thought*...

The sick feeling in Hermione's stomach was getting worse. There was a feeling in her mind of something hovering just on the edge of recognition, a perception about to invert itself, a young woman about to become a crone, a vase about to become two faces...

And she went on remembering the rules of Transfiguration.

Harry's knuckles had gone white on his wand by the time he stopped trying to Transfigure the air in front of his wand into a paperclip. It wouldn't have been safe to Transfigure the paperclip into gas, of course, but Harry didn't see any reason why it would be unsafe the other way around. It just wasn't supposed to be *possible*. But why not? Air was as real a substance as anything else...

Well, maybe that limitation *did* make sense. Air was disorganized, all the molecules constantly changing their relation to each other. Maybe you couldn't impose a new form on substance unless the substance was staying still long enough for you to master it, even though the atoms in solids were also constantly vibrating all the time...

The more Harry failed, the colder he felt, the clearer everything seemed to become.

All right. Next on the list.

You could only Transfigure whole objects as wholes. You couldn't Transfigure *half* a match into a needle, you had to Transfigure the *whole*

CHAPTER 28

thing. Back when Harry had been trapped in that classroom by Draco, it had been the reason he couldn't just Transfigure a thin cylindrical cross-section of the walls into sponge, and punch out a chunk of stone large enough for him to fit through the hole. He would have needed to impose a new form on the whole wall, and maybe a whole section of Hogwarts, just in order to change that little cross-section.

And that was *ridiculous*.

Things were made of atoms. Lots of little tiny dots. There *was* no contiguity, there *was* no solidity, just electromagnetic forces holding the little dots related to each other...

Mandy Brocklehurst paused with her fork on her way to her mouth. "Huh," she said to Su Li, sitting across from the now-empty space beside her, "what got into Hermione?"

Harry wanted to kill his eraser.

He'd been trying to change a single spot on the pink rectangle into steel, apart from the rest of the rubber, and the eraser wasn't cooperating.

It *had* to be a conceptual limitation, not a real one. *Had* to be.

Things were made of atoms, and every atom was a tiny separate thing. Atoms were held together by a quantum mist of shared electrons, for covalent bonds, or sometimes just magnetism at close ranges, for ionic bonds or van der Waals forces.

If it came down to that, the protons and neutrons inside the nuclei were tiny separate things. The quarks inside the protons and neutrons were tiny separate things! There simply *wasn't* anything in reality, the world-out-there, that corresponded to people's conceit of solid objects. It was all just little dots.

And free Transfiguration was all in the mind to begin with, wasn't it? No words, no gestures. Only the pure concept of form, kept strictly separate from substance, imposed on the substance, conceived of apart from its form. That and the wand and whatever made you a wizard.

REDUCTIONISM

The wizards couldn't transform parts of things, could only transform what their minds perceived as wholes, because they didn't *know in their bones* that it was all just atoms deep down.

Harry had focused on that knowledge as hard as he could, the *true fact* that the eraser was just a collection of atoms, everything was just collections of atoms, and the atoms of the little patch he was trying to Transfigure formed *just as valid* a collection as any other collection he cared to think about.

And Harry still hadn't been able to change that single part of the eraser, the Transfiguration wasn't going anywhere.

This. Was. Ridiculous.

Harry's knuckles were whitening on his wand again. He was *sick* of getting experimental results that *didn't make sense*.

Maybe the fact that *some* part of his mind was still thinking in terms of objects was stopping the Transfiguration from going through. He had thought of a collection of atoms that was an *eraser*. He had thought of a collection that was a *little patch*.

Time to kick it up a notch.

Harry pressed his wand harder against that tiny section of eraser, and tried to see through the illusion that nonscientists thought was reality, the world of desks and chairs, air and erasers and people.

When you walked through a park, the immersive world that surrounded you was something that existed inside your own brain as a pattern of neurons firing. The sensation of a bright blue sky wasn't something high above you, it was something in your visual cortex, and your visual cortex was in the back of your brain. All the sensations of that bright world were really happening in that quiet cave of bone you called your skull, the place where *you* lived and never, ever left. If you really wanted to say hello to someone, to the *actual person*, you wouldn't shake their hand, you'd knock gently on their skull and say "How are you doing in there?" That was what people were, that was where they really lived. And the *picture* of the park that you thought you were *walking through* was something that was visualized inside your brain as it processed the signals sent down from your eyes and retina.

It wasn't a *lie* like the Buddhists thought, there wasn't something terribly mystical and unexpected behind the veil of Maya, what lay

CHAPTER 28

beyond the illusion of the park was just the *actual park*, but it was all still *illusion*.

Harry wasn't sitting inside the classroom.

He wasn't looking at the eraser.

Harry was inside Harry's skull.

He was experiencing a processed picture his brain had decoded from the signals sent down by his retina.

The real eraser was somewhere else, somewhere that wasn't the picture.

And the real eraser wasn't like the picture Harry's brain had of it. The idea of the eraser as a *solid object* was something that existed only inside his own brain, inside the parietal cortex that processed his sense of shape and space. The real eraser was a collection of atoms held together by electromagnetic forces and shared covalent electrons, while nearby, air molecules bounced off each other and bounced off the eraser-molecules.

The real eraser was far away, and Harry, inside his skull, could never quite touch it, could only imagine ideas about it. But *his wand had the power*, it could change things out there in *reality*, it was only Harry's own preconceptions that were *limiting* it. Somewhere beyond the veil of Maya, the *truth* behind Harry's concept of "my wand" was touching the collection of atoms that Harry's mind thought of as "a patch on the eraser", and if that wand could change the collection of atoms that Harry considered "the whole eraser", there was absolutely no reason why it couldn't change the other collection too...

The Transfiguration still wasn't going through.

Harry's teeth clenched together, and he kicked it up *another* notch.

The concept Harry's mind had of the eraser as a single object was *obvious nonsense*.

It was a map that didn't and *couldn't* match the territory.

Human beings modeled the world using stratified levels of organization, they had *separate thoughts* about how countries worked, how people worked, how organs worked, how cells worked, how molecules worked, how quarks worked.

When Harry's brain needed to think about the eraser, it would think about the rules that governed erasers, like "erasers can get rid of pencil-

marks". Only if Harry's brain needed to predict what would happen on the lower chemical level, only then would Harry's brain start thinking - as though it were a separate fact - about rubber molecules.

But that was all in the *mind*.

Harry's mind might have separate *beliefs* about rules that governed erasers, but there was no *separate law of physics* that governed erasers.

Harry's mind modeled reality using multiple levels of organization, with different beliefs about each level. But that was all in the *map*, the true territory wasn't like that, *reality itself* had only a *single* level of organization, the quarks, it was a unified low-level process obeying mathematically simple rules.

Or at least that was what Harry had believed before he'd found out about magic, but the eraser wasn't magical.

And even if the eraser *had* been magical, the idea that there could *really exist* a single solid eraser was *impossible*. Things like erasers *couldn't* be basic elements of reality, they were too big and complicated to be atoms, they *had* to be made of parts. You couldn't have things that were *fundamentally complicated*. The implicit belief that Harry's brain had in the eraser as a single object wasn't just *wrong*, it was a map-territory confusion, the eraser only existed as a separate concept in Harry's multi-level *model* of the world, not as a separate element of single-level reality.

...the Transfiguration *still wasn't happening*.

Harry was breathing heavily, failed Transfiguration was almost as tiring as successful Transfiguration, but *damned* if he'd give up now.

All right, screw this nineteenth-century garbage.

Reality wasn't atoms, it wasn't a set of tiny billiard balls bopping around. That was just another lie. The notion of atoms as little dots was just another convenient hallucination that people clung to because they didn't want to confront the inhumanly alien shape of the underlying reality. No wonder, then, that his attempts to Transfigure based on that hadn't worked. If he wanted power, he had to abandon his humanity, and force his thoughts to conform to the true math of quantum mechanics.

There *were no particles*, there were just *clouds of amplitude* in a *multiparticle configuration space* and what his brain fondly imagined to be an eraser was nothing except a gigantic *factor* in a wavefunction that *happened to factorize*,

CHAPTER 28

it didn't have a separate existence any more than there was a particular solid factor of 3 hidden inside the number 6, if his wand was capable of *altering factors in an approximately factorizable wavefunction* then it should damn well be able to alter the slightly *smaller* factor that Harry's brain visualized as a patch of material on the eraser -

Hermione tore through the hallways, shoes pounding hard on the stone, breath coming in pants, the shock of adrenaline still racing through her blood.

Like a picture of a young woman turning into an old crone, like the cup becoming two faces.

What had they been doing?

What had they been doing?

She came to the classroom and her fingers slipped on the doorknob at first, too sweaty, she grabbed harder and the door opened -

- in a single flash of perception she saw Harry staring at a small pink rectangle on the table in front of him -

- as a few paces away the tiny black thread, almost invisible from this distance, supported all that weight -

"Harry get out of the classroom!"

Pure shock crossed Harry's face, and he stood up so fast he almost fell over, stopping only to grab the small pink rectangle from the table, and he tore out of the door, she'd already stepped aside, her wand was already in her hand coming up pointing at the thread -

"Finite Incantatem!"

And Hermione slammed the door shut again, just as the gigantic crash of a hundred kilograms of falling metal came from inside.

She was panting, gasping for air, she'd run all the way here without stopping, she was soaked in sweat and her legs and thighs burned like living flames, she couldn't have answered Harry's questions for all the Galleons in the world.

Hermione blinked, and realized that she had started to fall, and Harry had caught her, and was lowering her gently to sit on the floor.

"...healthy..." she managed to whisper.

"What?" said Harry, looking paler than she'd ever seen him.

REDUCTIONISM

"...are you, feeling, healthy..."

Harry started looking even more frightened as the question sank in. "I, I don't think I have any symptoms -"

Hermione closed her eyes for a moment. "Good," she whispered. "Catch, breath."

That took a while. Harry was still looking scared. That was good too, maybe it would teach him a lesson.

Hermione reached into the pouch Harry had bought her, whispered "water" through her parched throat, took out the bottle and drank in great huge gulps.

And then it was still a while before she could talk again.

"We broke the rules, Harry," she said in a hoarse voice. "We broke the rules."

"I..." Harry swallowed. "I still don't see how, I've been *thinking* but -"

"I asked if the Transfiguration was safe and *you answered me!*"

There was a pause.

"That's it?" Harry said.

She could have screamed.

"Harry, don't you get it?" she said. "It's made out of tiny fibers, what if it *unraveled*, who *knows* what could go wrong, *we didn't ask Professor McGonagall!* Don't you see what we were doing? We were experimenting with Transfiguration. We were *experimenting* with *Transfiguration!*"

There was another pause.

"Right..." Harry said slowly. "That's probably one of those things they don't even bother telling you *not* to do because it's too obvious. Don't test brilliant new ideas for Transfiguration by yourselves in an unused classroom without consulting any professors."

"You could have gotten us killed, Harry!" Hermione knew it wasn't fair, she'd made the mistake too, but she still felt angry at him, he always sounded so confident and that had dragged her unthinkingly along in his wake. "We could have *spoiled Professor McGonagall's perfect record!*"

"Yes," said Harry, "let's not tell her about this, shall we?"

"We have to stop," Hermione said. "We have to stop this or we're going to get hurt. We're too young, Harry, we can't do this, not yet."

A weak grin crossed Harry's face. "Um, you're sort of wrong about that."

CHAPTER 28

And he held out a small pink rectangle, a rubber eraser with a bright metal patch on it.

Hermione stared at it, puzzled.

"Quantum mechanics wasn't enough," Harry said. "I had to go all the way down to timeless physics before it took. Had to see the wand as enforcing a *relation* between separate past and future realities, instead of *changing* anything over time - but I did it, Hermione, I saw past the illusion of objects, and I bet there's not a single other wizard in the world who could have. Even if some Muggleborn knew about timeless formulations of quantum mechanics, it would just be a weird belief about strange distant quantum stuff, they wouldn't *see* that it was *reality*, accept that the world they knew was just a hallucination. I Transfigured *part* of the eraser without changing the *whole thing*."

Hermione raised her wand again, pointed it at the eraser.

For a moment anger crossed Harry's face, but he didn't make any move to stop her.

"*Finite Incantatem*," said Hermione. "Check with Professor McGonagall before you try it again."

Harry nodded, though his face was still a bit tight.

"And we still have to stop," said Hermione.

"*Why?*" said Harry. "Don't you see what this *means*, Hermione? Wizards *don't* know everything! There's too few of them, even fewer who know any science, they haven't exhausted the low-hanging fruit -"

"It's not *safe*," Hermione said. "If we *can* find out new things it's even *less* safe! We're *too young*! We made one big mistake already, next time we could just *die*!"

Then Hermione flinched.

Harry looked away from her, and started taking slow, deep breaths.

"Please don't try to do it alone, Harry," Hermione said, her voice trembling. "Please."

Please don't make me have to decide whether to tell Professor Flitwick.

There was a long pause.

"So you want us to study," Harry said. She could tell he was trying to keep the anger out of his voice. "Just study."

Hermione wasn't sure if she should say anything, but... "Like you studied, um, timeless physics, right?"

REDUCTIONISM

Harry looked back at her.

"That thing you did," Hermione said, her voice tentative, "it wasn't because of *our* experiments, right? You could do it because you'd read lots of books."

Harry opened his mouth, and then he shut it again. There was a frustrated look on his face.

"All right," Harry said. "How about this. We study, and if I think of anything that seems *really* worth trying, we'll try it after I ask a professor."

"Okay," Hermione said. She didn't fall over with relief, but only because she was already sitting down.

"Shall we get lunch?" Harry said cautiously.

Hermione nodded. Yes. Lunch sounded good. For real, this time.

She carefully began to push herself off the stone floor, wincing as her body screamed at her -

Harry pointed his wand at her and said "*Wingardium Leviosa*."

Hermione blinked as the huge weight on her legs diminished to something bearable.

A smile quirked across Harry's face. "You can *lift* something without being able to Hover it completely," he said. "Remember that experiment?"

Hermione smiled back helplessly, although she thought she ought to still be angry.

And she started walking back toward the Great Hall, feeling remarkably and wonderfully light on her feet, as Harry carefully kept his wand trained on her.

He only managed to keep it up for five minutes, but it was the thought that counted.

Minerva looked at Dumbledore.

Dumbledore gazed back inquiringly at her. "Did you understand any of that?" the Headmaster said, sounding bemused.

It had been the most complete and utter gibberish that Minerva could ever remember hearing. She was feeling a bit embarrassed about having summoned the Headmaster to hear it, but she'd been given explicit instructions.

CHAPTER 28

"I'm afraid not," Professor McGonagall said primly.

"So," Dumbledore said. The silver beard swung away from her, the old wizard's twinkling gaze looked elsewhere once more. "You suspect you might be able to do something that other wizards can't do, something we think is impossible."

The three of them stood within the Headmaster's private Transfiguration workroom, where the shining phoenix of Dumbledore's Patronus had told her to bring Harry, moments after her own Patronus had reached him. Light shone down through the skylights and illuminated the great seven-pointed alchemical diagram drawn in the center of the circular room, showing it to be a little dusty, which saddened Minerva. Transfiguration research was one of Dumbledore's great enjoyments, and she'd known how pressed for time he'd been lately, but not that he was *this* pressed.

And now Harry Potter was going to waste even more of the Headmaster's time. But she certainly couldn't blame *Harry* for that. He'd done the proper thing in coming to her to say that he'd had an idea for doing something in Transfiguration that was currently believed to be impossible, and she herself had done exactly what she'd been told to do: she'd ordered Harry to be quiet and not discuss anything with her until she had consulted the Headmaster and they'd finished moving to a secure location.

If Harry had started out by saying what *specifically* he thought he could do, she wouldn't have bothered.

"Look, I know it's hard to explain," Harry said, sounding a little embarrassed. "What it adds up to is that what you believe conflicts with what scientists believe, in a case where I'd genuinely expect scientists to know more than wizards."

Minerva would have sighed out loud, if Dumbledore hadn't seemed to be taking the whole thing very seriously.

Harry's idea stemmed from simple ignorance, nothing more. If you changed half of a metal ball into glass, the *whole ball* had a different Form. To change the part *was* to change the whole, and that meant removing the whole Form and replacing it with a different one. What would it even *mean* to Transfigure only half of a metal ball? That the metal ball

REDUCTIONISM

as a *whole* had the same Form as before, but *half* that ball now had a different Form?

"Mr. Potter," said Professor McGonagall, "what you want to do isn't just impossible, it's *illogical*. If you change half of something, you *did* change the whole."

"Indeed," said Dumbledore. "But Harry is the hero, so he may be able to do things that are logically impossible."

Minerva would have rolled her eyes, if she hadn't gone numb a long time ago.

"Supposing it *was* possible," said Dumbledore, "can you think of any reason why the results would differ in any way from ordinary Transfiguration?"

Minerva frowned. The fact that the concept was literally unimaginable was presenting her with some difficulty, but she tried to take it at face value. A Transfiguration imposed on only half of a metal ball...

"Strange things happening at the interface?" said Minerva. "But that should be no different than Transfiguring the object as a whole, into a Form with two different parts..."

Dumbledore nodded. "That is my own thought as well. And Harry, if your theory is correct, it implies that what you want to do is *exactly* like any other Transfiguration, only applied to a part of the subject rather than the whole? No changes *at all*?"

"Yes," Harry said firmly. "That's the whole point."

Dumbledore looked at her again. "Minerva, can you think of any reason whatsoever why that would be dangerous?"

"No," said Minerva, after she had finished searching through her memory.

"Likewise myself," said the Headmaster. "All right, then, since this ought to be exactly analogous to ordinary Transfiguration in all respects, and since we cannot think of any reason whatsoever why it would be dangerous, I think that the second degree of caution will suffice."

Minerva was surprised, but she didn't object. Dumbledore was by far her senior in Transfiguration, and he had tried literally thousands of new Transfigurations without ever choosing a degree of caution that was too low. He had used Transfiguration *in combat* and he was *still alive*. If the Headmaster thought the second degree was enough, it was enough.

CHAPTER 28

That Harry was certainly going to fail was, of course, completely irrelevant.

The two of them started setting up the wards and detection webs. The most important web was the one that checked to make sure no Transfigured material had entered the air. Harry would be enclosed in a separate shell of force with its own air supply just to be certain, only his wand allowed to leave the shield, and the interface tight. They were inside Hogwarts so they couldn't automatically Apparate out any material that showed signs of spontaneous combustion, but they could launch it out a skylight almost as fast, the windows all folded outward for exactly that reason. Harry himself would go out a different skylight at the first sign of trouble.

Harry watched them working, his face looking a little frightened.

"Don't worry," said Professor McGonagall in the middle of her running description, "this almost certainly won't be necessary, Mr. Potter. If we *expected* anything to go wrong you would not be allowed to try. It's just ordinary precautions for any Transfiguration no one has ever tried before."

Harry swallowed and nodded.

And a few minutes later, Harry was strapped into the safety chair and resting his wand against a metal ball - one that, based on his current test scores, should have been too large for him to Transfigure in less than thirty minutes.

And a few minutes after *that*, Minerva was leaning against the wall, feeling faint.

There was a small patch of glass on the ball where Harry's wand had rested.

Harry didn't say *I told you so*, but the smug look on his sweating face said it for him.

Dumbledore was casting analytic Charms on the ball, looking more and more intrigued by the moment. Thirty years had melted off his face.

"Fascinating," said Dumbledore. "It's exactly as he claimed. He simply Transfigured a part of the subject without Transfiguring the whole. You say it's really just a conceptual limitation, Harry?"

"Yes," Harry said, "but a deep one, just knowing it had to be a conceptual limitation wasn't enough. I had to suppress the part of my

mind that was making the error and think instead about the underlying reality that scientists figured out."

"Truly fascinating," Dumbledore said. "I take it that for any other wizard to do the same would require months of study if they could do it at all? And may I ask you to partially Transfigure some other subjects?"

"Probably yes and of course," Harry said.

Half an hour later, Minerva was feeling equally bewildered, but considerably reassured about the safety issues.

It *was* the same, aside from being logically impossible.

"I believe that's enough, Headmaster," Minerva said finally. "I suspect partial Transfiguration is more tiring than the ordinary sort."

"Getting less so with practice," said the exhausted and pale boy, voice unsteady, "but yeah, you've got that right."

The process of extracting Harry from the wards took another minute, and then Minerva escorted him to a much more comfortable chair, and Dumbledore produced an ice-cream soda.

"*Congratulations*, Mr. Potter!" said Professor McGonagall, and meant it. She would have bet almost anything against that working.

"Congratulations indeed," said Dumbledore. "Even I did not make any original discoveries in Transfiguration before the age of fourteen. Not since the day of Dorotea Senjak has any genius flowered so early."

"Thanks," Harry said, sounding a little surprised.

"Nonetheless," Dumbledore said thoughtfully, "I think it would be most wise to keep this happy event a secret, at least for now. Harry, did you discuss your idea with any other person before you spoke to Professor McGonagall?"

There was silence.

"Um..." Harry said. "I don't want to turn anyone over to the Inquisition, but I did tell one other student -"

The word almost exploded from Professor McGonagall's lips. "*What?* You discussed a completely novel form of Transfiguration with a *student* before consulting a recognized authority? Do you have any idea how *irresponsible* that was?"

"I'm sorry," said Harry. "I didn't realize."

The boy looked appropriately frightened, and Minerva felt something inside her relax. At least Harry understood how foolish he'd been.

CHAPTER 28

"You must swear Miss Granger to secrecy," Dumbledore said gravely. "And do not tell anyone else unless there is an extremely good reason for it, and they too have sworn."

"Ah... why?" Harry said.

Minerva was wondering the same thing. Once again the Headmaster was thinking too far ahead for her to keep up.

"Because you can do something that no one else will believe you can do," Dumbledore said. "Something completely unexpected. It may prove to be your critical advantage, Harry, and we must preserve it. Please, trust me in this."

Professor McGonagall nodded, her firm face showing nothing of her inner confusion. "Please do, Mr. Potter," she said.

"All right..." Harry said slowly.

"Once we have finished examining your materials," Dumbledore added, "you may practice partial Transfiguration, on glass to steel and steel to glass *only*, with Miss Granger to act as your spotter. Naturally, if either of you suspect any symptom of any form of Transfiguration sickness, inform a professor at once."

Just before Harry left the workroom, with his hand on the doorhandle, the boy turned back and said, "As long as we're here, have either of you noticed anything different about Professor Snape?"

"Different?" said the Headmaster.

Minerva didn't let her wry smile show on her face. Of course the boy was apprehensive about the 'evil Potions Master', since he had no way of knowing why Severus was to be trusted. It would have been odd to say the least, explaining to Harry that Severus was still in love with his mother.

"I mean, has his behavior changed recently in any way?" said Harry.

"Not that I have seen..." the Headmaster said slowly. "Why do you ask?"

Harry shook his head. "I don't want to prejudice your own observations by saying. Just keep an eye out, maybe?"

That sent a quiver of unease through Minerva in a way that no outright accusation of Severus could have.

Harry bowed to both of them respectfully, and took his leave.

"Albus," Minerva said after the boy had gone, "how did you *know* to take Harry seriously? I would have thought his idea merely impossible!"

The old wizard's face turned grave. "The same reason it must be kept secret, Minerva. The same reason I told you to come to me, if Harry made any such claim. Because it is a power that Voldemort knows not."

The words took a few seconds to sink in.

And then the cold shiver went down her spine, as it always did when she remembered.

It had started out as an ordinary job interview, Sybill Trelawney applying for the position of Professor of Divination.

*THE ONE WITH THE POWER TO VANQUISH THE DARK
LORD APPROACHES,
BORN TO THOSE WHO HAVE THRICE DEFIED HIM,
BORN AS THE SEVENTH MONTH DIES,
AND THE DARK LORD WILL MARK HIM AS HIS EQUAL,
BUT HE WILL HAVE POWER THE DARK LORD KNOWS NOT,
AND EITHER MUST DESTROY ALL BUT A REMNANT OF
THE OTHER,
FOR THOSE TWO DIFFERENT SPIRITS CANNOT EXIST IN
THE SAME WORLD.*

Those dreadful words, spoken in that terrible booming voice, didn't seem to fit something like partial Transfiguration.

"Perhaps not, then," Dumbledore said after Minerva tried to explain. "I confess I had been hoping for something that would help in finding Voldemort's horcrux, wherever he may have hidden it. But..." The old wizard shrugged. "Prophecies are tricky things, Minerva, and it is best to take no chances. The smallest thing may prove decisive if it remains unexpected."

"And what do you suppose he meant about *Severus*?" said Minerva.

"There I have no idea," sighed Dumbledore. "Unless Harry is making a move against Severus, and thought that an open question might be taken seriously where a direct allegation would be dismissed. And if that was indeed what happened, Harry correctly reasoned that I would not trust that it was so. Let us simply keep watch, without prejudice, as he asks."

CHAPTER 28

Aftermath, 1:

"Um, Hermione?" Harry said in a very small voice. "I think I owe you a really, really, really big apology."

Aftermath, 2:

Alissa Cornfoot's eyes were slightly glazed as she gazed upon the Potions Master giving her class a stern lecture, holding up a tiny bronze bean and saying something about screaming puddles of human flesh. Ever since the start of this year she'd been having trouble listening in Potions. She kept staring at their awful, mean, greasy professor and fantasizing about special detentions. There was probably something really *wrong* with her but she just couldn't seem to stop doing it -

"Ow!" Alissa said then.

Snape had just flicked the bronze bean unerringly at Alissa's forehead.

"Miss Cornfoot," said the Potions Master, his voice cutting, "this is a delicate potion and if you cannot pay attention you will hurt your classmates, not just yourself. See me after class."

The last four words didn't help her any, but she tried harder, and managed to get through the day without melting anyone.

After class, Alissa approached the desk. Part of her wanted to stand there meekly with her face abashed and her hands clasped penitently behind her back, just in case, but some quiet instinct told her this might be a *bad idea*. So instead she just stood there with her face neutral, in a posture that was very proper for a young lady, and said, "Professor?"

"Miss Cornfoot," Snape said without looking up from the sheets he was grading, "I do not return your affections, I begin to find your stares disturbing, and you will restrain your eyes henceforth. Is that quite clear?"

"Yes," said Alissa in a strangled squeak, and Snape dismissed her, and she fled the classroom with her cheeks flaming like molten lava.

CHAPTER 29

EGOCENTRIC BIAS

Unfortunately, no one can be told who J. K. Rowling is. You have to see her for yourself.

Science disclaimers: Luosha points out that the theory of empathy in Ch. 27 (you use your own brain to simulate others) isn't quite a known scientific fact. The evidence so far points in that direction, but we haven't analyzed the brain circuitry and proven it. Similarly, timeless formulations of quantum mechanics (alluded to in Ch. 28) are so elegant that I'd be shocked to find the final theory had time in it, but they're not established yet either.

There'd been a sinking feeling in Hermione's stomach lately, every time she heard the other students talking about her and Harry. She'd been in a shower stall this morning when she'd overheard a conversation between Morag and Padma that had been the last straw piled on top of quite a lot of other straws.

She was starting to think that getting involved in a rivalry with Harry Potter had been a terrible mistake.

If she'd just *stayed away* from Harry Potter, she could have been Hermione Granger, the brightest academic star of Hogwarts, who was earning more points for Ravenclaw than anyone. She wouldn't have been *as* famous as the Boy-Who-Lived, but she would have been famous for *herself*.

Instead the Boy-Who-Lived had an academic rival, and her name happened to be Hermione Granger.

And worse, she had gone on a date with him.

The idea of getting into a Romance with Harry had seemed like an appealing idea at first. She'd read books like that, and if there was anyone in Hogwarts who was a candidate for the heroine's love interest it was obviously Harry Potter. Bright, funny, famous, sometimes scary...

CHAPTER 29

So she'd forced Harry into going on a date with her.

And now *she* was *his* love interest.

Or worse, one of the options on his dinner menu.

She'd been in a shower stall that morning and just about to turn on the water, when she'd heard giggles coming from outside. And she'd heard Morag talking about how that Muggleborn girl probably wouldn't fight hard enough to win against Ginevra Weasley, and Padma speculating that Harry Potter might decide he wanted *both*.

It was like they didn't understand that GIRLS had options on their dinner menu and BOYS fought over them.

But that wasn't even the part that hurt, really. It was that when she scored 98 on one of Professor McGonagall's tests, the news wasn't that Hermione Granger had scored the highest in the class, the news was that Harry Potter's rival had scored seven more points than him.

If you got too close to the Boy-Who-Lived, you became part of his story.

You didn't get your own.

And the thought had come to Hermione that she should just walk away, but that would've been too sad.

But she did want to get *back* what she'd accidentally given away by letting herself become known as Harry's rival. She wanted to be a separate person again instead of Harry Potter's third leg, was that too much to ask?

It was a hard trap to climb out of once you fell in. No matter how high you scored in class, even if you did something that deserved a special dinnertime announcement, it just meant you were rivaling Harry Potter again.

But she thought she'd come up with a way.

Something to do that *wouldn't* be seen as pushing up on the opposite end of Harry Potter's seesaw.

It would be hard.

It would go against her nature.

She would have to fight someone very evil.

And she would need to ask someone even *more* evil for help.

Hermione raised her hand to knock upon that terrible door.

She hesitated.

Hermione realized she was being *silly*, and raised her hand a bit higher. She tried to knock again.

Her hand quite failed to touch the door.

And then the door swung open anyway.

"Dear me," said the spider, sitting in its web. "Was it really that hard to lose a single Quirrell point, Miss Granger?"

Hermione stood there with her hand raised, her cheeks growing pink. It *had* been.

"Well, Miss Granger, I shall be merciful," said the evil Professor Quirrell. "Consider it already lost. There, I have taken a hard choice from you. Are you not grateful?"

"Professor Quirrell," Hermione managed to say in a voice that squeaked a little. "I have a lot of Quirrell points, don't I?"

"You do indeed," said Professor Quirrell. "Though one less than you had before. Terrible, isn't it? Just think, if I don't like your reason for coming here, you could lose another fifty. Maybe I'd take them away one... by one... by one..."

Hermione's cheeks were going even redder. "You're really evil, did anyone ever tell you that?"

"Miss Granger," Professor Quirrell said gravely, "it can be dangerous to give people compliments like that when they have not been truly earned. The recipient might feel bashful and undeserving and want to do something worthy of your praise. Now what was it you wanted to talk to me about, Miss Granger?"

It was after lunch on Thursday afternoon, and Hermione and Harry were ensconced in a little library nook, with a *Quietus* field up so they could talk. Harry was lying stomach-down on the ground with his elbows resting on the floor and his head in his hands and his feet kicking up casually behind him. Hermione was occupying a stuffed chair much too large for her, like she was the Hermione center of a candy shell.

Harry had suggested that they could, as a first pass, read just the *titles* of all the books in the library, and then Hermione could read all the tables of contents.

CHAPTER 29

Hermione had thought this was a brilliant idea. She'd never done that with a library before.

Unfortunately there was a slight flaw in this plan.

Namely, they were both Ravenclaws.

Hermione was reading a book called *Magical Mnemonics*.

Harry was reading a book called *The Skeptical Wizard*.

Each had thought it was just one special exception they would make only this one time, and neither had yet realized it was impossible for either of them to ever finish reading all the book titles no matter how hard they tried.

The quiet of their little nook was broken by two words.

"Oh, *no*," Harry suddenly said out loud, sounding like the words had been torn out of him.

There was a bit more quiet.

"He *didn't*," Harry said, in the same voice.

Then she heard Harry start giggling helplessly.

Hermione looked up from her book.

"All right," she said, "what *is* it?"

"I just found out why you never ask the Weasleys about the family rat," Harry said. "It's *really* awful and I shouldn't be laughing and I'm a terrible person."

"Yes," Hermione said primly, "you are. Tell me too."

"Okay, first the background. There's a whole chapter in this book about Sirius Black conspiracy theories. You remember who that is, right?"

"Of course," said Hermione. Sirius Black was a traitor, a friend of James Potter who'd betrayed the location of Harry's parents to Voldemort.

"So it turns out there were a number of, shall we say, *irregularities*, associated with Black going to Azkaban. He didn't get a trial, and the Junior Minister in charge when the Aurors arrested Black was none other than Cornelius Fudge, who became our current Minister of Magic."

That sounded a little suspicious to Hermione too, and she said as much.

Harry made a shrugging motion with his shoulders, as he lay on the floor looking at his book. "Suspicious things happen all the time, and if you're a conspiracy theorist you can always find *something*."

"But *no trial?*" said Hermione.

"It was right after the Dark Lord's defeat," Harry said, his voice serious as he said it. "Things were incredibly chaotic, and when the Aurors tracked down Black he was standing there laughing in a street ankle-deep in blood, with twenty eyewitnesses to recount how he'd killed a friend of my father's named Peter Pettigrew plus twelve bystanders. I'm not saying I approve of Black not getting a trial. But these are wizards we're talking about here, so it's not really any more suspicious than, I don't know, the sort of thing people point to when they want to argue over who shot John F. Kennedy. So anyway, Sirius Black is the wizarding Lee Harvey Oswald. There's all sorts of conspiracy theories about who *really* betrayed my parents instead of him, and one of the favorites is Peter Pettigrew, and this is where it starts getting complicated."

Hermione listened, fascinated. "But how do you go from there to the Weasleys' *pet rat* -"

"Hold on," said Harry, "I'm getting there. Now, after Pettigrew's death it came out that he'd been a spy for the Light - not a double agent, just someone who snuck around and found things out. He'd been good at that since he was a teenager, even in Hogwarts he had a reputation for finding out all sorts of secrets. So the conspiracy theory is that Pettigrew became an unregistered Animagus while he was still in Hogwarts, an Animagus of something small that could scurry around and listen to conversations. The main problem being that successful Animagi are rare and doing it as a teenager would be really unlikely, so of course the conspiracy theory says that my father and Black were unregistered Animagi too. And in that conspiracy theory, Pettigrew himself killed the twelve bystanders, turned into his small Animagus form, and ran. So Michael Shermer says there are four additional problems with this. One, Black was the only one who knew where my parents were." (Harry's voice was a little hard as he said that.) "Two, Black was a more likely suspect to start with than Pettigrew, there's a rumor Black deliberately tried to get a student killed during his time at Hogwarts, and he was from

CHAPTER 29

this really nasty pureblood family, Bellatrix Black was literally his cousin. Three, Black was twenty times the fighting wizard that Pettigrew was, even if he wasn't as smart. The duel between them would have been like Professor Quirrell versus Professor Sprout. Pettigrew probably didn't even get a chance to draw his wand, let alone fake all the evidence the conspiracy theory requires. And four, Black was standing in the street *laughing*."

"But the *rat* -" said Hermione.

"Right," Harry said. "Well, to make a long story short, Bill Weasley decided that his little brother Percy's pet rat was Pettigrew's Animagus form -"

Hermione's jaw dropped.

"Yes," Harry said, "you wouldn't exactly expect Evil Pettigrew to be living a sad and furtive life as the pet rat of an enemy wizarding family, he'd either be with the Malfoys or, more likely, off in the Carribean after a bit of plastic surgery. Anyway, Bill knocks out his little brother Percy, stuns and grabs the rat, sends out all these emergency owl messages -"

"Oh, *no!*" Hermione said, the words torn out of her.

"- and somehow manages to gather Dumbledore, the Minister of Magic, and the Head Auror -"

"He *didn't!*" said Hermione.

"And of course when they get there they think he's crazy, but they use *Veritas Oculum* on the rat anyway, just to be sure, and what do they discover?"

She would've *died*. "A rat."

"You win a cookie! So they dragged poor Bill Weasley off to St. Mungo's and it turned out to be a pretty standard schizophrenic break, it just happens to some people, especially young men around what we'd consider college age. Guy was convinced he was ninety-seven years old and had died and gone back in time to his younger self via train station. And he responded perfectly well to antipsychotics and is back to normal and everything's fine now, except people don't talk as much anymore about Sirius Black conspiracy theories, and you don't ever ask the Weasleys about the family rat."

Hermione was giggling helplessly. It was really awful and she shouldn't be laughing and she was a terrible person.

"The thing I *don't* understand," Harry said, after their giggles had died down, "is *why* Black would hunt down Pettigrew instead of running as fast as he could. He had to know the Aurors would be after him. I wonder if they got the reason out of Black before they took him to Azkaban? See, this is why people who are absolutely positively guilty still go through the legal system and get trials."

Hermione had to agree with that.

Soon Harry was done with his book while Hermione was only halfway through hers - hers was a much more difficult book than Harry's, but she still felt embarrassed about that. And then she had to put *Magical Mnemonics* back on the shelf and drag herself away, because it was time for her to face the most dreaded class in Hogwarts, BROOMSTICK RIDING.

Harry tagged along as she walked there, even though his own class wasn't until an hour and a half later, like a fighter jet escorting a sad little propeller plane on its way to its own funeral.

The boy wished her goodbye in a quiet, sympathetic voice, and she walked onto the grassy fields of Doom.

And there was much shrieking and almost falling and horrible brushes with death and the ground in completely the *wrong place* and the sun getting in her eyes and Morag buzzing her and Mandy thinking she was being *subtle* about always being near enough to catch her if she fell and she *knew* the other students were laughing at both of them but she never said anything to Mandy because she didn't actually want to die.

After ten million years the class ended, and she was back on the ground where she belonged until next Thursday. Sometimes she had nightmares about it always being Thursday.

Why everyone had to learn this, when they were just going to Apparate or Floo or portkey everywhere once they grew up, was a complete and utter mystery to Hermione. Nobody actually needed to ride broomsticks as an adult, it was like being forced to play dodgeball in P.E.

At least Harry had the decency to be ashamed of being good at it.

CHAPTER 29

It was a couple of hours later, and she was in a Hufflepuff study hall with Hannah, Susan, Leanne, and Megan. Professor Flitwick, surprisingly diffident for a teacher, had asked if she might possibly maybe help those four with their Charms homework for a while, even though they weren't Ravensclaws, and Hermione had felt so proud she'd almost *burst*.

Hermione took a piece of parchment, spilled a little bit of ink on it, tore it into four pieces, crumpled them, and tossed the pieces on the table.

She could have gotten it just from crumpling it, but doing all that made it more like garbage, and that helped when someone was first practicing the Disposal Charm.

Hermione sharpened her ears and eyes, and said, "Okay, try it."

"*Evert*o."

"*Evert*o."

"*Evert*o."

"*Evert*o."

Hermione didn't think she'd quite caught all the problems. "Can you all try it again?"

An hour later Hermione had concluded that (1), Leanne and Megan were sort of sloppy, but if you asked them to keep practicing something, they would, (2) Hannah and Susan were focused and driven to the point where you had to keep telling them to *slow down* and *relax* and *think* about things instead of *trying* so hard - it was odd to think that those two would soon be *hers* - and (3) she liked helping Hufflepuffs, the whole study hall had a very cheerful atmosphere.

When she left for dinner, she found the Boy-Who-Lived reading a book while he waited to escort her. It made her feel flattered, and also a little worried because Harry didn't seem to really talk to *anyone* besides her.

"Did you know there's a girl in Hufflepuff who's a Metamorphmagus?" said Hermione as they headed toward the Great Hall. "She makes her hair really red, like stopsign red not Weasley red, and when she spilled hot tea on herself she turned into a black-haired boy until she got it under control again."

"Really? Cool," said Harry, sounding a bit distracted. "Um, Hermione, just to check, you know tomorrow is the last day to sign up for Professor Quirrell's armies, right?"

"Yes," Hermione said. "The armies of the evil Professor Quirrell." Her voice was a little angry, though Harry didn't know why, of course.

"Hermione," Harry said, his voice exasperated, "he's not evil. He's a little bit Dark and a whole lot Slytherin. It's not the same as being *evil*."

Harry Potter had too many words for things, that was his problem. He would have been better off if he'd just divided the universe into Good and Bad. "Professor Quirrell called me up in front of the whole class and told me to *shoot someone*!"

"He was right," Harry said, his face sober. "I'm sorry, Hermione, but he was. You should have shot *me*, I wouldn't have minded. You can't learn Battle Magic if you can't practice against real opponents using real spells. And now you're doing okay in sparring, aren't you?"

Hermione was only twelve, and so she knew, but she couldn't put it into words, she couldn't find the thing to say that would convince Harry.

Professor Quirrell had taken a young girl and called up that girl in front of everyone, and ordered her to open fire without provocation on a classmate.

It didn't *matter* if Professor Quirrell was right about her needing to learn it.

Professor McGonagall wouldn't ever have done that.

Professor Flitwick wouldn't ever have done that.

Maybe not even Professor Snape would have done that.

Professor Quirrell was *EVIL*.

But she couldn't find the words, and she knew that Harry would never believe her.

"Hermione, I've talked to older students," Harry said. "Professor Quirrell could be the *only* competent Defense Professor we get in all seven years at Hogwarts. Anything else we can learn later. If we want to study Defense, we have to do it *this year*. The students who sign up for the extracurricular stuff are going to be learning huge amounts, way beyond what the Ministry thinks first-years are supposed to study - did you know we're going to be learning the Patronus Charm? In *January*?"

"The *Patronus Charm*?" Hermione said, her voice going up in surprise.

CHAPTER 29

Her books said that was one of the brightest magics known, a weapon against the Darkest creatures, cast with pure positive emotions. It wasn't something she'd expect the evil Professor Quirrell to teach - or arrange to be taught, since Hermione couldn't imagine he could do the spell himself.

"Yes," Harry said. "Students don't usually learn the Patronus Charm until their fifth years or even later! But Professor Quirrell says the Ministry schedules were made up by talking Flobberworms, and the ability to cast the Patronus Charm depends on emotions more than magical strength. Professor Quirrell says that he thinks most students do *way* less than they can, and this year he's going to prove it."

There was the usual tone of awed worship that Harry's voice had when he talked about Professor Quirrell, and Hermione gritted her teeth and kept walking.

"I already signed up, actually," Hermione said, her voice a little quiet. "I did it this morning. For everything, just like you said."

In for a penny, in for a pound was the usual expression.

Besides, she didn't want to *lose*, and if she wanted to win she had to learn.

"So you *will* be in the armies, then?" Harry's voice was suddenly enthusiastic. "That's awesome, Hermione! I've already gotten my list of soldiers, but I'm sure Professor Quirrell will let me add one more, or trade -"

"I'm not joining *your* army." Hermione's voice was sharp. She knew it was a reasonable assumption but it *still* annoyed her.

Harry blinked. "Not Draco Malfoy's, surely. So you want to be in the third army? Even though we don't know who the general *is* yet?" Harry sounded surprised and a little wounded, and she couldn't blame him, though of course she did blame him, since in fact it was all his fault. "But why not mine?"

"Think about it," Hermione snapped, "and maybe you'll work it out!" And she sped up her stride and left Harry gaping behind her.

"Professor Quirrell," Draco said in his most formal voice, "I must protest your appointment of Hermione Granger as the third general."

"Oh?" said Professor Quirrell, leaning back in his chair in a casual and relaxed manner. "Protest away, Mr. Malfoy."

"Granger is unfit for the position," said Draco.

Professor Quirrell tapped a finger on his cheek thoughtfully. "Why yes, yes she is. Do you have any further protests?"

"Professor Quirrell," said Harry Potter beside him, "with all due respect to Miss Granger's many outstanding academic talents and the Quirrell points she has justly earned in your classes, her personality is not suited to military command."

Draco had been relieved when Harry had agreed to accompany him to Professor Quirrell's office. It wasn't *just* that Harry was a gigantic blatant teacher's pet where Professor Quirrell was concerned. Draco had also started to worry that Harry actually *was* friends with Granger, it had been a while now and he *still* hadn't made his move... but this was more like it.

"I agree with Mr. Potter," said Draco. "Appointing her as a general turns it into a farce."

"Harshly put," said Harry, "but I cannot bring myself to disagree with Mr. Malfoy. To be blunt, Professor Quirrell, Hermione Granger has around as much intent to kill as a bowl of wet grapes."

"That," said Professor Quirrell mildly, "is not a thing I would fail to notice myself. You are telling me nothing I do not already know."

It was Draco's turn to say something, but the conversation had suddenly hiccupped. That answer had *not* been in the possibilities he and Harry had brainstormed before coming here. What *did* you say after the teacher said that he knew everything you knew and he was still going to commit an obvious mistake?

The silence stretched.

"Is this some sort of plot?" Harry said slowly.

"Must everything I do be some sort of plot?" said Professor Quirrell. "Can't I ever create chaos just for the sake of chaos?"

Draco almost choked.

"Not in your Battle Magic class," Harry said with calm certainty. "Other places, maybe, but not there."

Professor Quirrell slowly raised his eyebrows.

Harry gazed steadily back at him.

CHAPTER 29

Draco shivered.

"Well then," Professor Quirrell said. "Neither of you seem to have considered a very simple question. Who could I appoint instead of Miss Granger?"

"Blaise Zabini," Draco said without hesitation.

"Any other suggestions?" said Professor Quirrell, sounding quite amused.

Anthony Goldstein and Ernie Macmillan, came the thought, before Draco's common sense kicked in and ruled out mudbloods and Hufflepuffs no matter how aggressively they dueled. So instead Draco just said, "What's wrong with Zabini?"

"I *see*..." Harry said slowly.

"I *don't*," said Draco. "Why not Zabini?"

Professor Quirrell looked at Draco. "Because, Mr. Malfoy, no matter how hard he tries, he'll never be able to keep up with you or Mr. Potter."

The shock of it staggered Draco. "You can't believe *Granger* is going to -"

"He's gambling on her," Harry said quietly. "It's not guaranteed. The odds aren't even good. She'll probably never give us a good fight, and even if she does, it may take her months to learn. But she's the only one in our year with any chance at all of growing to beat us."

Draco's hands twitched but didn't clench into fists. Showing up as your supporter and then backing out was a classic undermining tactic, so Harry Potter *was* in it with Granger and *that* implied -

"But Professor," Harry went on smoothly, "I'm worried Hermione will be *miserable* as the general of an army. I'm speaking as her friend now, Professor Quirrell. The competition might be good for Draco and me, but what you're asking her to do isn't good for *her*!"

Never mind.

"Your friendship for Hermione Granger does you credit," Professor Quirrell said dryly. "Especially as you are able to be friends with Draco Malfoy at the same time. Quite a feat, that."

Harry suddenly looked a little nervous, meaning he probably felt a lot *more* nervous, and Draco silently swore to himself. Of course Harry wasn't going to fool Professor Quirrell.

"And I doubt Miss Granger would appreciate your friendly concern," said Professor Quirrell. "She asked me for the position, Mr. Potter, I did not ask her."

Harry was quiet at this for a moment. Then he flashed Draco a quick look that mixed apology and warning, saying at the same time, *Sorry, I did my best and We'd better not press it any further.*

"As for her being miserable," Professor Quirrell went on, a slight smile now playing about his lips, "I suspect that she will have a much easier time with the rigors of her position than either of you suspect, and that she will put up a good fight much sooner than you think."

Harry and Draco both gasped in horror.

"You're not going to *advise* her, are you?" said Draco, utterly aghast.

"I never signed up to fight *you!*" said Harry.

The smile playing around Professor Quirrell's lips grew wider. "As a matter of fact, I *did* offer to share a few suggestions regarding Miss Granger's first battles."

"*Professor Quirrell!*" said Harry.

"Oh, don't worry," Professor Quirrell said. "She turned me down. Just as I expected."

Draco's eyes narrowed.

"Dear me, Mr. Potter," said Professor Quirrell, "didn't anyone ever tell you it's rude to stare?"

"You're not going to secretly help her some *other* way, are you?" said Harry.

"Would I do that?" said Professor Quirrell.

"Yes," said Draco and Harry at the same time.

"I am wounded by your lack of trust. Well then, I promise not to help General Granger in any way that the two of you don't know about. And now I suggest that both of you be about your military affairs. November approaches, and swiftly."

Draco saw the implications before the door had closed all the way behind them on their way out of Professor Quirrell's office.

Harry had once spoken dismissively of "people stuff".

And now that was Draco's only hope.

CHAPTER 29

Let him not realize, let him not realize...

"We should just attack the Granger girl first and get her out of our way," said Draco. "After we crush her, we can have our own contest without any distractions."

"Now that doesn't really seem fair to her, does it?" said Harry in a mild voice.

"What do *you* care?" said Draco. "She's your rival, right?" Then, with just the right note of suspicion in his voice, "Don't tell me you've started *really* liking her, after being her rival all this time..."

"Founders forbid," said Harry. "What can I say, Draco? I merely have a natural sense of justice. Granger does too, you know. She has a very firm grasp on good and evil, and she's probably going to attack evil first. Having a name like 'Malfoy' is just asking for it, you know."

DAMN IT!

"Harry," said Draco, sounding wounded and maybe a little superior, "don't you want to fight *fairly* against me?"

"You mean rather than attacking you after you've already lost some of your forces beating Granger?" said Harry. "Oh, I don't know. Maybe after I get bored with just winning I'll try that 'fair' thing."

"Maybe she'll attack *you*," Draco said. "*You're* her rival."

"But I'm her *friendly* rival," Harry said with an evil grin. "I bought her a nice birthday present and everything. You wouldn't go around sabotaging your friendly rival like that."

"What about sabotaging your *friend's* chance at a fair fight?" said Draco angrily. "I thought we were friends!"

"Let me rephrase that," said Harry. "*Granger* wouldn't sabotage a friendly rival. But that's because she has the killing intention of a bowl of wet grapes. *You* would. You *totally* would. And guess what, so would I."

DAMN IT!

If it had been a play, there would have been dramatic music.

The hero, impeccably turned out in green-trimmed robes and perfectly combed white-blond hair, faced the villain.

The villain, leaning back in a simple wooden chair with her buckteeth clearly visible and stray chestnut curls drifting over her cheeks, faced the hero.

It was Wednesday, October 30th, and the first battle was coming up on Sunday.

Draco was standing in General Granger's office, a room the size of a small classroom. (*Why* each general's office was so large, Draco wasn't quite sure. A chair and a desk would have worked for him. He wasn't even clear on why the generals needed offices at all, his soldiers knew where to find him. Unless Professor Quirrell had deliberately arranged the huge offices for them as a sign of status, in which case Draco was all for it.)

Granger sat on the room's single chair like a throne, all the way on the other end of the office from where the door opened. There was a long oblong table stretched across the middle of the room between them, and four small circular tables scattered around the corners, but only that one single chair, all the way at the opposite end. The room had windows along one wall, and one beam of sunlight touched the top of Granger's hair like a glowing crown.

It would have been nice if Draco could have walked slowly forward. But there was a table in the way, and Draco had to go around it diagonally, and there was no good way to do that in a dramatic and dignified fashion. Had that been deliberate? If it had been his father, it surely would have been; but this was Granger, so surely not.

There was nowhere for him to sit, and Granger hadn't stood up, either.

Draco kept the outrage entirely off his face.

"Well, Mr. Draco Malfoy," Granger said once he stood before her, "you requested an audience with me and I have been so gracious as to grant it. What was your plea?"

Come with me to visit Malfoy Manor, my father and I would like to show you some interesting spells.

"Your rival, Potter, came to me with an offer," said Draco, putting a serious look on his face. "He doesn't mind losing to me, but would be humiliated if you won. So he wants to join with me and wipe you out immediately, not just in our first battle, all of them. If I won't do that,

CHAPTER 29

Potter wants me to hold back or harass you, while he launches an all-out attack on you as his first move."

"I see," Granger said, looking surprised. "And you're offering to help me against him?"

"Of course," said Draco smoothly. "I didn't think what he wanted to do to you was fair."

"Why, that's very nice of you, Mr. Malfoy," said Granger. "I'm sorry for how I spoke to you earlier. We should be friends. Can I call you Drakey?"

Alarm bells started to sound in Draco's head, but there was a *chance* she meant it...

"Of course," said Draco, "if I can call you Hermey."

Draco was pretty sure he saw her expression flicker.

"Anyway," Draco said, "I was thinking it would serve Potter right if we both attacked him and wiped him out."

"But that wouldn't be fair to Mr. Potter, would it?" said Granger.

"I think it'd be very fair," Draco said. "He was planning to do it to you first."

Granger was giving him a stern look that could possibly have intimidated him if he'd been a Hufflepuff instead of a Malfoy. "You think I'm pretty stupid, don't you, Mr. Malfoy?"

Draco smiled charmingly. "No, Miss Granger, but I thought I'd at least *check*. So, what do you want?"

"Are you offering to *bribe* me?" said Granger.

"Sure," said Draco. "Can I just slip you a Galleon and have you beat on Potter instead of me for the rest of the year?"

"Nope," said Granger, "but you can offer me ten Galleons and have me attack both of you equally, instead of just you."

"Ten Galleons is a lot of money," Draco said cautiously.

"I didn't know the Malfoys were poor," said Granger.

Draco stared at Granger.

He was starting to get a strange feeling about this.

That particular reply didn't seem like it should have come from this particular girl.

"Well," said Draco, "you don't get to be rich by wasting money, you know."

"I don't know if you know what a dentist is, Mr. Malfoy, but my parents are *dentists* and anything less than ten Galleons isn't worth my time at all."

"Three Galleons," Draco said, more as a probe than anything else.

"Nope," said Granger. "If you want an equal fight at all, I don't believe that a Malfoy wants an equal fight less than he wants ten Galleons."

Draco was starting to get a *very* strange feeling about this.

"No," said Draco.

"No?" said Granger. "This is a limited time offer, Mr. Malfoy. Are you sure you want to risk a whole year of being miserably crushed by the Boy-Who-Lived? That would be pretty embarrassing for the House of Malfoy, wouldn't it?"

It was a very persuasive argument, one that was hard to refuse, but you didn't get to be rich by spending money when your heart told you it was a setup.

"No," said Draco.

"See you on Sunday," said Granger.

Draco turned and walked out of the office without another word.

That had been *not right*...

"Hermione," Harry said patiently, "we're *supposed* to be plotting against each other. You could even betray me and it wouldn't mean anything outside the battlefield."

Hermione shook her head. "It wouldn't be nice, Harry."

Harry sighed. "I don't think you're getting into the spirit of this at all."

It wouldn't be nice. She'd actually said that. Hermione didn't know whether to be insulted at what Harry thought of her, or worried about whether she really *did* sound like that much of a goody-two-shoes usually.

It was probably time to change the subject.

"Anyway, are you doing anything special for tomorrow?" said Hermione. "It's -"

Her voice cut off abruptly as she realized.

"Yes, Hermione," Harry said a little tightly, "what day is it?"

Interlude:

There was a time when October 31st had been called Halloween in magical Britain.

Now it was Harry Potter Day.

Harry had turned down all the offers, even the one from Minister Fudge which might have been good for future political favors and which he *really* should have gritted his teeth and taken. But to Harry, October 31st would always be The Dark Lord Killed My Parents Day. There should have been a quiet, dignified memorial service somewhere, and if there was one, he hadn't been invited.

Hogwarts got the day off to celebrate. Even the Slytherins didn't dare wear black outside their own dorm. There were special events and special foods and the teachers looked the other way if anyone ran through the hallways. It was the tenth anniversary, after all.

Harry spent the day in his trunk so as not to spoil it for anyone else, eating snack bars in place of meals, reading some of his sadder science fiction books (no fantasy), and writing a letter to Mum and Dad that was much longer than the ones he usually sent.

CHAPTER 30

WORKING IN GROUPS, PT 1

J. K. Rowling if a man tries to bother you, you can think blue, count two, and look for a red shoe.

The day was Sunday, November 3rd, and soon the three great powers of their school year, Harry Potter, Draco Malfoy, and Hermione Granger, would begin their struggle for supreme dominance.

(Harry was slightly annoyed by the way the Boy-Who-Lived had been demoted from supreme dominance to one of three equal rivals just by entering the contest, but he expected to get it back soon.)

The battleground was a section of non-Forbidden forest, dense with trees, because Professor Quirrell thought that being able to see all the enemy forces was too boring even for your very first battle.

All the students who were not actually *in* a first-year army were camped out nearby and watching on screens that Professor Quirrell had set up. Except for three Gryffindors in their fourth year, who were currently sick and confined to healer's beds by Madam Pomfrey. Aside from that, everyone was there.

The students were dressed, not in their ordinary school robes, but in Muggle camouflage uniforms that Professor Quirrell had obtained somewhere and supplied in sufficient quantity and variety to fit everyone. It wasn't that students would have worried about stains and rips, that was what Charms were for. But as Professor Quirrell had explained to the surprised wizardborns, nice dignified clothing was not efficient for hiding in forests or dodging around trees.

And on each uniform's breast, a patch bearing the name and insignia of your army. A *small* patch. If you wanted your soldiers to wear, say, colored ribbons so that they could identify each other at a distance, and risk the enemy getting their hands on the ribbons, that was all up to you.

Harry had tried to get the name Dragon Army.

CHAPTER 30

Draco had pitched a fit and said that would confuse everyone completely.

Professor Quirrell had ruled that Draco could lay prior claim to the name, if he wished.

So now Harry was fighting Dragon Army.

This probably wasn't a good sign.

For their insignia, instead of the too-obvious dragon's head breathing fire, Draco had elected to simply go with the fire. Elegant, understated, deadly: *This is what's left after we've passed.* Very Malfoy.

Harry, after considering alternate choices such as the 501st Provisional Battalion and Harry's Minions o' Doom, had decided that his army would be known by the simple and dignified appellation of the Chaos Legion.

Their insignia was a hand poised with fingers ready to snap.

It was *universally* agreed that this wasn't a good sign.

Harry had earnestly advised Hermione that the young boys serving under her were probably nervous about her being a girl with a reputation for being nice, and that she should pick something scary that would reassure them of her toughness and make them proud to be part of her army, like the Blood Commandos or something.

Hermione had named her army the Sunshine Regiment.

Their insignia was a smiley face.

And in ten minutes, they would be at war.

Harry stood in the bright forest clearing that was their assigned starting location, an area of open space with old and rotting tree stumps that had been cleared away for some unknown purpose, ground coated with a small scattering of blown leaves and the dried grey remnants of grass that had failed the test of summer's heat, and the sun shining down brilliantly from above.

Around him were the twenty-three soldiers that Professor Quirrell had assigned to him. Nearly all of Gryffindor had signed up, of course, and more than half of Slytherin, and less than half of Hufflepuff, and a handful of Ravenclaw. In Harry's army there were twelve Gryffindors and six Slytherins and four Hufflepuffs and one Ravenclaw besides himself... not that there was any way to tell that by looking at the uniforms. No red, no green, no yellow, no blue. Just Muggle camouflage

patterns, and a patch on the breast with the device of a hand poised to snap its fingers.

Harry looked upon his twenty-three soldiers, all wearing the same uniforms with no marks of group identity save that single patch.

And lo, Harry smiled, because he understood what this part of Professor Quirrell's master plan was about; and Harry was taking full advantage of it for his *own* purposes, too.

There was a legendary episode in social psychology called the Robbers Cave experiment. It had been set up in the bewildered aftermath of World War II, with the intent of investigating the causes and remedies of conflicts between groups. The scientists had set up a summer camp for 22 boys from 22 different schools, selecting them to all be from stable middle-class families. The first phase of the experiment had been intended to investigate what it took to *start* a conflict between groups. The 22 boys had been divided into two groups of 11 -

- and this had been quite sufficient.

The hostility had started from the moment the two groups had become aware of each others' existences in the state park, insults being hurled on the first meeting. They'd named themselves the Eagles and the Rattlers (they hadn't needed names for themselves when they thought they were the only ones in the park) and had proceeded to develop contrasting group stereotypes, the Rattlers thinking of themselves as rough-and-tough and swearing heavily, the Eagles correspondingly deciding to think of themselves as upright-and-proper.

The other part of the experiment had been testing how to resolve group conflicts. Bringing the boys together to watch fireworks hadn't worked at all. They'd just shouted at each other and stayed apart. What *had* worked was warning them that there might be vandals in the park, and the two groups needing to work together to solve a failure of the park's water system. A common task, a common enemy.

Harry had a strong suspicion Professor Quirrell had understood this principle very well indeed when he had chosen to create *three* armies per year.

Three armies.

Not *four*.

And definitely *not* segregated by House... except that no Slytherins had been assigned to Draco besides Mr. Crabbe and Mr. Goyle.

It was things like this which reassured Harry that Professor Quirrell, despite his affected Dark atmosphere and his pretense of neutrality in the conflict between Good and Evil, was secretly backing Good, not that Harry would ever dare say that out loud.

And Harry had decided to take full advantage of Professor Quirrell's plan to define a group identity *his* way.

The Rattlers, once they'd met the Eagles, had started thinking of themselves as rough-and-tough, and they'd conducted themselves accordingly.

The Eagles had thought of themselves as good-and-proper.

And in that bright forest clearing, scattered around the old and rotting tree stumps, outlined in the sun shining down brilliantly from above, General Potter and his twenty-three soldiers were arranged in nothing remotely resembling a formation. Some soldiers stood, some soldiers sat, some stood on one leg just to be different.

It was the *Chaos* Legion, after all.

And if there wasn't a *reason* to stand in neat little lines, Harry had said disdainfully, there weren't going to be neat little lines.

Harry had divided the army into 6 squads of 4 soldiers each, each squad commanded by a Squad Suggester. All troops were under strict orders to disobey any orders they were given if it seemed like a good idea at the time, including that one... unless Harry or the Squad Suggester prefixed the order with "Merlin says", in which case you were supposed to actually obey.

The Chaos Legion's chief attack was to split up and run in from multiple directions, randomly changing vectors and firing the approved sleep spell as rapidly as you could rebuild the magical strength. And if you saw a chance to distract or confuse the enemy, you took it.

Fast. Creative. Unpredictable. Non-homogenous. Don't just obey orders, think about whether what you're doing *right now* makes sense.

Harry wasn't quite as sure as he'd pretended that this was the optimum of military efficiency... but he'd been given a golden opportunity to change how some students *thought about themselves*, and that was how he intended to use it.

WORKING IN GROUPS, PT 1

Five minutes to wartime, according to Harry's watch.

General Potter walked (not marched) over to where his air force was waiting tensely, broomsticks already clutched firmly in their hands.

"All wings report in," said General Potter. They'd rehearsed this during their one training session on Saturday.

"Red Leader standing by," said Seamus Finnigan, who had no idea what it meant.

"Red Five standing by," said Dean Thomas, who'd waited his entire life to say it.

"Green Leader standing by," Theodore Nott said rather stiffly.

"Green Forty-One standing by," Tracey Davis said.

"I want you in the air the instant we hear the bell," said General Potter. "Do not engage, repeat, do not engage. Evade if under fire." (Of course you did *not* aim sleep spells at broomsticks; you fired a spell that gave a temporary red glow to whatever it hit. If you hit the broomstick or the rider, they were out of the war.) "Red Leader and Red Five, fly toward Malfoy's army as fast as you can, stay as high as you can while still seeing them, return the instant you know for sure what they're doing. Green Leader, do the same for Granger's army. Green Forty-One, fly above us and watch for any approaching broomsticks or soldiers, you and only you are authorized to fire. And remember, I didn't say 'Merlin says' for any of that, but we *do* really need the information. For Chaos!"

"For Chaos!" the four echoed with varying degrees of enthusiasm.

Harry expected Hermione to launch an immediate attack on Draco, in which case he'd move his troops into position and start supporting her, but only after she'd taken severe losses and caused some damage. He would frame it as a heroic rescue, if possible; it wouldn't do to have Sunshine thinking that Chaos wasn't their friend, after all.

But just in case she *didn't*... well, that was why the Chaos Legion was staying put until Green Leader reported back.

Draco's moves would be in his own self-interest. He would predictably ready his army to defend against Hermione; he might or might not realize that Harry had been lying about waiting to attack until after that battle finished. Harry had still put two broomsticks on Dragon Army, just in case they *were* doing something, and just in case Draco or

CHAPTER 30

Mr. Goyle or Mr. Crabbe was good enough to shoot a broomstick out of the sky.

But General Granger was the unpredictable one, and Harry couldn't move until he knew how she was moving.

In the heart of the forest, with shadow patterns dancing on the ground as leafy canopies swayed high above, General Malfoy stood where the trees were relatively sparser, and looked out on his troops with calm satisfaction. Six units of three troops each, the Aerial Unit of four (to which Gregory was assigned), and the Command Unit, which was himself and Vincent. They'd only drilled for a short time on the previous Saturday, but Draco was confident that he'd managed to explain the basics. Stay with your mates, watch their back and trust them to watch yours. Move as a single body. Obey orders and show no fear. Aim, fire, move, aim again, fire again.

The six units were formed up in a defensive perimeter around Draco, watchfully gazing outward into the forest. Back-to-back they stood, wands gripped low until they needed to strike.

They already looked remarkably like the Auror units whose training Draco had watched during his father's inspections.

Chaos and Sunshine weren't going to know what hit them.

"Attention," said General Malfoy.

The six units unfolded and spun toward Draco; the faces of his broomstick riders turned from where they stood with broomsticks already in hand.

Draco had decided to wait on demanding salutes until after they won their first battle, when Gryffindors and Hufflepuffs would be more willing to salute a Malfoy.

But his soldiers were already standing straight enough, especially the Gryffindors, that Draco wondered if he'd even needed to delay. Gregory had quietly listened, and reported back that Draco's volunteering to stand by Harry Potter in Defense class, that time when Professor Quirrell had taught Harry how to lose, had marked Draco as an acceptable commander. At least if you happened to be assigned to his army. *Not all Slytherins are alike; there are Slytherins, and then there are*

Slytherins was what the Gryffindors in Draco's army were quoting to their Housemates.

Draco was frankly *astounded* at how incredibly *easy* that had been. Draco had protested at first about not being assigned any Slytherins, and Professor Quirrell had told him that if he wanted to be the first Malfoy to gain complete political control of the country, he needed to learn how to govern the other three-quarters of the population. It was things like this which reassured Draco that Professor Quirrell had a great deal more sympathy for the good guys than Professor Quirrell was letting on.

The actual battle wouldn't be easy, especially if Granger did attack the Dragons first. Draco had agonized over whether to commit all his forces against Granger immediately in a preemptive strike, but had worried that (1) Harry had been misleading him completely about what Granger was likely to do, and (2) Harry had been misleading him about waiting until after Granger's attack to join the battle.

Though Dragon Army had a secret weapon, three of them in fact, which might be enough to win even if they were attacked by both armies at once...

It was almost time, and that meant it was time for the pre-battle speech that Draco had composed and memorized.

"The battle is about to begin," Draco said. His voice was calm and precise. "Remember everything that I and Mr. Crabbe and Mr. Goyle showed you. An army wins because it is disciplined and deadly. General Potter and the Chaos Legion will not be disciplined. Granger and the Sunshine Regiment will not be deadly. We are disciplined, we are deadly, we are Dragons. The battle is about to begin, and we are about to win it."

(Ex tempore speech given by General Potter to the Chaos Legion, immediately before their first battle, on November 3rd, 1991, at 2:56pm:)

My troops, I'm not going to lie to you, our situation today is very grim. Dragon Army has never lost a single battle. And Hermione Granger... has a very good memory. The truth is, most of you are probably going to die. And the survivors will envy the dead. But we have to win this. We have to win this so that someday, our children can

enjoy the taste of chocolate again. Everything is at stake here. Literally everything. If we lose, the whole universe just blinks out like a light bulb. And now I realize that most of you don't know what a light bulb is. Well, take it from me, it's bad. But if we have to go down, let's go down fighting, like heroes, so that as the darkness closes in, we can think to ourselves, *at least we had fun*. Are you afraid to die? I know I am. I can feel those cold shivers of fear like someone is pumping ice cream into my shirt. But I know... that history is watching us. It was watching us when we changed into our uniforms. It was probably taking pictures. And history, my troops, is written by the victors. If we win this, we can write our own history. A history in which Hogwarts was founded by four renegade house elves. We can make everyone study that history, even though it isn't true, and if they don't answer the right way on our tests... they'll fail the class. Isn't that worth dying for? No, don't answer that. Some things are better left unknown. None of us know why we're here. None of us know why we're fighting. We just woke up in these uniforms in this mysterious forest, knowing only that there was no way to get our names and memories back except victory. The students in those other armies out there... they're just like us. They don't want to die. They're fighting to protect each other, the only friends they have left. They're fighting because they know they have families who'll miss them, even if they can't remember now. They may even be fighting to save the world. But we have a better reason to fight than they do. We fight because we like it. We fight to amuse eldritch monstrosities from beyond Space and Time. We fight because we're Chaos. Soon the final battle will begin, so let me say now, because I won't get a chance later, that it was an honor to be your commander, however briefly. Thank you, thank you all. And remember, your goal isn't just to cut down the enemy, it's to make them afraid.

A great booming gong echoed over the forest.
And the Sunshine Regiment began to march.

The tension rose and rose, as Harry and the nineteen other soldiers who remained waited for the aerial warriors to report back. It shouldn't take long, broomsticks were fast and the distances in the forest were not great -

Two broomsticks approached, at speed, from the direction of Draco's camp, and all the soldiers tensed. They weren't executing the maneuvers that were today's code for a *friendly* broomstick.

"*Scatter and fire!*" roared General Potter, and then suited action to words, scurrying off at top speed toward the forest cover; and then as soon as Harry was among the trees, he spun back, raised his wand, tried to seek out the broomstick in the sky -

"Clear!" shouted a voice. "They're heading back!"

Harry gave a mental shrug. There'd been no way to prevent Draco from obtaining that information, and he'd only learn that they'd been standing still.

And the Chaotics slowly emerged from the forest -

"Broomstick approaching from Granger's direction!" yelled another voice. "I think it's Green Leader, he did the dip and roll!"

Moments later Theodore Nott dived out of the sky and pulled up in the midst of the soldiers.

"Granger has divided her forces in two!" yelled Nott as he hovered on his broomstick. There was sweat staining his uniform, and all the reserve was gone from his voice. "She's attacking both armies! Two brooms covering each force, they pursued me halfway here!"

Divided her army, what on Earth -

A large force concentrating fire on a small force could deplete that force rapidly without taking much damage in return. If twenty soldiers faced ten soldiers, twenty sleep spells would be aimed at the ten soldiers with only ten sleep spells going the other way, so unless every one of those first sleep spells hit its target, the smaller force would lose more people than they could manage to take down with them. *Defeated in detail* was the military term for what happened when you divided your forces like that. What could Hermione *possibly* be thinking...

Then Harry realized.

She's being fair.

It was going to be a long year in Defense class.

CHAPTER 30

"All right," Harry said loudly, so the army could hear. "We'll wait until the Red Wing reports in, and then we'll go cloud up some Sunshine."

Draco listened to the flyers' reports with his face calm, all his shock concealed inside. What could Granger *possibly* be thinking?

Then Draco realized.

It's a feint.

One of Sunshine's two forces would change direction, and both would converge on... who?

Neville Longbottom marched through the forest toward the approaching Sunny force, occasionally glancing up at the sky for broomsticks. Beside him marched his squad comrades, Melvin Coote and Lavender Brown of Gryffindor, and Allen Flint of Slytherin. Allen Flint was their Squad Suggester, though Harry had first said to Neville, in private, that the position was his if he wanted it.

Harry had said quite a lot of things to Neville in private, starting with "You know, Neville, if you want to become as awesome as the imaginary Neville who lives in your head but isn't allowed to do anything because you're scared, then you really should sign up for Professor Quirrell's armies."

Neville was now *sure* the Boy-Who-Lived could read minds. There was just no other way Harry Potter could've known. Neville had never talked about that with *anyone*, or given any sign; and *other* people weren't like that, not that Neville had ever noticed.

And Harry's promise had come true, this *did* feel different from sparring in Defense class. Neville had hoped that sparring would fix everything that was wrong with him, and, well, it hadn't. Even if he could fire a few spells at another student in class with Professor Quirrell watching to make sure nothing went wrong, even if he could dodge and fire back when it was *allowed* and everyone else was *expecting* it and they would stare at him funny if he *didn't* do it, none of that was the same as being able to stand up for himself.

But being part of an *army*...

WORKING IN GROUPS, PT 1

Something strange was stirring inside Neville, as he marched through the forest alongside his comrades, upon their uniforms an insignia of fingers poised to snap.

He was allowed to walk if he wanted to, but he just felt like marching.

Beside him, Melvin and Lavender and Allen all seemed to feel like marching too.

And Neville softly began to sing the Song of Chaos.

The tune was what a Muggle would have identified as John Williams's Imperial March, also known as "Darth Vader's Theme"; and the words Harry had added were easy to remember.

Doom doom doom

Doom doom doom doom doom doom

Doom doom doom

Doom doom doom doom doom doom

DOOM doom DOOM

Doom doom doom-doom-doom doom doom

Doom doom-doom-doom doom doom

Doom doom doom, doom doom doom.

By the second line the others had joined in, and soon you could hear the same soft chant coming from nearby parts of the forest.

And Neville marched alongside his fellow Chaos Legionnaires, strange feelings stirring in his heart, imagination becoming reality, as from his lips poured a fearful song of doom.

Harry stared at the bodies scattered across the forest. Something inside him felt a bit queasy, and he had to remind himself hard that they were only sleeping. There were girls among the fallen, and that made it a lot worse somehow, and he would have to be careful never to mention that in front of Hermione or the Aurors would find his remains stuffed into a *small* teapot.

Half of Sunshine army hadn't put up much of a fight against all of Chaos. The nine ground soldiers had run in screaming inarticulately with Simple Shields raised, circular screens to protect their faces and chests. But you couldn't fire and hold the shield at the same time, and Harry's

CHAPTER 30

soldiers had simply aimed for the legs. All but one of the Sunnies had fallen over as soon as the cries of "*Somnium!*" filled the air. That last one had dropped her shield and managed to take out one of Harry's soldiers before being hit by the second wave of sleep spells (the Sleep Hex was safe for multiple hits). The two Sunny broomsticks had been much harder to take down and had accounted for three Chaotics before being averted by massed ground fire.

Hermione wasn't among the fallen. Draco must have gotten her and that was making Harry feel *angry* on some completely incomprehensible level, he wasn't sure if he was feeling protective toward Hermione, or cheated that he hadn't been the one to do it, or maybe *both*.

"All right," Harry said, raising his voice. "Let's everyone be clear on one thing, that wasn't a real fight. That was General Granger making a mistake in her first battle. Today's actual fight is with Dragon Army and it's not going to be anything like this. It's going to be a lot more fun. Let's move out."

A broomstick fell out of the sky, approaching terrifyingly fast, and spun on its end and decelerated so hard you could almost hear the air screaming in protest, and came to a halt directly beside Draco.

It wasn't dangerous showing-off. Gregory Goyle simply *was* that good and he didn't waste time.

"Potter's coming," Gregory said with no trace of his usual fake drawl. "They've still got all four of their brooms, you want me to take them out?"

"No," Draco said sharply. "Fighting over their army gives them too much of an advantage, they'll fire on you from the ground and even you might not be able to dodge it all. Wait until the forces engage."

Draco had lost four Dragons in exchange for twelve Sunnies. Apparently General Granger actually *had* been that incredibly stupid, though she hadn't been among the attackers, so Draco hadn't gotten a chance to taunt her or ask her what in Merlin's name she had been thinking.

The true battle, they all knew, would be with Harry Potter.

"Prepare yourselves!" roared Draco at his troops. "Stay together with your mates, act as a unit, fire as soon as the enemy is in range!"

Discipline against Chaos.

It shouldn't be much of a fight.

The adrenaline was pumping and pumping into Neville's blood until he felt like he could hardly breathe.

"We're closing in," said General Potter in a voice barely loud enough to carry to the whole army. "Time to spread out."

Neville's comrades moved away from him. They would still support each other, but if you clustered together, the enemy would have a much easier time hitting you; fire aimed at one of your comrades might miss and get you instead. You would be a lot harder to hit if you spread out and moved as fast as you could.

The first thing General Potter had done, during their training session, was get them to fire on each other when both sides were running fast, or both stood still and took time to aim, or one was moving and one was standing still - the reverse charm to the Sleep Hex was simple, though you weren't allowed to use it during real battles. General Potter had carefully recorded everything that happened, done some figuring and ciphering, and then announced that it made more sense for them to focus, not on slowing down to aim carefully, but on moving fast so they wouldn't get hit.

It still bothered Neville a little not to be marching side-by-side with his comrades, but the scary battlecries they'd learned were already thundering in his head and that made up for a lot.

This time, Neville silently vowed to himself, his voice was absolutely positively not going to squeak.

"Shields up," said General Potter, "power to forward deflectors."

"*Contego*," murmured the army, and the circular screens sprang into existence before their heads and chests.

A sharp taste filled Neville's mouth. General Potter wouldn't have ordered them to cast shields unless they were almost in range. Neville could see the uniformed shapes of Dragons moving through the dense screens of trees, and the Dragons would be seeing them as well -

"*Attack!*" came a cry from the distance, the voice of Draco Malfoy, and General Potter bellowed, "*Charge* -"

All the adrenaline in Neville's blood was unleashed, and his legs took over, sending him flying faster than he'd ever run before, straight toward the enemy, knowing without needing to look that all his comrades were doing the same.

"*Blood for the blood god!*" screamed Neville. "*Skulls for the skull throne! Ia! Shub-Niggurath! The enemy's gate is sideways!*"

There was a soundless impact as a sleep spell wasted itself against Neville's shield. If there'd been other spells fired, they hadn't hit.

Neville saw the brief look of fear on Wayne Hopkins's face, as he stood besides two Gryffindors Neville didn't recognize, and then -

- Neville dropped the Simple Shield and fired at Wayne -

- missed -

- his racing legs went *straight* past the enemy grouping and toward another three Dragons, their wands coming up on him, their mouths opening -

- not even thinking about it, Neville dived down to the forest floor just as three voices cried "*Somnium!*"

It hurt, hard stones and hard twigs digging into Neville as he rolled, it wasn't as bad as falling off his broomstick but he'd still hit the ground pretty hard, and then Neville, with sudden insight, lay still and closed his eyes.

"Stop that!" screamed a voice. "Don't shoot us, we're Dragons!"

With a flash of glorious satisfaction, Neville realized that he'd managed to get between two groups of Dragons just as one group had fired on him. Harry had talked about this as a tactic for making the enemy afraid to fire, but apparently it worked a bit better than that.

And not only that, the Dragons believed they'd *gotten* him, since they'd seen Neville fall just as they fired.

Neville counted to twenty inside his head, then opened his eyes a crack.

The three Dragons were very near him, heads spinning rapidly as cries of "*Somnium!*" and "*Skulls for the skull throne!*" filled the air around them. All three had Simple Shields up now.

WORKING IN GROUPS, PT 1

Neville's wand was still in his hand, and it didn't take much effort to point it at one boy's boots and whisper "*Somnium*."

Neville quickly closed his eyes and relaxed his hand as he heard the boy fall to the ground.

"*Where'd it come from?*" screamed Justin Finch-Fletchley's voice, and Neville heard rustles on the leafy forest floor, as if two Dragons spinning around looking for an enemy.

"*Reform ranks!*" bellowed Malfoy's voice. "*To me, everyone, don't let them scatter you!*"

Neville's ears heard the two Dragons actually jump over his prone body as they ran off.

Neville opened his eyes, pushed himself to his feet a bit painfully, and then pointed his wand and said the new charm that General Potter had taught them all. They couldn't do real illusion spells to confuse the enemy, but even at their age they could -

"*Ventriquo*," whispered Neville, pointing the wand to one side of Justin and the other boy, and then yelled, "*For Cthulhu and glory!*"

Justin and the other boy stopped abruptly, turning their shields toward where Neville had moved his battlecry, and that was when multiple cries of "*Somnium*!" filled the air and the other boy dropped before Neville was finished aiming.

"*The last one's mine!*" yelled Neville, and then he started sprinting straight toward Justin, who'd been mean to him until the older Hufflepuffs straightened him out. Neville was surrounded by his comrades and *that* meant -

"*Special attack, Chaotic Leap!*" howled Neville as he ran, and felt his body lighten, then lighten twice again, as his comrades got their wands turned toward him and quietly cast the Hover Charm, and Neville raised his left hand and snapped his fingers and then used his legs to push off the ground as hard as he could and *soared* through the air. Sheer shock painted Justin's face as Neville went *over* the other boy's shield and pointed his wand down at the form passing beneath him and cried "*Somnium*!"

Because he'd felt like it, that was why.

Neville didn't quite get his feet turned around properly and rather plowed into the ground as he landed, but two out of three of the

CHAPTER 30

other Chaos Legionnaires had managed to hold their wands on him throughout and he didn't hit very hard.

And Neville got to his feet, panting. He knew he should be moving, people were yelling "Somnium!" all over the place -

"I am Neville, the last scion of Longbottom!" screamed Neville to the sky above, holding his wand pointed straight up as though to challenge the blazing blue heaven itself, knowing that nothing after this day would ever be the same again. *"Neville of Chaos! Face me if you da!"*

(When Neville woke up afterward, he was told that Dragon Army had taken this as their cue to counterattack.)

The girl beside Harry slumped to the ground, taking the shot meant for him, and he could hear Mr. Goyle's distant gloating laugh as his broomstick blasted past them, cutting the air so hard it should have shattered in his wake.

"Luminos!" cried one of the boys next to Harry, who hadn't been able to rebuild the magical strength fast enough to do it earlier, and Mr. Goyle dodged it without a pause.

Chaos had only six soldiers left, now, and Dragon Army had two, and the only problem was that one of those soldiers was invincible, and the other one was using up three soldiers just to cover him inside his shield.

They'd lost more soldiers to Mr. Goyle than all the other Dragons put together, he was weaving and dodging through the air so fast that no one could hit him, and he could *shoot people while he did that*.

Harry had thought of all sorts of ways to stop Mr. Goyle but none of them were *safe*, even using the Hover Charm to slow him down (it was a continuous beam and much easier to aim) wouldn't be safe because he might fall off the broomstick, throwing things in his way wouldn't be safe, and that was getting harder and harder to remember as Harry's blood froze over.

It's a game. You're not trying to kill him. Don't throw away all your future plans for a game...

Harry could *see* the pattern, he could *see* how Mr. Goyle was weaving, he could *see* how and when they all needed to fire in order to create a web of shots that Mr. Goyle wouldn't be able to dodge, but he just

WORKING IN GROUPS, PT 1

hadn't been able to *explain* it fast enough to his soldiers, they couldn't coordinate their shots well enough, and now they didn't have enough people left to do it -

I refuse to lose, not like this, not my whole army to one soldier!

Mr. Goyle's broomstick turned faster than anything should have been able to turn and started to angle in toward Harry and his surviving troops, he could sense the boy beside him tensing, getting ready to throw himself in front of his general.

SCREW THIS.

Harry's wand came up, focusing on Mr. Goyle, Harry's mind visualized the pattern, and Harry's lips opened and his voice screamed -

[illegible]

When Harry's eyes opened again, he found himself resting in a comfortable position with his hands folded over his chest, holding his wand like a fallen hero.

Slowly, Harry sat up. His *magic* was aching, a strange sensation but not an entirely unpleasant one, much like the burn and lethargy that followed hard physical exercise.

"The general's awake!" cried a voice, and Harry blinked and focused in that direction.

Four of his soldiers held their wands on a shimmering prismatic hemisphere, and Harry realized that the battle wasn't over. Right... he hadn't been hit by a Sleep Hex, just exhausted himself, so when he woke up, he was still in the game.

Harry suspected he was going to get a lecture from someone-or-other about not exhausting his magic to the point of unconsciousness over a children's game. But he hadn't hurt Mr. Goyle when he'd lost his temper, and that was the important thing.

Then Harry's mind clicked on another implication, and he looked down at the steel ring on his left hand's pinky finger, and almost swore out loud when he saw that the tiny diamond was missing and there was a marshmallow lying on the ground near where he'd fallen.

He'd sustained that Transfiguration for seventeen days, and would now need to start over.

Could've been worse. He could've done this fourteen days later, *after* Professor McGonagall had approved him to Transfigure his father's rock. That was one very good lesson to learn the easy way.

Note to self: Always remove ring from finger before completely exhausting magic.

Harry pushed himself up, making rather hard going of it. Using up your magic didn't exhaust your muscles, but dodging around trees certainly did.

He staggered over to the iridescent hemisphere that contained Draco Malfoy, who was holding his wand aloft to sustain the shield, and smiling coldly at Harry.

"Where's the fifth soldier?" said Harry.

"Um..." said a boy whose name Harry couldn't remember at the moment. "I fired a Sleep Hex at the shield and it bounced off and hit Lavender, I mean the angle shouldn't have been right but it did..."

Draco was smirking inside the shield.

"So let me guess," Harry said, looking Draco directly in the eyes, "those neat little trios are the formation used by professional magical militaries? Made up of trained soldiers who can easily hit moving targets if their own hands are steady, and who can combine their defensive powers so long as they stay together? Unlike *your* soldiers?"

The smirk had vanished from Draco's face, which was now hard and grim.

"You know," Harry said lightly, knowing that none of the others would understand the real message passing between them, "it just goes to show that you should always question everything you see your role models doing, and ask why it's being done, and whether it makes sense in context for you to do it too. Don't forget to apply that advice to real life, by the way. And thanks for the slow-moving clustered targets."

Because Draco had already gotten that lecture, and, Harry suspected, discounted it out of suspicion that Harry was trying to shift his loyalties further away from pureblood tradition. Which of course Harry *was*. But this example would make an excellent excuse, next Saturday, to claim that questioning authority was a merely practical technique for real life. And Harry would also mention the experiments he'd run, first

with individuals and then with groups, to check that his ideas about the importance of speed had actually been *correct*, by way of hammering home the point of Draco needing to keep an eye out at all times for chances to apply the methods in everyday practice.

"You haven't won *yet*, General Potter!" snarled Draco. "Maybe we'll run out of time, and Professor Quirrell will call it a draw."

A fair and worrisome point. The war only ended when Professor Quirrell, in his personal judgment, decided one army had won by practical real-world standards. There was no *formal* victory condition, Professor Quirrell had explained, because then Harry would figure out how to game the rules. Harry had to admit this was a fair cop.

And Harry couldn't blame Professor Quirrell for not calling an end, because it was plausible that the last soldier of Dragon Army could take out all five survivors of the Chaos Legion.

"All right," Harry said. "Does anyone know anything about General Malfoy's shield spell?"

It developed that Draco's shield was a version of the standard *Protego* which had several disadvantages, the most important of which was that the shield couldn't move with the caster.

The upside - or from Harry's perspective, downside - was that it was easier to learn, easier to cast, and much easier to sustain for long times.

They would need to hammer the shield with attack spells in order to bring it down.

And Draco could apparently exert some control over the angle of reflection at which the spells would bounce off.

The thought occurred to Harry that they could use Wingardium Leviosa to pile up heavy rocks on the shield until Draco couldn't sustain it against the pressure... but then the rocks might fall in afterward and hit Draco, and injuring the enemy general for real was not among today's goals.

"So," said Harry. "Are there such things as specialized shield-piercing spells?"

There were.

Harry asked if any of his soldiers knew them.

No one did.

Draco was smirking again, inside his shield.

Harry asked if there was any sort of attack spell that *wouldn't* bounce. Lightning bolts, it seemed, were usually absorbed by shields instead of bouncing off them.

...No one knew how to cast any sort of lightning-related spell.

Draco sniggered.

Harry sighed.

He quite deliberately laid his wand on the ground.

And Harry announced, with some weariness in his voice, that he would just go ahead and take down the shield himself, using some method that would remain mysterious; and everyone else was to fire on Draco as soon as his shield went down.

The Chaos Legionnaires looked nervous.

Draco looked calm, which was to say, controlled.

A thin, folded blanket came out of Harry's pouch.

Harry sat down next to the shimmering shield, and pulled the blanket over his head so no one could see what he did - except Draco, of course.

From Harry's pouch came a car battery and a set of jumper cables.

...it wasn't like he'd been about to leave the Muggle world to start a new era of magical research, and not take along any way of generating electricity.

Shortly after, the Chaos Legionnaires heard the sound of fingers snapping, followed by a crackling noise from beneath the blanket. The shield started glowing more brightly, and Harry's voice said, "Don't be distracted please, eyes on General Malfoy."

The strain was showing on Draco's face, along with the fury and annoyance and frustration.

Harry smiled up at him, and mouthed, *Tell you later.*

And that was when a spiral of green energy shot out of the forest and smashed into Draco's shield, which shrieked like pieces of sharp glass being rubbed together, and Draco staggered.

In sudden, frantic panic, Harry took the jumper cables off the battery and fed them into the pouch, then he fed the battery itself into the pouch, and then he tore off the blanket and grabbed his wand and stood up.

All of his soldiers were still there and glancing around frantically.

"*Contego*," Harry said, and his soldiers followed suit, but Harry didn't even know which direction the shield ought to be pointing in. "Did anyone see where that came from?" Shaken heads. "And General Malfoy, would you mind telling me if *you* got General Granger?"

"Why yes," Draco said acidly, "I mind."

Oh, hell.

Harry's mind began calculating, Draco inside the shield, Draco worn out now to some degree, Harry worn out too, Hermione in the woods who-knew-where, Harry and four other Chaotics left...

"You know, General Granger," Harry said out loud, "you really should've waited to attack until after I'd fought General Malfoy. You might've been able to get *all* the survivors."

From somewhere came a girl's high-pitched laughter.

Harry froze.

That wasn't Hermione.

And that was when the dreadful, eerie, cheerful chant began to rise, coming from all around them.

"*Don't be frightened, don't be sad,
We'll only hurt you if you're bad...*"

"*Granger cheated!*" burst out Draco inside the shield. "She woke up her soldiers! Why doesn't Professor Quirrell -"

"Let me guess," Harry said, the sickness already churning in his stomach. He really hated losing. "It was a very easy battle, right? They dropped like flies?"

"Yes," Draco said. "We got them all on the first shot -"

The look of horrified realization spread from Draco to the Chaos Legionnaires.

"No," Harry said, "we didn't."

Camouflaged forms were appearing from among the trees.

"Allies?" Harry said.

"Allies," Draco said.

"Good," said General Granger's voice, and a spiral of green energy blazed out of the woods and shattered Draco's shield to splinters.

General Granger surveyed the battlefield with a definite feeling of satisfaction. She was down to nine Sunshine Soldiers, but that was probably enough to handle the last survivor of the enemy forces, especially when Parvati and Anthony and Ernie were already holding their wands on General Potter, whom she'd ordered taken alive (well, conscious).

It was Bad, she knew, but she'd really really *really* wanted to gloat.

"There's a trick, isn't there?" said Harry, the strain showing in his voice. "There *has* to be some trick. You can't just turn into a perfect general. Not on top of everything else. You're not that Slytherin! You don't write creepy poetry! *No one's that good at everything!*"

General Granger glanced around at her Sunshine Soldiers, and then looked back at Harry. Everyone was probably watching this on the screens outside.

And General Granger said, "I can do anything if I study hard enough."

"Oh now that's just bu-"

"Somnium."

Harry slumped to the ground in mid-sentence.

"SUNSHINE WINS," intoned the huge voice of Professor Quirrell, seeming to come from everywhere and nowhere.

"Niceness has triumphed!" cried General Granger.

"*Hooray!*" shouted the Sunshine Soldiers. Even the Gryffindor boys said it, and they said it with pride.

"And what's the moral of today's battle?" said General Granger.

"We can do anything if we study hard enough!"

And the survivors of the Sunshine Regiment marched off toward the victory field, singing their marching song as they went:

*Don't be frightened, don't be sad,
We'll only hurt you if you're bad,
And send you to a home that's true,
With new friends to watch over you,
Be sure to tell them you were sent
By Granger's Sunshine Regiment!*

CHAPTER 31

WORKING IN GROUPS, PT 2

Aftermaths:

Harry paced backward and forward in his general's office, which made a wonderful room for pacing, it didn't have any other uses as far as he could tell.

How?

How?

Hermione shouldn't have won that battle! Not on her first try, not when she wasn't at all violent by her nature, automatically being a great military commander on top of everything else was too much even for *her*.

Had she read about the tactic in a military history book? But it hadn't been just that one tactic, she'd had her forces perfectly positioned to block any retreat, her troops had been better coordinated than his *or* Draco's...

Had Professor Quirrell broken his promise not to help her? Had he given her the diary of General Tacticus or something?

Harry was missing something here, something really important, and his mind went around and around in circles, and he still couldn't figure it out.

Finally Harry sighed. He wasn't getting anywhere on this, and he had to go learn the Breaking Drill Hex from Hermione or someone before the next battle - Professor Quirrell had explained to Harry, his voice amused but with a sharp undertone of warning, that "no magical items except the ones I give you" included Muggle technology no matter how much that *wasn't magic*. Plus Harry also needed to figure out how to bring down Mr. Goyle next time...

CHAPTER 31

Battles counted for a lot of Quirrell points if you were a general, and Harry needed to get cracking if he wanted to win Professor Quirrell's Christmas wish.

In his private room at Slytherin, Draco Malfoy stared off into space, as though the wall in front of his desk was the most fascinating surface in the world.

How?

How?

In retrospect it had been an obvious sort of idea as cunning plots went, but Granger wasn't *supposed* to be cunning! She'd been too much of a Hufflepuff to use a Simple Strike Hex! Had Professor Quirrell been advising her despite his promise, or...

And then Draco finally did what he should have done much earlier.

What he should have done after the first time he met with Granger.

What Harry Potter had *told* him to do, *trained* him to do, and yet Harry had also warned Draco that it would take time to make his brain realize that the methods applied to real life, and Draco hadn't *understood* that until today. He could have avoided every single one of his mistakes if he'd just *applied* the things Harry had already *told* him -

Draco said out loud, "I notice that I am confused."

Your strength as a rationalist is your ability to be more confused by fiction than by reality...

Draco was confused.

Therefore, something he believed was fiction.

Granger should not have been able to do all that.

Therefore, she probably hadn't.

I promise not to help General Granger in any way that the two of you don't know about.

With sudden horrified realization, Draco swept papers out of the way, hunting through the mess on his desk, until he found it.

And there it was.

Right in the list of people and equipment assigned to each of the three armies.

Curse Professor Quirrell!

WORKING IN GROUPS, PT 2

Draco had *read* it and he still hadn't *seen* it -

The afternoon sunlight poured down into the office of the Sunshine Regiment, illuminating General Granger in her chair as though she glowed with a golden aura.

"How long do you think it will take Malfoy to figure it out?" said General Granger.

"Not long," said Colonel Blaise Zabini. "He may have already. How long will it take Potter to figure it out?"

"Forever," said General Granger, "unless Malfoy tells him, or one of his own soldiers realizes. Harry Potter just doesn't think like that."

"Really?" said Captain Ernie Macmillan, looking up from one of the corner tables where he was being crushed at chess by Captain Ron Weasley. (They'd brought back all the other chairs after Malfoy had left, of course.) "I mean it seems kind of obvious to me. Who would try to come up with all the ideas just by themselves?"

"Harry," said Hermione, at exactly the same time Zabini said, "Malfoy."

"Malfoy thinks he's way better than everyone else," said Zabini.

"And Harry... doesn't really *see* most other people like that," said Hermione.

It was kind of sad, actually. Harry had grown up very, very alone. It wasn't that he went around thinking in words that only geniuses had a right to exist. It just wouldn't *occur* to him that anyone in Hermione's army besides Hermione could have any good ideas.

"Anyhow," Hermione said. "Captains Goldstein and Weasley, you're on duty for thinking up strategic ideas for our next battle. Captains Macmillan and Susan - sorry, I mean Macmillan and Bones - try to come up with some tactics we can use, also any training you think we should try. Oh, and congratulations on your marching song, Captain Goldstein, I think it was a big plus for *esprit de corps*."

"What're you doing?" said Susan. "And Colonel Zabini?"

Hermione stood up out of her chair, stretching. "I'll try to figure out what Harry Potter is thinking and Colonel Zabini will try to figure out what Draco Malfoy might do, and both of us will join you again after we

CHAPTER 31

come up with something. I'm going to walk while I think. Zabini, you want to come along?"

"Yes, General," said Zabini stiffly.

It hadn't been meant as an order. Hermione sighed to herself a little. This was going to take some getting used to, and although Zabini's first idea had certainly worked, she wasn't *quite* sure that Professor Quirrell's quote mixture of positive and negative incentives unquote would be enough to keep the Slytherin fully on her side until December when traitors would be allowed for the first time...

She still had no idea what she was going to do with Professor Quirrell's Christmas wish, either. Maybe she'd just ask Mandy if she wanted anything, when the time came around.

CHAPTER 32

INTERLUDE: PERSONAL FINANCIAL MANAGEMENT

"But Headmaster," Harry argued, some of his desperation leaking into his voice, "leaving all of my assets in one undiversified vault full of gold coins - it's crazy, Headmaster! It's like, I don't know, doing Transfiguration experiments without consulting a recognized authority! You just don't do that with money!"

From the lined face of the old wizard - underneath a festive holiday hat like a catastrophic automobile collision between cars of green and red cloth - a grave, sad look peered out at Harry.

"I'm sorry, Harry," said Dumbledore, "and I do apologize, but allowing you control over your own finances would give you far too much independence of action."

Harry's mouth opened and no sound came out. He was, literally, speechless.

"I will permit you to withdraw five Galleons for Christmas presents," said Dumbledore, "which is more than any boy your age should spend, but poses no threat, I think -"

"*I can't believe you just said that!*" the words burst out of Harry's mouth. "You *admit* to being that manipulative?"

"Manipulative?" said the old wizard, smiling slightly. "No, manipulative would be if I did *not* admit it, or if I had some deeper motive behind the obvious. This is quite straightforward, Harry. You are not yet ready to play the game, and it would be foolish to allow you thousands of Galleons with which to upset the gameboard."

The bright hustle and bustle of Diagon Alley had increased by a hundredfold and redoubled as Christmas approached, with all the shops enshrouded in brilliant sorceries that flashed and sparkled as though the season's spirit was about to blaze out of control and turn the whole

CHAPTER 32

area into a cheerful holiday crater. The streets were so crowded with witches and wizards in festive and *loud* clothing that your eyes were assaulted almost as severely as your ears; and it was clear, from the bewildering variety of the shoppers, that Diagon Alley was considered an international attraction. There were witches wrapped in giant swathes of cloth like toweled mummies, and wizards in formal top hats and bathrobes, and young children barely past toddling age who were decorated with lights that blazed almost as bright as the shops themselves, as their parents took them hand in hand through that magic wonderland and let them shriek to their heart's content. It was the season to be merry.

And in the midst of all that light and cheer, a note of blackest night; a cold, dark atmosphere that cleared a few precious paces of distance even in the midst of all that crush.

"No," said Professor Quirrell, with a look of grim revulsion, like he'd just bitten into food that not only tasted horrible but was morally repugnant to boot. It was the sort of grim face an ordinary person might make after biting into a meat pie, and discovering that it was rotten and had been made from kittens.

"Oh, come *on*," Harry said. "You must have *some* ideas."

"Mr. Potter," Professor Quirrell said, his lips set in a thin line, "I agreed to act as your adult guardian on this expedition. I did not agree to advise you on your choice of presents. I don't do Christmas, Mr. Potter."

"How about Newtonmas?" Harry said brightly. "Isaac Newton actually *was* born on December 25th, unlike some other historical figures I could name."

This failed to impress Professor Quirrell.

"Look," said Harry, "I'm sorry, but I've got to do *something* special for Fred and George and I've got no idea of my options."

Professor Quirrell made a thoughtful humming sound. "You could ask which family members they most dislike, and then hire an assassin. I know someone from a certain government-in-exile who is quite competent, and he would give you a discount on multiple Weasleys."

"*This* Christmas," Harry said, dropping his voice into a lower register, "give your friends the gift... of *death*."

That made Professor Quirrell smile. It went all the way to his eyes.

INTERLUDE: PERSONAL FINANCIAL MANAGEMENT

"Well," said Harry, "at least you didn't suggest getting them a pet rat -" Harry's mouth snapped shut, and he was regretting the words almost as soon as they were out of his mouth.

"Pardon me?" said Professor Quirrell.

"Nothing," Harry said at once, "long dumb story." And telling it seemed wrong somehow, maybe because Harry was afraid Professor Quirrell would have laughed even if Bill Weasley *hadn't* been cured and everything put back to right...

And where had Professor Quirrell *been* that he'd never heard the story? Harry had gotten the impression that everyone in magical Britain knew.

"Look," said Harry, "I'm trying to *solidify their loyalty to me*, you know? Make the Weasley twins my minions? Like the old saying goes: A friend isn't someone you use once and then throw away, a friend is someone you use over and over again. Fred and George are two of the most useful friends I have in Hogwarts, Professor Quirrell, and I plan to use them over and over again. So if you'd help me be Slytherin here, and suggest something they might be *very* grateful for..." Harry's voice trailed off invitingly.

You just had to pitch these things the right way.

They walked on for a good way before Professor Quirrell spoke again, his voice practically dripping with distaste. "The Weasley twins are using secondhand wands, Mr. Potter. They would be reminded of your generosity with every Charm they cast."

Harry clapped his hands together in involuntary excitement. Just put the money on account at Ollivander's, and tell Mr. Ollivander to never refund it - no, better yet, to send it to Lucius Malfoy if the Weasley twins didn't show up before the start of their next school year. "That's *brilliant*, Professor!"

Professor Quirrell did not look like he appreciated the compliment. "I suppose I can tolerate Christmas in *that* spirit, Mr. Potter, though only barely." Then he smiled slightly. "Of course that will cost you fourteen Galleons, and you only have five."

"*Five* Galleons," Harry said, with a sniff of outrage. "Just who does the Headmaster think he's dealing with, anyway?"

"I think," said Professor Quirrell, "that it simply did not occur to him to fear the consequences if you turned your ingenuity to the task of obtaining funds. Though you were wise to lose, rather than making it an explicit threat. Out of curiosity, Mr. Potter, what *would* you have done if I hadn't turned away in boredom while you, in a fit of childish pique, counted out five Galleons worth of Knuts?"

"Well, the easiest way would've been to borrow money from Draco Malfoy," said Harry.

Professor Quirrell chuckled briefly. "Seriously, Mr. Potter."

Duly noted. "Probably I'd have done a few celebrity appearances. I wouldn't resort to anything economically disruptive just for spending money." Harry had checked, and he *would* be allowed to keep the Time-Turner while he went home for the holidays, so that his sleep cycle didn't start to rotate. But then it was *also* possible that someone kept an eye out for magical day traders. The gold and silver trick would've taken work on the Muggle end, and seed funding, and the goblins might've gotten suspicious after the first cycle. And starting a real bank would be a *lot* of work... Harry hadn't *quite* worked out any money-making methods that were fast *and* certain *and* safe, so he'd been very glad when Professor Quirrell had turned out to be so easily fooled.

"I do hope those five Galleons will be enough to last, since you counted them so carefully," said Professor Quirrell. "I doubt the Headmaster shall be so eager to entrust me with your vault key a second time, once he discovers I've been tricked."

"I'm sure you did your best," Harry said with deep gratitude.

"Do you need any assistance finding a safe place to store all those Knuts, Mr. Potter?"

"Well, sort of," said Harry. "Do you know of any good investment opportunities, Professor Quirrell?"

And the two of them walked on, in their tiny sphere of silence and isolation, through the brilliant and bustling crowds; and if you looked carefully, you would see that where they went, leafy boughs faded, and flowers withered, and children's toys that played cheerful bells changed to lower and more ominous notes.

Harry *did* notice, but he didn't say anything, just smiled a little to himself.

INTERLUDE: PERSONAL FINANCIAL MANAGEMENT

Everyone had their own way of celebrating the holidays, and the Grinch was as much a part of Christmas as Santa.

CHAPTER 33

COORDINATION PROBLEMS, PT 1

I just recite to myself, over and over, until I can choose sleep: It all adds up to J. K. Rowling.

The version of decision theory used in this chapter is *not* the academically dominant one. It's based on something called "timeless decision theory" that's under development by (among others) Gary Drescher, Wei Dai, Vladimir Nesov, and, well... (*coughs a few times*) me.

The terrifying part was how fast the whole thing had spiraled out of control.

"Albus," Minerva said, not even trying to keep the worry out of her voice as the two of them entered the Great Hall, "something has to be done."

The atmosphere at Hogwarts before Yuletide was usually bright and cheerful. The Great Hall had already been decorated in green and red, after a Slytherin and a Gryffindor whose Yule wedding had become a symbol of friendship transcending Houses and allegiances, a tradition almost as ancient as Hogwarts itself and which had even spread to Muggle countries.

Now the students eating dinner were glancing nervously over their shoulders, or sending vicious glares at other tables, or at some tables arguing heatedly. You could have described the atmosphere as *tense*, perhaps, but the phrase coming to Minerva's mind was *fifth degree of caution*.

Take a school, into four Houses divided...

Now into each year, add three armies at war.

And the partisanship of Dragon and Sunshine and Chaos had spread beyond the first-years; they had become the armies for those who had no armies. Students were wearing armbands with insignia of fire or smile or upraised hand, and hexing each other in the corridors. All three first-

year generals had told them to stop - even Draco Malfoy had heard her out and then nodded grimly - but their supposed followers hadn't listened.

Dumbledore gazed out at the tables with a distant look. *"In every city," the old wizard quoted softly, "the population has been divided for a long time past into the Blue and the Green factions... And they fight against their opponents knowing not for what end they imperil themselves... So there grows up in them against their fellow men a hostility which has no cause, and at no time does it cease or disappear, for it gives place neither to the ties of marriage nor of relationship nor of friendship, and the case is the same even though those who differ with respect to these colours be brothers or any other kin. I, for my part, am unable to call this anything except a disease of the soul..."*

"I'm sorry," said Minerva, "I don't -"

"Procopius," said Dumbledore. "They took their chariot-racing very seriously, in the Roman Empire. Yes, Minerva, I agree that something must be done."

"Soon," Minerva said, her voice lowering even further. "Albus, I think it must be done before Saturday."

On Sunday, most students would leave Hogwarts to stay the holiday with their families; Saturday, then, was the final battle of the three first-year armies that would determine the awarding of Professor Quirrell's thrice-cursed Christmas wish.

Dumbledore glanced over at her, studying her gravely. "You fear that the explosion will come then, and someone will be hurt."

Minerva nodded.

"And that Professor Quirrell will be blamed."

Minerva nodded again, her face tight. She had long since become wise in the ways that Defense Professors were fired. "Albus," Minerva said, "we cannot lose Professor Quirrell now, we *cannot*! If he but stays through January our fifth-years will pass their OWLs, if he stays through March our seventh-years will pass their NEWTs, he is remedying years of neglect in months, a whole generation will grow up able to defend themselves in spite of the Dark Lord's curse - you must stop the battle, Albus! Ban the armies now!"

"I am not sure the Defense Professor would take that kindly," said Dumbledore, glancing over toward the Head Table where Quirrell was

drooling into his soup. "He did seem most attached to his armies, though when I agreed I thought there would be four in each year." The old wizard sighed. "A clever man, probably with the best of intentions; but perhaps not clever enough, I fear. And to ban the armies might also trigger the explosion."

"But then Albus, what will you *do*?"

The old wizard favored her with a benign smile. "Why, I shall plot, of course. It's the new fashion in Hogwarts."

And they had come too close to the Head Table for Minerva to say anything more.

The terrifying part was how fast the whole thing had spiraled out of control.

The first battle in December had been... messy, or so Draco had heard.

The second battle had been *deranged*.

And the next one would be *worse*, unless the three of them together succeeded in their last desperate attempt to stop it.

"Professor Quirrell, this is insanity," Draco said flatly. "This isn't Slytherin any more, it's just..." Draco was at a loss for words. He waved his hands helplessly. "You can't possibly do any real plots with all this stuff going on. Last battle, one of my soldiers faked his own suicide. We have *Hufflepuffs* trying to plot, and they think they can, but they *can't*. Things just happen at random now, it doesn't have anything to do with who's cleverest, or which army fights best, it's..." He couldn't even describe it.

"I agree with Mr. Malfoy," said Granger in the tones of someone who hadn't ever expected to hear herself saying those words. "Allowing traitors isn't working, Professor Quirrell."

Draco had tried forbidding anyone in his army to plot except him, and that had just driven the plots underground, no one wanted to be left out when the soldiers in *other* armies got to plot. After miserably losing their last battle, he'd finally given in and revoked his decree; but by then his soldiers had already started setting their own personal plans in motion, without any sort of central coordination.

After being told all the plans, or what his soldiers claimed were their plans, Draco had tried to sketch a plot to win the final battle. It had required considerably more than three different things to go right, and Draco had used *Incendio* on the paper and *Everto* to vanish the ashes, because if Father had seen it he would have been disowned.

Professor Quirrell's eyelids were half-closed, his chin resting on his hands as he leaned forward onto his desk. "And you, Mr. Potter?" said the Defense Professor. "Are you likewise in agreement?"

"All we'd need to do is shoot Franz Ferdinand and we could start World War One," said Harry. "It's gone to complete chaos. I'm all for it."

"*Harry!*" said Draco in utter shock.

He didn't even realize until a second later that he'd said it at exactly the same time, and in exactly the same tone of indignation, as Granger.

Granger shot him a startled glance, and Draco carefully kept his face neutral. Oops.

"That's right!" said Harry. "I'm betraying you! Both of you! Again! Ha ha!"

Professor Quirrell was smiling thinly, though his eyes were still half-closed. "And why is that, Mr. Potter?"

"Because I think I can cope with the chaos better than Miss Granger or Mr. Malfoy," said the traitor. "Our war is a zero-sum game, and it doesn't matter whether it's easy or hard in an absolute sense, only who does better or worse."

Harry Potter was learning far too fast.

Professor Quirrell's eyes moved beneath their lids to regard Draco, and then Granger. "In truth, Mr. Malfoy, Miss Granger, I simply could not live with myself if I shut down the grand debacle before its climax. One of your soldiers has even become a quadruple agent."

"*Quadruple?*" said Granger. "But there's only three sides in the war!"

"Yes," said Professor Quirrell, "you'd think that, wouldn't you. I am not sure that there has ever in history been a quadruple agent, or any army with such a high fraction of real and pretended traitors. We are exploring new realms, Miss Granger, and we cannot turn back now."

Draco left the Defense Professor's office with his teeth gritting hard against each other, and Granger looking even more annoyed beside him.

"I can't believe you did that, Harry!" said Granger.

"Sorry," Harry said, not sounding sorry at all, his lips curved up in a merry smile of evil. "Remember, Hermione, it *is* just a game, and why should generals like us be the only ones who get to plot? And besides, what are the two of you going to do about it? Team up against me?"

Draco traded glances with Granger, knowing that his own face was as tight as hers. Harry had been relying, more and more openly and gloatingly, on Draco's refusal to make common cause with a mudblood girl; and Draco was beginning to get *sick* of having that used against him. If this kept up much longer he *was* going to ally with Granger just to crush Harry Potter, and see how much the son of a mudblood liked *that*.

The terrifying part was how fast the whole thing had spiraled out of control.

Hermione stared at the parchment Zabini had given her, feeling utterly and completely helpless.

There were names, and lines connecting the names to other names, and some of the lines were in different colors and...

"Tell me," said General Granger, "is there anyone in my army who *isn't* a spy?"

The two of them weren't in the office but in another, deserted classroom, and they were alone; because, Colonel Zabini had said, it was now nearly certain that at least one of the captains was a traitor. Probably Captain Goldstein, but Zabini didn't know for sure.

Her question had put an ironic smile on the young Slytherin's face. Blaise Zabini always seemed a little disdainful of her, but he didn't seem to actively dislike her; nothing like the derision he held for Draco Malfoy, or the resentment he had developed for Harry Potter. She had worried at first about Zabini betraying her, but the boy seemed desperate to show that the other two generals were no better than him; and Hermione thought that while Zabini would probably be happy to sell her out to anyone *else*, he'd never let Malfoy or Harry win.

"Most of your soldiers *are* still loyal to you, I'm pretty sure," said Zabini. "It's just that no one wants to be left out of the fun." The scornful look on the Slytherin's face made it clear what he thought of

people who didn't take plotting seriously. "So they think they can be double agents and secretly work for our side while pretending to betray us."

"And that would also go for anyone in the *other* armies who says they want to be *our* spy," Hermione said carefully.

The young Slytherin shrugged. "I think I did a good job of telling which ones really want to sell out Malfoy, I'm not sure *anyone* really wants to sell out Potter to you. But Nott is a sure bet for betraying Potter to Malfoy and since I had Entwhistle approach him supposedly on behalf of Malfoy and Entwhistle really reports to us, that's almost as good -"

Hermione closed her eyes for a moment. "We're going to lose, aren't we?"

"Look," Zabini said patiently, "You're in the lead right now on Quirrell points. We just have to not lose this last battle *completely* and you'll have enough Quirrell points to win the Christmas wish."

Professor Quirrell had announced that the final battle would operate on a formal scoring system, which he'd been asked to do to avoid recriminations afterward. Each time you shot someone, the general of your army got two Quirrell points. A gong would ring through the battle area (they didn't know yet where they would be fighting, though Hermione was hoping for the forest again, where Sunshine did well) and its pitch would tell which army had won the points. And if anyone was faking being hit, the gong would ring out anyway, and then a double gong would ring later, after no fixed time, to hail the retraction. And if you called the name of an army, cried "For Sunshine!" or "For Chaos!" or "For Dragon!", it switched your allegiance to that army...

Even Hermione had been able to see the flaw in *that* set of rules. But Professor Quirrell had gone on to announce that if you'd been originally assigned to Sunshine, nobody could shoot you in the name of Sunshine - or rather, they could, but then Sunshine lost a single Quirrell point, symbolized by a triple gong. That prevented you from shooting your own soldiers for points, and discouraged suiciding before the enemy got you, but you could still shoot spies if you had to.

Right now, Hermione had two hundred and forty-four Quirrell points, and Malfoy had two hundred and nineteen, and Harry had two

hundred and twenty-one; and there were twenty-four soldiers in each army.

"So we fight carefully," Hermione said, "and just try not to lose too badly."

"No," said Zabini. The young Slytherin's face was now serious. "The problem is, Malfoy and Potter both know that their only way to win is to combine and crush us, then fight it out on their own. So here's what I think we should do -"

Hermione left the classroom in something of a daze. Zabini's plan hadn't been the obvious one, it had been strange and complicated and layered and the sort of thing she would've expected Harry to come up with, not Zabini. It felt wrong just for her to be able to *understand* a plan like that. Young girls shouldn't be able to understand plans like that. The Hat would've Sorted her into Slytherin, if it'd seen that she could understand plans like that...

The awesome thing was how fast he'd been able to escalate the chaos once he started doing it deliberately.

Harry sat in his office; he'd been given the authority to order furniture from the house elves, so he'd ordered a throne, and curtains in a black and crimson pattern. Scarlet light like blood, mixed with shadow, poured over the floor.

Something in Harry felt like he'd finally come home.

Before him stood the four Lieutenants of Chaos, his most trusted minions, one of whom was a traitor.

This. This was what life should be like.

"We are gathered," said Harry.

"Let Chaos reign," chorused his four Lieutenants.

"My hovercraft is full of eels," said Harry.

"I will not buy this record, it is scratched," chorused his four Lieutenants.

"All mimsy were the borogroves."

"And the mome raths outgrabe!"

That concluded the formalities.

"How goes the confusion?" Harry said in a dry whisper like Emperor Palpatine.

"It goes well, General Chaos," said Neville in the tone he always used for military matters, a tone so deep that the boy often had to stop and cough. The Chaotic Lieutenant was neatly dressed in his black school robes, trimmed in the yellow of Hufflepuff House, and his hair was parted and combed in the usual look for an earnest young boy. Harry had liked the incongruity better than any of the cloaks they'd tried. "Our Legionnaires have begun five new plots since yesterday evening."

Harry smiled evilly. "Do any of them have a chance of working?"

"I don't think so," said Neville of Chaos. "Here's the report."

"Excellent," said Harry, and laughed chillingly as he took the parchment from Neville's hand, trying his best to make it sound like he was choking on dust. That brought the total to sixty.

Let Draco *try* to handle that. Let him *try*.

And as for Blaise Zabini...

Harry laughed again, and this time it didn't even take an effort to sound evil. He really needed to borrow someone's pet Kneazle for his staff meetings, so he'd have a cat to stroke while he did this.

"Can the Legion stop making plots now?" said Finnigan of Chaos. "I mean, don't we have enough already -"

"No," Harry said flatly. "We can *never* have enough plots."

Professor Quirrell had put it perfectly. They were pushing the boundaries further, perhaps, than they had ever been pushed; and Harry wouldn't have been able to live with himself if he'd turned back now.

There came a knock at the door.

"That will be the Dragon General," Harry said, smiling with evil prescience. "He arrives precisely as I expected. Do show him in, and yourselves out."

And the four Lieutenants of Chaos shuffled out, casting dark looks at Draco as the enemy general entered into Harry's secret lair.

If he wasn't allowed to do this when he was older, Harry was just going to stay eleven forever.

The sun was dripping through the red curtains, sending rays of blood dancing across the floor from behind Harry Potter's grownup-sized cushioned chair, which he had covered in gold and silver glitter and insisted on referring to as his throne.

(Draco was beginning to feel a lot more confident that he'd done the right thing in deciding to overthrow Harry Potter before he could take over the world. Draco couldn't even *imagine* what it would be like to live under his rule.)

"Good evening, Dragon General," said Harry Potter in a chill whisper. "You have arrived just as I expected."

This was not surprising, considering that Draco and Harry had agreed on the meeting time in advance.

And it also wasn't evening, but by now Draco knew better than to say anything.

"General Potter," Draco said with as much dignity as he could manage, "you know that our two armies have to work together for *either* of us to win Professor Quirrell's wish, right?"

"Yesss," hissed Harry, like the boy thought he was a Parselmouth. "We must cooperate to destroy Sunshine, and only then fight it out between us. But if one of us betrays the other earlier on, that one could gain an advantage in the later fight. And the Sunshine General, who knows all this, will try to trick each of us into thinking the other has betrayed them. And you and I, who know that, will be tempted to betray the other and pretend that it is Granger's trickery. And Granger knows *that*, as well."

Draco nodded. That much was obvious. "And... both of us *only* want to win, and there's no one else who'll punish either of us if we defect..."

"Precisely," said Harry Potter, his face now turning serious. "We are faced with a *true* Prisoner's Dilemma."

The Prisoner's Dilemma, according to Harry's teachings, ran thus: Two prisoners had been locked in separate cells. There was evidence against each prisoner, but only minor evidence, enough for a prison sentence of two years apiece. Each prisoner could opt to *defect*, betray the other, testify against them in court; and this would take one year off their own prison sentence, but add two years to the other's. Or a prisoner could *cooperate*, staying silent. So if both prisoners defected, each

testifying against the other, they would serve three years apiece; if both cooperated, or stayed silent, they would serve two years each; but if one defected and the other cooperated, the defector would serve a single year, and the cooperator would serve four.

And both prisoners had to make their decision without knowing the other one's choice, and neither would be given a chance to change their decision afterward.

Draco had observed that if the two prisoners had been Death Eaters during the Wizarding War, the Dark Lord would have killed any traitors.

Harry had nodded and said that was *one* way to resolve the Prisoner's Dilemma - and in fact both Death Eaters would *want* there to be a Dark Lord for exactly that reason.

(Draco had asked Harry to stop and let him to think about this for a while before they continued. It had explained a *lot* about why Father and his friends had agreed to serve under a Dark Lord who often wasn't nice to them...)

In fact, Harry had said, this was pretty much the reason why people had governments - *you* might be better off if you stole from someone else, just like each prisoner would be individually better off if they defected in the Prisoner's Dilemma. But if *everyone* thought like that, the country would fall into chaos and everyone would be worse off, like what would happen if both prisoners defected. So people let themselves be ruled by governments, just like the Death Eaters had let themselves be ruled by the Dark Lord.

(Draco had asked Harry to stop again. Draco had always taken for granted that ambitious wizards put themselves in power because they wanted to rule, and people let themselves be ruled because they were scared little Hufflepuffs. And this, on reflection, still seemed true; but Harry's perspective was fascinating even if it was wrong.)

But, Harry had continued afterward, the fear of a third party punishing you was not the *only* possible reason to cooperate in the Prisoner's Dilemma.

Suppose, Harry had said, you were playing the game against a magically produced identical copy of yourself.

Draco had said that if there were two Dracos, of course neither Draco would want anything bad to happen to the other one, not to mention that no Malfoy would let himself become known as a traitor.

Harry had nodded again, and said that this was yet *another* solution to the Prisoner's Dilemma - people might cooperate because they cared about each other, or because they had senses of honor, or because they wanted to preserve their reputation. Indeed, Harry had said, it was rather difficult to construct a *true* Prisoner's Dilemma - in real life, people usually cared about the other person, or their honor or their reputation or a Dark Lord's punishment or *something* besides the prison sentences. But suppose the copy had been of someone *completely* selfish -

(Pansy Parkinson had been the example they'd used)

- so each Pansy only cared what happened to *her* and not to the other Pansy.

Given that this was all Pansy cared about... and that there was no Dark Lord... and Pansy wasn't worried about her reputation... and Pansy either had no sense of honor or didn't consider herself obligated to the other prisoner... *then* would the rational thing be for Pansy to cooperate, or defect?

Some people, Harry said, claimed that the rational thing to do was for Pansy to defect against her copy, but Harry, plus someone named Douglas Hofstadter, thought these people were wrong. Because, Harry had said, if Pansy defected - not at random, but for what seemed to her like *rational reasons* - then the other Pansy would think exactly the same way. Two identical copies wouldn't decide different things. So Pansy had to choose between a world in which both Pansies cooperated, or a world in which both Pansies defected, and she was better off if both copies cooperated. And if Harry had thought 'rational' people *did* defect in the Prisoner's Dilemma, then he wouldn't have done anything to spread that kind of 'rationality', because a country or a conspiracy full of 'rational' people would dissolve into chaos. You would tell your *enemies* about 'rationality'.

Which had all *sounded* reasonable at the time, but *now* the thought was occurring to Draco that...

"*You* said," Draco said, "that the rational solution to the Prisoner's Dilemma is to cooperate. But of course *you* would want me to believe

that, wouldn't you?" And if Draco was fooled into cooperating, Harry would just say, *Ha ha, betrayed you again!* and laugh at him about it afterward.

"I wouldn't fake your lessons," Harry said seriously. "But I have to remind you, Draco, that I didn't say you should just automatically cooperate. Not on a *true* Prisoner's Dilemma like this one. What I said was that when you choose, you shouldn't think like you're choosing for just yourself, *or* like you're choosing for everyone. You should think like you're choosing for all the people who are *similar enough* to you that they'll probably do the same thing you do for the same reasons. And also choosing the predictions made by anyone who knows you well enough to predict you accurately, so that you never have to regret being rational because of the correct predictions that other people make about you - remind me to explain about Newcomb's Problem at some point. So the question you and I have to ask, Draco, is this: are we similar enough that we'll probably do the *same thing* whatever it is, making our decisions in mostly the same way? Or do we know each other well enough to predict each other, so that *I* can predict whether you'll cooperate or defect, and *you* can predict that I've decided to do the same thing I predict you'll do, because *I* know that you can predict me deciding that?"

...and Draco could not help but think that since he had to strain just to understand *half* of that, the answer was obviously 'No'.

"Yes," said Draco.

There was a pause.

"I see," said Harry, sounding disappointed. "Oh, well. I guess we'll have to think of some other way, then."

Draco hadn't thought that was going to work.

Draco and Harry talked about it back and forth. They had both agreed much earlier that what they did on the battlefield would *not* count as broken promises in real life - though Draco was a little angry about what Harry had done in Professor Quirrell's office, and said so.

But if the two of them couldn't rely on honor or friendship, that *did* leave the question of how to get their armies to work together on beating Sunshine, despite everything Granger might try to break them up. Professor Quirrell's rules didn't make it tempting to let Sunshine kill the other army's soldiers - that just increased the bar you had to pass

CHAPTER 33

yourself - but it did tempt each side to steal kills instead of acting like a single army would, or to shoot some of the other side's soldiers during the confusion of battle...

Hermione was walking back to Ravenclaw not really looking where she was going, her mind preoccupied with war and treachery and other age-inappropriate concepts, and she turned a corner and bumped straight into a grownup.

"Sorry," she said automatically, and then, entirely without thinking, "Eeeeeek!"

"Don't worry, Miss Granger," said the cheerful smile, set beneath the twinkling eyes, and above the silver beard, of the HEADMASTER OF HOGWARTS. "You are quite forgiven."

Her gaze was helplessly locked on the kindly face of the most powerful wizard in the world, who was also the Chief Warlock, who was also the Supreme Mugwump, who had gone insane years ago from the stress of fighting the Dark Lord, and numerous other facts that were popping up into her mind one after the other while her throat went on making little embarrassing squeaks.

"In fact, Miss Granger," said Albus Percival Wulfric Brian Dumbledore, "it is quite lucky that we bumped into each other. Why, I was just now wondering curiously what the three of you were thinking of asking for your wishes..."

Saturday dawned bright and clear and with the students speaking in hushed voices, as though the first to shout might set off the explosion.

Draco had hoped that they would be fighting in the upper levels of Hogwarts again. Professor Quirrell had said that real fights were more likely to take place in cities than forests, and fighting inside schoolrooms and corridors was supposed to simulate that, with ribbons to mark the allowed areas. Dragon Army had done well in those fights.

Instead, just as Draco had feared, Professor Quirrell had come up with something *special* for this battle.

COORDINATION PROBLEMS, PT 1

The battleground was the Hogwarts Lake.

And not in boats, either.

They were fighting *underwater*.

The Giant Squid had been temporarily paralyzed; spells had been set in place to keep away the grindylows; Professor Quirrell had gone and talked to the merfolk; and all the soldiers had been issued *potions of underwater action* that allowed them to breathe, see clearly, talk to each other, and swim not quite as fast as a fast walk by kicking their legs.

A huge silver sphere hung in the center of the battleground, shining like a small underwater moon. It would help to provide a sense of direction - at first. The moon would slowly go into eclipse as the battle went on, and when it had gone entirely dark, the battle would end if it hadn't already.

War in water. You couldn't defend a perimeter, attackers could come at you from any direction, and even with the potion you couldn't see very far in the darkness of the lake.

And if you swam too far away from the action, you would start to glow after a while, and be easy to hunt down - ordinarily if an army scattered and ran instead of fighting, Professor Quirrell would just declare them defeated; but today they were working on a points system. Of course you still had some time *before* you started to glow, if you wanted to play assassin.

Dragon Army had been set low in the water at the start of the game; above and far away, the distant underwater moon shone. The murky water was mostly lit by *Lumos* Charms, though his soldiers would extinguish the lights as soon as they began maneuvers. There was no point in letting the enemy see you before you saw them.

Draco kicked his legs a few times, propelling him to a higher position from which he could gaze down at where his soldiers hovered in the water.

The conversations died down almost at once under Draco's icy glare, his soldiers looking up at him with gratifying expressions of fear and worry.

"Listen to me very carefully," said General Malfoy. His voice came out a little lower, a little burbly with bubbles, *libsten to me vebny caerbfully*, but the sound traveled clearly. "There's only one way we can win

this. We've got to march on Sunshine together with Chaos, and beat Sunshine. *Then* we fight it out with Potter and win. That's *got* to happen, understand? No matter what else goes on, that part *has* to happen that way -"

And Draco explained the plan he and Harry had come up with.

Astonished looks were exchanged among the soldiers.

"- and if any of *your* plots get in the way of that," finished Draco, "after we are out of the water, I will set you on *fire*."

There was a nervous chorus of yessirs.

"And everyone with secret orders, make sure you carry them out *to the letter*," said Draco.

Around half his soldiers *openly nodded*, and Draco marked them for death after he rose to power.

Of course all the private orders were fake, like one Dragon being told to offer a false traitor's commission to another Dragon, and the second Dragon being told in hushed confidence to report anything said by the first Dragon. Draco had told each Dragon that the whole war could depend on that one thing, and that he hoped they understood it was more important than the plans they'd previously made. With luck that would keep all the idiots happy, and maybe flush out a few spies to boot, if the reports didn't match the instructions.

Draco's real plan for winning against Chaos... well, it was simpler than the one he'd burned, but Father still wouldn't have liked it. Despite trying, though, Draco hadn't been able to think of anything better. It was a plot that couldn't *possibly* have worked against anyone except Harry Potter. In fact it had *been* Harry's plan originally, according to the traitor, though Draco had guessed that without being told. Draco and the traitor had just modified it a little...

Harry took a deep breath, feeling the water gurgle harmlessly in his lungs.

They'd fought in the forest, and he hadn't gotten a chance to say it.

They'd fought in the corridors of Hogwarts, and he hadn't gotten a chance to say it.

They'd fought in the air, broomsticks issued to every soldier, and it still hadn't made sense to say it.

Harry had thought he wouldn't ever get to say those words, not while he was still young enough for them to be real..

The Chaos Legionnaires were looking at Harry in puzzlement, as their general swam with his feet pointing up toward the distant light of the surface, and his head pointed down toward the murky depths.

"*Why are you upside down?*" the young commander shouted at his army, and began to explain how to fight after you abandoned the privileged orientation of gravity.

A hollow, booming bell echoed through the water, and on the instant, Zabini and Anthony and five other soldiers struck out downward, into the murky depths of the lake. Parvati Patil, the only Gryffindor in the group, turned her head back for a moment and gave them all a cheery wave as she dived; and after a moment, Scott and Matt did the same. The rest just sank and vanished.

General Granger swallowed a lump in her throat as she watched them go. She was risking everything on this, dividing her army instead of just trying to take as many enemy soldiers with them as possible.

The thing to realize, Zabini had told her, was that no army would move until they had a plan that let them expect victory. Sunshine couldn't just plan to win themselves, they had to make both other armies *think* they would win until it was too late.

Ernie and Ron still looked like they were in shock. Susan was gazing after the disappearing soldiers with a calculating look. Her army, what was left of it, just looked bewildered, tracteries of light dappling on their uniforms as they all drifted just below the sunlit surface of the lake.

"*Now* what?" said Ron.

"Now we wait," said Hermione, loudly enough for all the soldiers to hear. It felt odd to talk with her mouth full of water, she kept feeling like she was committing some sort of horrible impoliteness at the dinner table and was about to drool all over herself. "All of us left here are going to get zapped, but that was going to happen anyway with Dragon

and Chaos ganging up on us. We've just got to take as many of them with us as we can."

"I've got a plan," said one of her Sunshine Soldiers... Hannah, her voice had been a little hard to recognize at first. "It's like all complicated, but I know how we can get Dragon and Chaos to start fighting each other -"

"Me too!" said Fay. "I've got a plan too! See, Neville Longbottom is secretly on our side -"

"*You* were talking to Neville?" said Ernie. "That's not right, *I* was the one who -"

Daphne Greengrass and a couple of other Slytherins who hadn't gone with Zabini were giggling helplessly as the cries of "No, wait, *I* was the one who got Longbottom" erupted from one soldier after another.

Hermione just looked at them all wearily.

"Okay," said Hermione when it had all died down, "does everyone get it? All your plots were faked by the Chaos Legion, or maybe some by Dragon. Anyone who *really* wanted to betray Harry or Malfoy went straight to me or Zabini, not you. Just go ahead and compare notes on all your secret plots and you'll see it for yourselves." She might not be as good at plotting as Zabini, but she could always understand what all her officers told her, that was why Professor Quirrell had made her the general. "So don't bother trying to do any plots when the other armies get here. Just fight, okay? Please?"

"But," said Ernie with shock on his face, "Neville is in *Hufflepuff*! You're saying he *lied* to us?"

Daphne was laughing so hard and so helplessly that the exhalations had turned her upside down in the water.

"I'm not sure *what* Longbottom is," said Ron darkly, "but I don't think he's a Hufflepuff any more. Not now that *Harry Potter's* got to him."

"Do you know," said Susan, "I *asked* him that, and Neville told me he had become a Chaos Hufflepuff?"

"*Anyway*," said Hermione in a loud voice. "Zabini took with everyone who we thought was a spy, so in *our* army we can stop watching each other quite so hard now, I hope."

"*Anthony* was a spy?" yelled Ron.

"*Parvati* was a spy?" gasped Hannah.

"Parvati was *totally* a spy," said Daphne. "She shopped at the spy shoe store and wore spy lipstick, and someday she's going to marry a nice spy husband and have a lot of little spies."

And then a gong sound echoed through the water, indicating that Sunshine had just scored two points.

This was shortly followed by the triple gong of Dragon losing a single point.

Traitors weren't allowed to kill generals, not after the disaster of the first battle in December when all three generals had been shot in the first minute. But with any luck...

"Aw," said Hermione. "It sounds like Mr. Crabbe is taking a little nap."

Like two shoals of fish, the armies swam along.

Neville Longbottom kicked his feet in slow, measured motions. Diving, always diving in whatever direction you happened to be moving. You wanted to show the enemy the smallest profile, present them with your head or your feet. So you were always diving, downward and head-first, and the enemy was always *down*.

Like every Chaos Legionnaire in the army, Neville's head was constantly rotating as he swam, looking up, down, around, to every side. Not just watching for Sunshine Soldiers, but watching for any sign that a Chaos Legionnaire had drawn their wand and was about to betray them. Usually traitors waited until the confusion of battle to make their move, but that early gong had put them all on guard.

...the truth was, Neville was feeling sad about that. In November he'd been a soldier in a united army, all of them pulling together and helping each other, and now they were all watching each other constantly for the first signs of betrayal. It might have been more fun for General Chaos, but it wasn't nearly as much fun for Neville.

The direction formerly known as 'up' was getting steadily brighter, as they came closer to the surface and Sunshine.

"Wands out," said General Chaos.

CHAPTER 33

Neville's squad drew their wands, pointing them straight ahead toward the enemy, as their heads scanned around more rapidly. If there were Sunny traitors, the time was approaching for them to strike.

The other shoal of fish, Dragon Army, was doing the same thing.

"*Now!*" shouted the distant voice of the Dragon General.

"*Now!*" shouted General Chaos.

"*For Sunshine!*" shouted all the soldiers in both armies, and charged downward.

"*What?*" said Minerva involuntarily as she watched the screens from next to the lake, a cry echoed in many other places; all of Hogwarts was watching this battle as they had watched the first.

Professor Quirrell was laughing dryly. "I warned you, Headmaster. It is impossible to have rules without Mr. Potter exploiting them."

For long precious seconds, as the forty-seven soldiers charged her own seventeen, Hermione's mind went blank.

Why...

Then it all snapped into place.

Every time a soldier originally from Sunshine got shot by someone crying the name of Sunshine, she would lose a Quirrell point. When two Sunshine Soldiers were shot by either army, *both* enemy armies would be two points closer to overtaking her, it was the same gain only *shared*. And if anyone shot another soldier *not* in the name of Sunshine, that gong *wouldn't* get lost in the confusion...

Hermione was suddenly very glad that Zabini hadn't gone with the obvious plan of starting trouble between the other two armies while they attacked Sunshine.

It was still disheartening, though, that sense of your chances closing down, of hope being taken away.

Most of Hermione's soldiers were still looking confused, but some had expressions of dawning horror as they got it.

"It's all right," Susan Bones said firmly. Heads turned to look at the Sunshine Captain. "Our job is the same, to take as many of them with

us as we can. And remember, Zabini took away all the spies! We don't have to stay on the lookout like *they* do!" The girl was smiling defiantly, provoking answering smiles from many of the other soldiers, even from Hermione herself. "It can be like it was in November. We just have to keep our heads high, fight our best, and trust each other -"

Daphne shot her.

"*Blood for the blood god!*" shrieked Neville of Chaos, though since he was underwater it came out more like 'Blubbed for the blubbed glub!'

Captain Weasley spun and raised his wand toward Neville and fired. But Neville was swimming *downward* toward him, wand pointed straight ahead, and that meant the Simple Shield could shelter Neville's entire profile; if anyone shot him now, it wasn't going to be Sunny Ron.

A grimly determined look came over Captain Weasley's face, and he arrowed straight up toward Neville, mouthing the word *Contego*, though the shield wasn't visible in the water.

The two enemy champions shot toward each other like arrows released from bows, each aimed to split the other down the middle. They had dueled many times before, but this time would pay for all.

(Far away by the lakeside, a hundred breaths were held.)

"*Rainbows and unicorns!*" roared the Sunshine Captain.

"*The Black Goat with a thousand young!*"

"*Do your homework!*"

Closer and yet closer, the two champions charged, neither willing to swerve, the first person to turn would present a vulnerable broadside and get shot, though if neither lost their nerve they would crash right into each other...

Falling straight down as the enemy rose straight up to meet him, hammer descending to meet anvil in a path neither was willing to leave...

"*Special attack, Chaotic Twist!*"

Neville saw the look of horror on Captain Weasley's face as the Hover Charm caught him. They'd tested it before the battle had started; and just as Harry had suspected, *Wingardium Leviosa* became a whole new sort of weapon once everyone was swimming underwater.

"Curse you, Longbottom!" shrieked Ron Weasley, "*Can't you ever fight without your dumb special attacks -*"

and by that time the Sunshine Captain had been spun around sideways and Neville shot him in the leg.

"I don't fight fair," said Neville to the sleeping form, "I fight like Harry Potter."

Granger: 237 / Malfoy: 217 / Potter: 220

It still hurt every time he had to shoot Hermione. Harry could hardly stand to look at the expression of peace that had come over her sleeping face, arms now drifting aimlessly as the curves of sunlight moved over her camouflage uniform and the cloud of her chestnut hair.

And if Harry had tried to duck out of being the one to shoot her... not only would Draco have known what it meant, *Hermione* would have been offended.

She's not dead, Harry said to his brain as his kicking feet pushed him away, *she's just resting. IDIOT.*

Are you sure? said his brain. *What if she's an ex-Hermione? Could we go back and check?*

Harry glanced back briefly.

See, she's fine, there are bubbles coming out of her mouth.

Could've been her last breath escaping.

Oh be quiet. Why are you being so paranoid-protective, anyway?

Er, first real friend we've ever had in our whole life? Hey, remember what happened to our pet rock?

Would you SHUT UP about that worthless lump of rubble, it wasn't even alive let alone sentient, that is like the most pathetic childhood trauma ever -

The two armies swiftly separated, becoming two shoals of fish once more.

General Granger had gone down seventeen points, and taken three Chaotics and two Dragons with her; and one Chaotic and two Dragons had been shot as traitors. So she'd lost net seven points, Harry had lost one, Draco had lost two; that put Sunshine twenty points up on Dragon, and seventeen points up on Chaos. Chaos could still win easily if they

exterminated all twenty remaining Dragons. The wild card, of course, being those seven remaining Sunshine Soldiers...

...if you could call them that.

The two shoals swam uneasily next to each other, the soldiers in each army awaiting an order to call out their true allegiances, and attack...

"Everyone who got them," Harry said loudly, "remember Special Orders One through Three. And don't forget it's Merlin Says on Three. Do not acknowledge."

The trustworthy two-thirds of the army did not nod, and the other third just looked puzzled.

Special Order One: Don't bother trying to call out any codewords in this battle, don't expend effort on any plot not specially approved by the commander; just swim, shield, and fire.

Hermione and Draco had both been fighting their soldiers, trying to get them to stop plotting on their own all through December. Harry had egged his soldiers on and supported their plotting through the last two battles... while also telling them that at some *future* point he might ask them to put a plot or two on hold, to which they'd all readily agreed. So now, in this critical battle, they were happy to obey.

Neither Hermione or Draco could have given that order successfully, Harry was certain. It was the difference between your soldiers seeing you as an ally in their plotting, and seeing you as a spoilsport old fuddy-duddy who didn't want them to have any fun. Imposition of order equaled escalation of chaos, and it also worked in reverse...

"There they are!" shouted someone, and pointed.

From the depths of the lake arose the forgotten ones, the ones who'd forsaken the last battle, the seven missing Sunshine Soldiers, glowing with the bright aura of cowards, now fading as they returned to battle.

The two shoals of fish wavered, pointing wands uneasily.

"Hold your fire!" shouted Harry, and a similar cry came from General Malfoy.

There was a moment of held breath.

Then the seven Sunshine Soldiers swam up to join Dragon Army.

There was a triumphant cheer from Dragon Army.

There were cries of dismay from a third of the Chaos Legion.

Some of the other two-thirds smiled, though they shouldn't have.

Harry wasn't smiling.

Oh, this is so completely not going to work...

But Harry hadn't been able to think of anything better.

"Special Orders Two and Three still apply!" shouted Harry. "Fight!"

"*For the Chaos Legion!*" roared twenty Chaotic Legionnaires.

"*For Dragon Army!*" roared twenty Dragon Warriors and seven Sunshine Soldiers.

And the Chaotics dived straight downward, as all the traitors got ready to strike.

Granger: 237 / Malfoy: 220 / Potter: 226

Draco's head darted around frantically, trying to weigh up what was happening; somehow, despite his greater forces, he'd *lost the initiative*. Four small Chaotic forces were being pursued by four larger Dragon forces, but because Draco's forces were the ones trying to force an engagement, it meant that they had to *follow* where Chaos *ran*, and somehow that was producing concentrations of Chaotic force that would fire into the exposed sides of Dragon -

It was happening *again!*

"*Prismatis!*" shouted Draco, raising his wand, and that shield you could see even through the water, a sparkling multicolored flat wall wide enough to shield Draco and the five other Dragons with him from the Chaotic force that had just started firing on them as they swam past, and *that* let the other five Dragons turn *their* attentions back to the Chaotic force they'd been chasing -

There was a tense moment as sleep spell after sleep spell crashed into Draco's Prismatic Wall, and Draco was hoping to Merlin that none of those four Chaotics had learned the Breaking Drill Hex -

Then there was the bell of a Dragon victory, and the Chaotic force spun head-for-foot and began swimming away; and Draco, his hands now shaking slightly, dropped the Prismatic Wall and lowered his wand.

Fighting in water was more exhausting even than fighting on broomsticks.

"*Do not pursue!*" Draco cried to his soldiers as they started to follow, then, "*Sonorus! REFORM ON ME!*"

The Dragon forces started converging on Draco, and the Chaotic forces spun around and began *pursuing* the Dragons on the instant - Draco swore out loud as he heard the bell of a Chaotic victory, someone hadn't gotten their Simple Shield oriented right - and then the Dragon forces were in supporting range of each other and the Chaotics were moving back into the murky distance.

Somehow, despite their numerical superiority, the Dragons had scored three times against the Chaotics and the Chaotics had scored four times back, and he'd heard one Dragon spy get executed. Either Harry Potter had thought of a lot of very good ideas very fast, or for some unimaginable reason he'd already spent a lot of time working out how to fight underwater. This wasn't working, and Draco needed to rethink things.

It looked like everyone was having trouble aiming while swimming, too, the battle might last long enough that time would be called... the distant underwater moon was only half full now, that wasn't good... he had to rethink things *fast*...

"What is it?" said Padma Patil, as she and her force swam over toward Draco.

Padma was his second-in-command; she was clever and powerful, and better yet, she hated Granger and saw Harry as a rival, which made her *trustworthy*. Working with Padma was making him realize the truth of the old adage that Ravenclaw was sister to Slytherin; Draco had been surprised when his father had told him it was an acceptable House for his future wife, but now he saw the sense of it.

"Wait until we're all here," Draco said. The truth was, he needed to catch his breath. That was the trouble with being the general *and* the most powerful wizard, you had to keep using magic.

Zabini came in next, commanding a force of two Sunnies and four Dragons, one of whom was Gregory keeping an eye on Zabini. Draco didn't trust Zabini. And neither Draco nor Zabini trusted the Sunnies enough to make them a majority of any unit; they were *supposed* to be loyal either to Draco directly, or to Granger who'd been fooled by the promise that the Dragons would be betrayed in the end after both forces had been depleted, just as Harry's more trusted Chaotics should've been fooled into not shooting at the Sunnies by the promise of their firing

fake Sleep Hexes and switching to support Chaos later; but it was possible some of the Sunnies *were* loyal to Chaos and *weren't* firing real Sleep Hexes and that was why Dragon wasn't winning the way their numerical advantage should've let them win...

The next unit that approached was depleted, three soldiers holding wands on two other soldiers, who were swimming with empty hands.

Draco gritted his teeth. More traitor problems. He needed to talk to Professor Quirrell about having some way to *punish* traitors at least, conditions like these were *unrealistic*, in real life you tortured your traitors to death.

"General Malfoy!" shouted the commander of the problem unit as it swam up, a Ravenclaw boy named Terry. "We don't know what to do - Cesi shot Bogdan, but Cesi says Kellah told him that Bogdan shot Specter -"

"I *didn't!*" said Kellah.

"Yes you *did!*" shrieked Cesi. "General Malfoy, *she's* the spy, I should've rea-"

"*Somnium*," said Draco.

There was the triple bell of a one-point loss from Dragon, and then Kellah's limp body began to float away in the water.

Draco *had* heard the word 'recursion' by this point, and he knew a Harry Potter plot when he saw one.

(Unfortunately Draco had *not* heard of autoimmune disorders, and the thought did *not* readily occur to him that a clever virus would begin its attack by creating symptoms of an autoimmune disorder so as to get the body to distrust its own immune system...)

"*General order!*" said Draco, raising his voice. "Nobody gets to shoot spies except myself, Gregory, Padma, and Terry. If anyone sees anything suspicious they come to one of *us*."

And then -

There was the bell of Sunshine scoring two points.

"*What?*" said Draco and Zabini around the same time; their heads swiveled around. No one seemed to have gotten hit, and all the Sunshine soldiers were present and accounted for. (Except Parvati, who had been shot by some still-unknown traitor in Padma's squad; and of course Padma had shot Parvati again in case she was faking, so it wasn't her...)

"A Sunny traitor in Chaos?" said Zabini, sounding puzzled. "But all the ones I knew about were supposed to strike during Chaos's attack on Sunshine -"

"No!" said Padma in a tone of sudden realization. "That was *Chaos* executing a spy!"

"*What?*" said Zabini. "But why -"

And Draco got it. *Damn it!* "Because Potter thinks he's safe for how much he beats Sunshine, but not for how much he beats *us!* So he doesn't want to lose a single point when he executes a traitor! *General order!* If you have to execute a traitor, call Sunshine first! And don't forget to switch back to Dragon afterward -"

Granger: 253 / Malfoy: 252 / Potter: 252

Longbottom's body drifted chaotically through the water, arms and legs disarrayed. After Draco had finally got a hit in they'd all shot him *again* just to be sure.

Nearby was Harry Potter, now protected by a Prismatic Sphere, looking at them all grimly as the last sliver of crescent moon slowly diminished, somewhere far away. If Longbottom had managed to shoot one more soldier (Draco knew Harry was thinking), if the two Chaotics had managed to hold out just a little longer, they might have *won...*

After Draco had reformed his forces and struck out again, the ensuing battle and execution of spies in Sunshine's name had left Sunshine exactly one point ahead of Dragon and Chaos both. Once Harry had started doing it, Draco had been left with no choice but to follow suit.

But now they had General Chaos outnumbered three to one, the survivors of Dragon Army and the last remaining Sunny traitor: Draco, and Padma, and Zabini.

And Draco, who was no fool, had ordered Padma to take Zabini's wand after Longbottom had shot Gregory and fallen in turn to Draco. The boy had given him an insulted look, told Draco that he owed him for this, and handed it over.

That left Draco and Padma to take down General Chaos.

"I don't suppose you'd like to surrender?" said Draco, smiling as evilly as any smile he'd ever directed at Harry Potter.

"Sleep before surrender!" shouted General Chaos.

"Just so you know," said Draco, "Zabini doesn't actually *have* an older sister for you to rescue from Gryffindor bullies. But Zabini *does* have a mother who doesn't approve of Muggleborns like Granger, and I wrote her a few notes, and offered Zabini a few favors - nothing involving my father, just things *I* can do in school. And by the way, Zabini's mother doesn't approve of the Boy-Who-Lived, either. Just in case you still thought Zabini was really on your side."

Harry's face grew even grimmer.

Draco raised his wand, and began breathing rhythmically, building up strength for a Breaking Drill Hex. Granger's Prismatic Sphere was almost as strong as Draco's now, and Harry's wasn't much weaker, where did those two find *time*?

"*Lagann!*" spoke Draco, putting everything he had into it, and the green spiral blazed out and Harry's shield shattered, and at almost the same moment -

"*Somnium!*" said Padma.

Granger: 253 / Malfoy: 252 / Potter: 254

Harry let out a long breath of relief, and not just because he didn't have to hold the Prismatic Sphere any more. His hand was shaking as he lowered his wand.

"You know," said Harry, "I was pretty worried there for a moment."

Special Order Two: If a Sunny traitor doesn't seem to be really shooting at you, fake being hit occasionally. Prefer targeting Dragons to Sunnies but go ahead and shoot Sunnies if you can't shoot Dragons.

Special Order Three: Merlin says do not shoot at Blaise Zabini or either Patil twin.

With a wide grin, Parvati Patil stripped the Transfigured patch off her uniform's insignia, and let it float away in the water.

"Gryffindors for Chaos," she said, and handed Zabini his wand back.

"Thank you *very* much," Harry said, and bowed sweepingly to the Gryffindor girl. "And thank *you* as well," bowing to Zabini. "You know, when you came to me with that plan, I wondered if you were brilliant or crazy, and I've decided that you're both. And by the way," Harry

said, now turning as though to address Draco's body, "Zabini *does* have a cousin -"

"*Somnium*," said Zabini's voice.

Granger: 255 / Malfoy: 252 / Potter: 254

And Harry Potter's body floated away, his expression of shock and horror quickly relaxing into sleep.

"On second thought," Parvati said cheerfully, "make that Gryffindors for Sunshine."

She started to laugh, more exhilarated than she'd ever been in her life, she'd *finally* gotten to assassinate and replace her twin sister and she'd wanted to do that since *forever*, and this had been *perfect*, it had all been *perfect* -

- and then her wand spun around in a lightning motion just as Zabini's wand turned to point at her.

"Wait!" said Zabini. "Do not shoot, do not resist. That's an order."

"*What?*" said Parvati.

"Sorry," said Zabini, looking not-quite-sincerely apologetic, "but I can't be totally *sure* you're for Sunshine. So I order you to let me shoot you."

"*Hold on!*" said Parvati. "We're only ahead of Chaos by one point! If you shoot me now -"

"I'll shoot you in the name of Dragon, *obviously*," said Zabini, now sounding a little superior. "Just because we tricked *them* into doing it, doesn't mean it won't work for us."

Parvati stared at him, her eyes narrowing. "General Malfoy said your mother doesn't like Hermione."

"I suppose," said Zabini, still with that superior smirk. "But some of us are more willing than Draco Malfoy to annoy a parent."

"And Harry Potter said you have a cousin -"

"Nope," said Zabini.

Parvati stared at him, trying to think, but she wasn't really good at plotting; Zabini'd said the plan was to secretly keep the scores of Chaos and Dragon as even as possible so they'd use Sunshine's name to execute their traitors instead of losing even a single point, and that had

CHAPTER 33

worked... but... she had the feeling she was missing something, she wasn't a Slytherin...

"Why don't *I* shoot *you* in the name of Dragon?" said Parvati.

"Because I outrank you," said Zabini.

Parvati had a bad feeling about this.

She stared at him for a long moment.

And then -

"*Somni*-" she started to say, and then realized she hadn't said *for Dragon*, and frantically cut herself off -

Granger: 255 / Malfoy: 254 / Potter: 254

"Hey, everyone," said Blaise Zabini's face on the screens, looking quite amused, "guess it's all down to me."

All by the lakeside, people were holding their breath.

Sunshine was ahead of Dragon and Chaos by exactly one point.

Blaise Zabini could shoot himself in the name of either Dragon or Chaos, or just leave things the way they were.

A series of chimes indicated that the last minute of time was running out.

And the Slytherin was smiling a strange, twisted smile, and casually toying with his wand, the dark wood barely visible in the dark water.

"You know," said Blaise Zabini's voice, in the tones of someone who'd been rehearsing the words for a while, "it's just a game, really. And games are supposed to be *fun*. So how about if I just do whatever I feel like?"

CHAPTER 34

COORDINATION PROBLEMS, PT 2

Minerva and Dumbledore together had applied their combined talent to conjure the grand stage toward which Quirrell now slowly trudged; it was, at its core, sturdy wood, but the outer surfaces shone with glitter of marble inlaid with platinum and studded with gems of every House color. Neither she nor the Headmaster was any Founder of Hogwarts, but the conjuration only needed to last a few hours. Minerva ordinarily enjoyed the few occasions when she had the occasion to tire herself out on large Transfigurations; she should have enjoyed the many small chances for artistry, and the illusion of opulence; but this time she had done the work with the dreadful feeling of digging her own grave.

But Minerva was feeling a little better now. There'd been one brief moment when the explosion might've come; but Dumbledore had already been standing up and applauding warmly, and no one had proven foolish enough to riot in front of the Headmaster.

And the explosive mood had rapidly faded into a collective sentiment which might perhaps have been described by the phrase: *Give us a break!*

Blaise Zabini had shot himself in the name of Sunshine, and the final score had been 254 to 254 to 254.

Behind the stage, waiting to ascend, three children were glaring at each other in mingled fury and frustration. It didn't help that they were still damp from being fished out of the lake, and that the Warming Charms didn't seem quite enough to make up for the crisp December air, or maybe it was just their mood.

"That's *it*," said Granger. "I've *had* it! No more traitors!"

"I completely agree with you, Miss Granger," Draco said icily. "Enough is enough."

"And what do *you* two intend to do about it?" snapped Harry Potter. "Professor Quirrell already said he wouldn't ban spies!"

CHAPTER 34

"We'll ban them *for* him," said Draco grimly. He hadn't even understood what he meant by the words as he said them, but the very act of speaking seemed to crystallize a plan -

The stage really was well done, at least for a temporary structure; the makers hadn't fallen into the usual pitfall of being impressed by their own illusion of wealth, and knew something about architecture and visual style. From where Draco stood, in the obvious place for him to stand, the watching students would see him haloed in the faint glitter of emeralds; and Granger, standing where Draco had subtly motioned her, would be haloed in Ravenclaw's sapphire. As for Harry Potter, Draco wasn't looking at him right now.

Professor Quirrell had... awakened, or whatever it was he did; and was leaning upon a platinum podium bare of all gems. With evident showmanship, the Defense Professor was carefully stacking and squaring those three envelopes containing the three parchments upon which the three generals had written their wishes, as all the students of Hogwarts watched, and waited.

Finally Professor Quirrell looked up from the envelopes. "Well," said the Defense Professor. "This is inconvenient."

A slight titter of laughter ran through the crowd, with a sharp undertone.

"I suppose you are all wondering what I will do?" said Professor Quirrell. "There is nothing for it; I shall have to do what is fair. Although first there was a little speech I wanted to make, and before even that, it appears to me that Mr. Malfoy and Miss Granger have something they wish to share."

Draco blinked, and then he and Granger traded rapid glances - *may I?* - *yes, go ahead* - and Draco raised his voice.

"General Granger and I would both like to say," Draco said in his most formal voice, knowing it was being amplified and heard, "that we will no longer accept the help of any traitors. And if, in any battle, we find that Potter has accepted traitors from either of our armies, we will join forces to crush him."

And Draco shot a glance filled at malice at the Boy-Who-Lived. *Take that, General Chaos!*

"I agree completely with General Malfoy," said Granger standing beside him, her high voice clear and strong. "Neither of us will use traitors, and if General Potter does, we will wipe him off the battlefield."

There was a susurrations of surprise from the watching students.

"Very good," said their Defense Professor, smiling. "It took the two of you long enough, but you are still to be congratulated on having thought of it before any other generals."

It took a moment for this to soak in -

"In the future, Mr. Malfoy, Miss Granger, before you come to my office with any request, consider whether there is a way for you to accomplish it without my help. I will not deduct Quirrell points on this occasion, but next time you may expect to lose the full fifty." Professor Quirrell wore an amused grin. "And what do you have to say about that, Mr. Potter?"

Harry Potter's gaze went to Granger, then to Draco. His face appeared calm; though Draco was sure *controlled* would have been the better term.

Finally Harry Potter spoke, his voice level. "The Chaos Legion is still happy to accept traitors. See you on the battlefield."

Draco knew the shock was showing on his own face; there were astonished murmurs from the watching students, and when Draco glanced at the front row he saw that even Harry's Chaotics looked taken aback.

Granger's face was angry, and getting angrier. "Mr. Potter," she said in a sharp tone like she thought she was a teacher, "are you *trying* to be obnoxious?"

"Most certainly not," Harry Potter said calmly. "I won't make you do it every time. Beat me once, and I'll stay beaten. But threats aren't always enough, General of Sunshine. You did not ask me to join with you, but tried simply to impose your will; and sometimes you must actually defeat the enemy, to impose your will on him. You see, I am skeptical that Hermione Granger, the brightest academic star of Hogwarts, and Draco, son of Lucius, scion of the Noble and Most Ancient House of Malfoy, can work together to beat their common foe, Harry Potter." An amused

CHAPTER 34

smile crossed Harry Potter's face. "Maybe I'll just do what Draco tried with Zabini, and write a letter to Lucius Malfoy and see what *he* thinks about that."

"*Harry!*" gasped Granger, looking absolutely aghast, and there were gasps from the audience as well.

Draco controlled the anger flushing through him. That had been a *stupid* move on Harry's part, saying that in public. If Harry had simply *done* it, it might have worked, Draco hadn't even thought about that, but *now* if Father did that it would look like he was playing into Harry's hands

"If you think my father, Lord Malfoy, can be manipulated by *you* that easily," Draco said coldly, "you have a surprise coming, Harry Potter."

And Draco realized as the words finished leaving his mouth that he'd just backed *his own father* squarely into the corner, more or less without even meaning to. Father probably *wasn't* going to like this, not the tiniest bit, but now it would be impossible for him to say so... Draco would have to apologize for that, it *had* been an honest accident, but it was strange to think that he'd done it at all.

"Then go ahead and defeat the evil General Chaos," Harry said, still looking amused. "I can't win against both your armies - not if you *really* work together. But I wonder if perhaps I could break you up before then."

"You won't, and we'll *crush* you!" said Draco Malfoy.

And beside him, Hermione Granger firmly nodded.

"Well," said Professor Quirrell after the astounded silence had stretched for a while. "That was *not* how I expected that particular conversation to go." The Defense Professor had a rather intrigued expression on his face. "Truthfully, Mr. Potter, I expected you to concede immediately and with a smile, then announce that you had long since worked out my intended lesson but had decided not to spoil it for others. Indeed, I planned my speech accordingly, Mr. Potter."

Harry Potter just shrugged. "Sorry about that," he said, and said nothing more.

"Oh, don't worry," said Professor Quirrell. "This, too, will serve."

And Professor Quirrell turned from the three children, and straightened at the podium to address the whole watching crowd; his

customary air of detached amusement dropped away like a falling mask, and when he spoke again his voice was amplified louder than it had been.

"If not for Harry Potter," said Professor Quirrell, his voice as crisp and cold as December, "You-Know-Who would have won."

The silence was instant, and total.

"Make no mistake," said Professor Quirrell. "The Dark Lord *was* winning. There were fewer and fewer Aurors who dared face him, the vigilantes who opposed him were being hunted down. One Dark Lord and perhaps fifty Death Eaters were *winning* against a country of thousands. That is beyond ridiculous! There are no grades low enough for me to mark that incompetence!"

There was a frown on the face of Headmaster Dumbledore; and on the faces of the audience, puzzlement; and the utter silence went on.

"Do you understand now how it happened? You saw it today. I allowed traitors, and gave the generals no means to restrain them. You saw the result. Clever plots and clever betrayals, until the last soldier left on the battlefield shot himself! You cannot *possibly* doubt that all three of those armies could have been defeated by *any* outside foe that was unified within itself."

Professor Quirrell leaned forward at the podium, his voice now filled with a grim intensity. His right hand stretched out, fingers open and spread. "Division is weakness," said the Defense Professor. His hand closed into a tight fist. "Unity is strength. The Dark Lord understood that well, whatever his other follies; and he *used* that understanding to create the one simple invention that made him the most terrible Dark Lord in history. Your parents faced one Dark Lord. And fifty Death Eaters who were perfectly unified, knowing that any breach of their loyalty would be punished by death, that any slack or incompetence would be punished by pain. None could escape the Dark Lord's grasp once they took his Mark. And the Death Eaters agreed to take that terrible Mark because they knew that once they took it, they would be *united*, facing a divided land. One Dark Lord and fifty Death Eaters would have defeated an entire country, by the power of the Dark Mark."

Professor Quirrell's voice was bleak and hard. "Your parents *could* have fought back in kind. They did not. There was a man named Yermy Wibble who called upon the nation to institute a draft, though he did not quite have vision enough to propose a Mark of Britain. Yermy Wibble knew what would happen to him; he hoped his death would inspire others. So the Dark Lord took his family for good measure. Their empty skins inspired nothing but fear, and no one dared to speak again. And your parents would have faced the consequences of their despicable cowardice, if not for being saved by a one-year-old boy." Professor Quirrell's face showed full contempt. "A dramatist would have called that a *dei ex machina*, for they did nothing to earn their salvation. He-Who-Must-Not-Be-Named may not have deserved to win, but make no doubt of it, your parents deserved to lose."

The voice of the Defense Professor rang forth like iron. "And know this: your parents have learned nothing! The nation is still fragmented and weak! How few decades passed between Grindelwald and You-Know-Who? Do you think *you* will not see the next threat in your own lifetimes? Will *you* repeat then the follies of your parents, when you have seen the results so clearly laid out before you this day? For I can tell you what your parents will do, when the day of darkness comes! I can tell you what lesson they have learned! They have learned to hide like cowards and do nothing while they wait for Harry Potter to save them!"

There was a wondering look in the eyes of Headmaster Dumbledore; and other students gazed up at their Defense Professor with bewilderment and anger and awe.

Professor Quirrell's eyes were as cold now as his voice. "Mark this, and mark it well. He-Who-Must-Not-Be-Named wished to rule over this country, to hold it in his cruel grasp forever. But at least he wished to rule over a *living* country, and not a heap of ash! There have been Dark Lords who were mad, who wished only to make the world a vast funeral pyre! There have been wars in which one whole country marched against another! Your parents nearly lost against half a hundred, who thought to take this country alive! How quickly would they have been crushed by a foe more numerous than they, a foe that cared for nothing but their destruction? This I foretell: When the next threat rises, Lucius Malfoy will claim that you must follow him or perish, that your only hope is to

trust in his cruelty and strength. And though Lucius Malfoy himself will believe it, this will be a lie. For when the Dark Lord perished, Lucius Malfoy did not unite the Death Eaters, they were shattered in an instant, they fled like whipped dogs and betrayed each other! Lucius Malfoy is not strong enough to be a true Lord, Dark or otherwise."

Draco Malfoy's fists were clenched white, there were tears in his eyes, and fury, and unbearable shame.

"No," said Professor Quirrell, "I do not think it will be Lucius Malfoy who saves you. And lest you think that I speak on my own behalf, time will make clear soon enough that this is not so. I make you no recommendation, my students. But I say that if a whole country were to find a leader as strong as the Dark Lord, but honorable and pure, and take his Mark; then they could crush any Dark Lord like an insect, and all the rest of our divided magical world could not threaten them. And if some still greater enemy rose against us in a war of extermination, then only a united magical world could survive."

There were gasps, mostly from Muggleborns; the students in green-trimmed robes looked merely puzzled. Now it was Harry Potter whose fists were clenched tight and trembling; and Hermione Granger beside him was angry and dismayed.

The Headmaster rose from his seat, his face now stern, saying no word as yet; but the command was clear.

"I do not say *what* threat will come," said Professor Quirrell. "But you will not live all your lives in peace, not if the past history of the world is any guide at all to its future. And if you do in the future as you have seen three armies do this day, if you cannot throw aside your petty bickering and take the Mark of a single leader, then indeed you might wish that the Dark Lord had lived to rule over you, and regret the day that ever Harry Potter was born -"

"*Enough!*" bellowed Albus Dumbledore.

There was silence.

Professor Quirrell slowly turned his head to gaze at where Albus Dumbledore stood in the fury of his wizardry; their eyes met, and a soundless stress pressed down like weight upon all the students, as they listened not daring to move.

CHAPTER 34

"You, too, failed this country," said Professor Quirrell. "And you know the peril as well as I."

"Such speeches are not for the ears of students," said Albus Dumbledore in a dangerously rising voice. "Nor for the mouths of professors!"

Dryly, then, Professor Quirrell spoke: "There were many speeches made for the ears of adults, as the Dark Lord rose. And the adults clapped and cheered, and went home having enjoyed their day's entertainment. But I will obey you, Headmaster, and make no further speeches if you do not like them. My lesson is simple. I will go on doing nothing about traitors, and we will see what students can do for themselves about that, when they do not wait for professors to save them."

And then Professor Quirrell turned back to his students, and his mouth quirked up in a wry grin that seemed to dissipate the dreadful pressure like a god blowing to scatter the clouds. "But do please be kind to the traitors up until now," said Professor Quirrell. "They were just having fun."

There was laughter, though it was nervous at first, and then it seemed to build, as Professor Quirrell stood there smiling wryly and some of the tension released itself.

Draco's mind was still whirling through a thousand questions and a daze of horror, as Professor Quirrell prepared to open the envelopes in which the three had inscribed their wishes.

It had never before occurred to Draco that moon-traveling Muggles were a greater threat than the slow decline of wizardry, or that Father had proven himself too weak to stop them.

And even stranger, the obvious implication: Professor Quirrell believed that *Harry* could. The Defense Professor claimed to have made no recommendation, but he'd mentioned Harry Potter over and over in his speech; others would already be thinking the same thing as Draco.

It was ridiculous. The boy who had covered a stuffed chair in glitter and called it a throne -

The boy who faced down Snape and won, whispered a traitorous voice, that boy could grow into a Lord strong enough to rule, strong enough to save us all -

Harry had been *raised* by Muggles! He was practically a mudblood himself, he wouldn't fight against his adopted family -

He knows their arts, their secrets and their methods; he can take all of the Muggles' science and use it against them, alongside our own power as wizards.

But what if he refuses? What if he's too weak?

Then, said that inner voice, it will have to be you, won't it, Draco Malfoy?

And then there was a renewed hush from the crowd, as Professor Quirrell opened the first envelope.

"Mr. Malfoy," said Professor Quirrell, "your wish is for... Slytherin to win the House Cup."

There was a puzzled pause from the watching audience.

"Yes, Professor," said Draco in a clear voice, knowing that it was once again being amplified. "If you can't do that, then something else for Slytherin -"

"I will not award House points unfairly," said Professor Quirrell. He tapped a cheek, looking thoughtful. "Which makes your wish difficult enough to be interesting. Would you like to say anything about why, Mr. Malfoy?"

Draco turned from the Defense Professor, gazed out at the crowd from against that backdrop of platinum and emeralds. Not all of Slytherin had cheered for Dragon Army, there were anti-Malfoy factions who had expressed that dissatisfaction by supporting the Boy-Who-Lived, or even Granger; and those factions would be encouraged greatly by what Zabini had done. He needed to remind them that Slytherin meant Malfoy and Malfoy meant Slytherin -

"No," said Draco. "They're Slytherins, they'll understand."

There was some laughter from the audience, especially in Slytherin, even from some students who would have called themselves anti-Malfoy a moment earlier.

Flattery was a lovely thing.

Draco turned back to look at Professor Quirrell again, and was surprised to see an embarrassed look on Granger's face.

"And for Miss Granger..." said Professor Quirrell. There was the sound of a tearing envelope. "Your wish is for... Ravenclaw to win the House Cup?"

There was considerable laughter from the audience, including a chuckle from Draco. He hadn't thought Granger played that game.

"Well, um," said Granger, sounding like she was suddenly stumbling over a memorized speech, "I meant to say, that..." She took a deep breath. "There were soldiers from every House in my army, and I don't mean to slight any of them. But Houses should still count for something, too. It was sad when students in the same House were hexing each other just because they were in different armies. People should be able to rely on whoever's in their House. That's why Godric Gryffindor, and Salazar Slytherin, and Rowena Ravenclaw, and Helga Hufflepuff created the four Houses of Hogwarts in the first place. I'm the General of Sunshine, but even before that, I'm Hermione Granger of Ravenclaw, and I'm proud to be part of a House that's eight hundred years old."

"Well said, Miss Granger!" said Dumbledore's booming voice.

Harry Potter was frowning, and something tickled at the edge of Draco's recognition.

"An interesting sentiment, Miss Granger," said Professor Quirrell. "But there are times when it is good for a Slytherin to have friends in Ravenclaw, or for a Gryffindor to have friends in Hufflepuff. Surely it would be best if you could rely both on your friends in your House, and also your friends in your army?"

Granger's eyes flicked briefly toward the watching students and teachers, and she said nothing.

Professor Quirrell nodded as though to himself, and then turned back to the podium, and took up and tore open the last envelope. Beside Draco, Harry Potter visibly tensed up as the Defense Professor drew forth the parchment. "And Mr. Potter wishes for -"

There was a pause as Professor Quirrell looked at the parchment.

Then, without any change of expression on Professor Quirrell's face, the sheet of parchment burst into flames, and burned with a brief, intense fire that left only drifting black dust sprinkling down from his hand.

"Please confine yourself to the possible, Mr. Potter," said Professor Quirrell, sounding very dry indeed.

There was a long pause; Harry, standing beside Draco, looked rather shaken.

What in Merlin's name did he ask for?

"I do hope," said Professor Quirrell, "that you prepared another wish, if I could not grant that one."

There was another pause.

Harry drew a deep breath. "I didn't," he said, "but I already thought of another one." Harry Potter turned to look out at the audience, and his voice firmed as he spoke. "People fear traitors because of the damage the traitor does directly, the soldiers they shoot or the secrets they tell. But that's only part of the danger. What people do because they're *afraid* of traitors also costs them. I used that strategy today against Sunshine and Dragon. I didn't tell my traitors to cause as much direct damage as possible. I told them to act in the way that would create the most distrust and confusion, and make the generals do the most costly things to try and stop them from doing it again. When there are just a few traitors and a whole country opposing them, it stands to reason that what a few traitors do might be less damaging than what a whole country does to stop them, that the cure might be worse than the disease -"

"Mr. Potter," said the Defense Professor, his voice suddenly cutting, "the lesson of history is that you are simply wrong. Your parents' generation did too little to unify themselves, not too much! This whole country almost fell, Mr. Potter, though you were not there to see it. I suggest that you ask your dorm-mates in Ravenclaw how many of them have lost family to the Dark Lord. Or if you are wiser, do *not* ask! *Do* you have a wish to make, Mr. Potter?"

"If you don't mind," said the mild voice of Albus Dumbledore, "I should like to hear what the Boy-Who-Lived has to say. He has more experience than either of us at stopping wars."

A few people laughed, but not many.

Harry Potter's gaze moved to Dumbledore, and he looked considering for a moment. "I'm not saying you're wrong, Professor Quirrell. In the last war, people didn't act together, and a whole country almost fell to a few dozen attackers, and yes, that was pathetic. And if we

make the same mistake next time, yes, that'll be even more pathetic. But you never fight the same war twice. And the problem is, the enemy is *also* allowed to be smart. If you're divided you're vulnerable in one way; but when you try to unite, then you face other risks, and other costs, and the enemy will try to take advantage of those, too. You can't stop thinking at just one level of the game."

"Simplicity also has a great deal to commend it, Mr. Potter," said the dry voice of the Defense Professor. "I do hope that you have learned something this day about the dangers of strategies more complicated than uniting your people and attacking your enemy. And if all this does not tie into your wish somehow, I shall be quite annoyed."

"Yes," said Harry Potter, "it was pretty difficult coming up with a wish to symbolize the costs of unity. But the problem of acting together isn't just for wars, it's something we have to solve all our lives, every day. If everyone is coordinating using the same rules, and the rules are stupid, then if *one* person decides to do things differently, they're breaking the rules. But if *everyone* decides to do things differently, they can. It's exactly the same problem of everyone needing to act together. But for the *first* person who speaks out, it seems like they're going against the crowd. And if you thought that the only important thing was that people should always be unified, then you could never change the game, no matter how stupid the rules. So my own wish, to symbolize what happens when people unite in the wrong direction, is that in Hogwarts we should play Quidditch without the Snitch."

"*WHAT?*" screamed a hundred voices in the crowd, as Draco's jaw dropped.

"The Snitch ruins the whole game," said Harry Potter. "Everything the other players do ends up being irrelevant. It would make overwhelmingly more sense to just buy a clock. It's one of those incredibly stupid things you don't notice just because you grew up with it, that people only do because everyone else is doing it -"

But by that point Harry Potter's voice could no longer be heard, because the riot had started.

The riot ended around fifteen seconds later, after a gigantic spout of fire blasted out of the highest tower of Hogwarts to the sound of a hundred thunders. Draco hadn't known Dumbledore could *do* that.

The students sat down again very carefully and quietly.

Professor Quirrell was laughing, without pause. "So be it, Mr. Potter. Your will be done." The Defense Professor paused deliberately. "Of course, I only promised *one* cunning plot. And that is all that the three of you will get."

Draco had been half-expecting the words earlier, but now they still came as a shock; Draco exchanged rapid glances with Granger, they would have been the obvious allies but their wishes were directly opposed -

"You mean," said Harry, "we have to all agree on a wish?"

"Oh, that would be *far* too much to ask," said Professor Quirrell. "The three of you have no common enemy, do you?"

And for one brief moment, so fast that Draco thought he might have imagined it, the Defense Professor's eyes flicked in the direction of Dumbledore.

"No," said Professor Quirrell, "I mean that I shall grant three wishes using a single plot."

There was a confused silence.

"You can't do that," Harry said flatly from beside Draco. "Not even I can do that. Two of those wishes are mutually incompatible. It's *logically impossible* -" and then Harry cut himself off.

"You're a few years too young to tell me what I can't do, Mr. Potter," said Professor Quirrell, with a brief dry smile.

Then the Defense Professor turned back to the watching students. "Truthfully, I have no confidence in your ability to learn this day's lesson. Go home, and enjoy your time with your families, or what's left of them, while they still live. My own family is long since dead at the Dark Lord's hand. I shall see you all when classes resume."

In the speechless silence that resulted, Professor Quirrell already turning to walk off the stage, Draco heard the Defense Professor's voice say, quietly and no longer amplified, "But you, Mr. Potter, I would speak to now."

CHAPTER 35

COORDINATION PROBLEMS, PT 3

They had gone to the Defense Professor's office, and Professor Quirrell had sealed the door before he leaned back in his chair and spoke.

The Defense Professor's voice was very calm, and that unnerved Harry a good deal more than if Professor Quirrell had been shouting.

"I am trying," said Professor Quirrell quietly, "to make allowances for the fact that you are young. That I myself, at the same age, was a quite extraordinary fool. You speak with adult style and meddle in adult games, and sometimes I forget that you are only a meddler. I hope, Mr. Potter, that your childish meddling has not just killed you, ruined your country, and lost the next war."

It was very hard for Harry to control his breathing. "Professor Quirrell, I said a good deal less than I wished to say, but I had to say something. Your proposals are extremely alarming to anyone who has the slightest familiarity with Muggle history over the last century. The Italian fascists, some very nasty people, got their name from the *fascies*, a bundle of rods bound together to symbolize the idea that unity is strength -"

"So the nasty Italian fascists believed that unity is stronger than division," said Professor Quirrell. Sharpness was beginning to creep into his voice. "Perhaps they also believed that the sky is blue, and advocated a policy of not dropping rocks on your head."

Reversed stupidity is not intelligence; the world's stupidest person may say the sun is shining, but that doesn't make it dark out... "Fine, you're right, that was an ad hominem argument, it's not wrong *because* the fascists said it. But Professor Quirrell, you can't have everyone in a country take the Mark of one dictator! It's a single point of failure! Look, I'll put it this way. Suppose the enemy just Imperiuses whoever controls the Mark -"

"Powerful wizards are not so easy to Imperius," said Professor Quirrell dryly. "And if you cannot find a worthy leader, you are in any

case doomed. But worthy leaders do exist; the question is whether the people shall follow them."

Harry raked his hands through his hair in frustration. He wanted to call a time-out and make Professor Quirrell read *The Rise and Fall of the Third Reich* and then start the conversation over again. "I don't suppose that if I suggested democracy was a better form of government than dictatorship -"

"I see," said Professor Quirrell. His eyes closed briefly, then opened. "Mr. Potter, the stupidity of Quidditch is transparent to you because you did not grow up revering the game. If you had never heard of elections, Mr. Potter, and you simply *saw what is there*, what you saw would not please you. Look to our elected Minister of Magic. Is he the wisest, the strongest, the greatest of our nation? No; he is a buffoon who is owned in fee simple by Lucius Malfoy. Wizards went to the polls and chose between Cornelius Fudge and Tania Leach, who had competed with each other in a grand and entertaining contest after the *Daily Prophet*, which Lucius Malfoy also controls, decided that they were the only serious candidates. That Cornelius Fudge was genuinely selected as the best leader our country could offer is not a suggestion anyone could make with a straight face. It is no different in the Muggle world, from what I have heard and seen; the last Muggle newspaper I read mentioned that the previous President of the United States had been a retired movie actor. If you had not grown up with elections, Mr. Potter, they would be as transparently silly to you as Quidditch."

Harry sat there with his mouth open, struggling for words. "The point of elections isn't to produce the one best leader, it's to keep politicians scared enough of the voters that they don't go completely evil like dictators do -"

"The last war, Mr. Potter, was fought between the Dark Lord and Dumbledore. And while Dumbledore was a flawed leader who was losing the war, it is *ridiculous* to suggest that *any* of the Ministers of Magic elected during that period could have taken Dumbledore's place! Strength flows from powerful wizards and their followers, not from elections and the fools they elect. That is the lesson of magical Britain's recent history; and I doubt that the next war will teach you a lesson any

different. *If* you survive it, Mr. Potter, which you will *not* do unless you abandon the enthusiastic illusions of childhood!"

"If you think there are no dangers in the course of action you advocate," said Harry, and despite everything his voice was growing sharp, "then that, too, is childish enthusiasm."

Harry stared grimly into Professor Quirrell's eyes, who stared back without blinking.

"Such dangers," said Professor Quirrell coldly, "are to be discussed in offices like this one, not in speeches. The fools who elected Cornelius Fudge are not interested in complications and caution. Present them with anything more nuanced than a rousing cheer, and you will face your war alone. *That*, Mr. Potter, was your childish error, which Draco Malfoy would not have made even when he was eight years old. It should have been obvious even to *you* that you should have stayed silent, and *consulted with me first*, not spoken your worries before the crowd!"

"I am no friend of Albus Dumbledore," said Harry, a cold in his voice to match Professor Quirrell's. "But he is no child, and he did not seem to think my concerns were childish, nor that I should have waited to speak them."

"Oh," said Professor Quirrell, "so you take your cues from the Headmaster now, do you?" and stood up from behind his desk.

When Blaise turned the corner on the way to the office, he saw that Professor Quirrell was already leaning against the wall.

"Blaise Zabini," said the Defense Professor, straightening; his eyes were set like dark stones within his face, and his voice sent a shiver of fear down Blaise's spine.

He can't do anything against me, I just have to remember that -

"I believe," said Professor Quirrell, in a clear, cold voice, "that I have already guessed the name of your employer. But I would hear it from your own lips, and tell me also the price that bought you."

Blaise knew he was sweating under his robes, and that the moisture would be already visible on his forehead. "I got a chance to show I was better than all three generals, and I took it. A lot of people hate me now,

but there're also plenty of Slytherins who'll love me for it. What makes you think I'm -"

"You did not devise the plan of today's battle, Mr. Zabini. Tell me who did."

Blaise swallowed hard. "Well... I mean, in that case... then you already know who did, right? The only one who's that crazy is Dumbledore. And he'll protect me if you try to do anything."

"Indeed. Tell me the price." The Defense Professor's eyes were still hard.

"It's my cousin Kimberly," Blaise said, swallowing again and trying to control his voice. "She's real, and she's really being bullied, Potter checked that, he wasn't dumb. Only Dumbledore said that he'd nudged the bullies into doing it, just for the plan, and if I worked for *him* she'd be fine afterward, but if I *did* go with Potter, there was more trouble Kimberly could get into!"

Professor Quirrell was silent for a long moment.

"I see," Professor Quirrell said, his voice now much milder. "Mr. Zabini, should such an event occur again, you may contact me directly. I have my own ways of protecting my friends. Now, a final question: Even with all the power you took into your hands, forcing a tie would have been difficult. Did Dumbledore instruct you as to who should win otherwise?"

"Sunshine," said Blaise.

Professor Quirrell nodded. "As I thought." The Defense Professor sighed. "In your future career, Mr. Zabini, I do not suggest trying any plots that complicated. They have a tendency to fail."

"Um, I said that to the Headmaster, actually," Blaise said, "and he said that was why it was important to have more than one plot going at a time."

Professor Quirrell passed a weary hand across his forehead. "It's a wonder the Dark Lord didn't go mad from fighting *him*. You may go on to your meeting with the Headmaster, Mr. Zabini. I will say nothing of this, but if the Headmaster should somehow discover that we have spoken, remember my standing offer to give you what protection I can. You are dismissed."

Blaise didn't wait for any other word, just turned and fled.

Professor Quirrell waited for a time, and then said, "Go ahead, Mr. Potter."

Harry tore the Cloak of Invisibility off his head and stuffed into his pouch. He was trembling with so much rage he could hardly speak. "He *what*? He did *what*?"

"You should have deduced it yourself, Mr. Potter," Professor Quirrell said mildly. "You must learn to blur your vision until you can see the forest obscured by the trees. Anyone who heard the stories about you, and who did not know that you were the mysterious Boy-Who-Lived, could easily deduce your ownership of an invisibility cloak. Step back from these events, blur away their details, and what do we observe? There was a great rivalry between students, and their competition ended in a perfect tie. That sort of thing only happens in stories, Mr. Potter, and there is one person in this school who thinks in stories. There was a strange and complicated plot, which you should have realized was uncharacteristic of the young Slytherin you faced. But there is a person in this school who deals in plots that elaborate, and his name is not Zabini. And I did warn you that there was a quadruple agent; you knew that Zabini was at least a triple agent, and you should have guessed a high chance that it was he. No, I will not declare the battle invalid. All three of you failed the test, and lost to your common enemy."

Harry didn't care about tests at this point. "Dumbledore *blackmailed* Zabini by *threatening his cousin*? Just to make our battle end in a tie? *Why*?"

Professor Quirrell gave a mirthless laugh. "Perhaps the Headmaster thought the rivalry was good for his pet hero and wished to see it continue. For the greater good, you understand. Or perhaps he was simply mad. You see, Mr. Potter, everyone knows that Dumbledore's madness is a mask, that he is sane pretending to be insane. They pride themselves on that clever insight, and knowing the secret explanation, they stop looking. It does not occur to them that it is *also* possible to have a mask behind the mask, to be insane pretending to be sane pretending to be insane. And I am afraid, Mr. Potter, that I have urgent business elsewhere, and must depart; but I should strongly advise you not to take your cues from Albus Dumbledore when fighting a war. Until later, Mr. Potter."

And the Defense Professor inclined his head with some irony, and then strode off in the same direction Zabini had fled, while Harry was still standing in open-mouthed shock.

Aftermath: Harry Potter.

Harry trudged slowly toward the Ravenclaw dorm, eyes unseeing of walls, paintings, or other students; he went up stairs and down ramps without slowing, speeding, or noticing where he trod.

It had taken him more than a minute after Professor Quirrell's departure to realize that his only source of information about Dumbledore being involved was (a) Blaise Zabini, who he would have to be an absolute gaping idiot to trust again, and (b) Professor Quirrell, who could have easily faked a plot in Dumbledore's style, and who might also think that a little student rivalry was a fine thing; and who had, if you stepped back and blurred out the details, just proposed turning the country into a magical dictatorship.

And it was also possible that Dumbledore *was* the one behind Zabini, and that Professor Quirrell had been sincerely trying to fight the Dark Mark in kind, and prevent the repetition of a performance he saw as pathetic. Trying to make sure that Harry didn't end up fighting the Dark Lord alone, while everyone else hid, frightened, trying to stay out of the line of fire, waiting for Harry to save them.

But the truth was...

Well...

Harry was sort of okay with that.

It was, he knew, the kind of thing that was supposed to make heroes resentful and bitter.

To heck with that. Harry was very much in favor of everyone else *staying out of danger* while the Boy-Who-Lived took down the Dark Lord by himself, plus or minus a small number of companions. If the next conflict with the Dark Lord got to the point of a Second Wizarding War that killed lots of people and embroiled a whole country, that would mean Harry had *already failed*.

And if afterward a war broke out between wizards and Muggles, it didn't matter who won, Harry would have already failed by letting it

get that far. Besides, who said the societies couldn't peacefully integrate when the secrecy inevitably broke down? (Though Harry could hear Professor Quirrell's dry voice in his mind, asking him if he was a fool, and saying all the obvious things...) And if mages and Muggles couldn't live in peace, then Harry would combine magic and science and figure out how to evacuate all the wizards to Mars or somewhere, instead of letting a war break out.

Because if it did come down to a war of extermination...

That was the thing Professor Quirrell hadn't realized, the one most important question he'd forgotten to ask his young general.

The real reason why Harry had no intention of being argued into endorsing a Light Mark, no matter *how* much it would help him in his fight against the Dark Lord.

One Dark Lord and fifty Marked followers had been a peril to all of magical Britain.

If all Britain took the Mark of a strong leader, they would be a peril to the whole magical world.

And if the whole wizarding world took a single Mark, they would be a danger to the rest of humanity.

No one knew quite how many wizards there were in the world. He'd done a few estimates with Hermione and come up with numbers in the rough range of a million.

But there were six billion Muggles.

If it came down to a final war...

Professor Quirrell had forgotten to ask Harry which side he would protect.

A scientific civilization, reaching outward, looking upward, knowing that its destiny was to grasp the stars.

And a magical civilization, slowly fading as knowledge was lost, still governed by a nobility that saw Muggles as not quite human.

It was a terribly sad feeling, but not one that held any hint of doubt.

Aftermath: Blaise Zabini.

Blaise strolled through the hallways with careful, self-imposed slowness, his heart beating wildly as he tried to calm down -

"Ahem," said a dry, whispering voice from a shadowy alcove as he passed.

Blaise jumped, but he didn't scream.

Slowly, he turned.

In that small, shadowy corner was a black cloak so wide and billowing that it was impossible to determine whether the figure beneath was male or female, and atop the cloak a broad-brimmed black hat, and a black mist seemed to gather beneath it and obscure the face of whoever or whatever might lie beneath.

"Report," whispered Mr. Hat and Cloak.

"I said just what you told me to," said Blaise. His voice was a little calmer now that he wasn't lying to anyone. "And Professor Quirrell reacted just the way you expected."

The broad black hat tilted and straightened, as though the head below had nodded. "Excellent," said the unidentifiable whisper. "The reward I promised you is already on its way to your mother, by owl."

Blaise hesitated, but his curiosity was eating him alive. "Can I ask now why you want to cause trouble between Professor Quirrell and Dumbledore?" The Headmaster hadn't had anything to do with the Gryffindor bullies that Blaise knew about, and besides helping Kimberly, the Headmaster had also offered to make Professor Binns give him excellent marks in History of Magic even if he turned in blank parchments for his homework, though he'd still have to attend class and pretend to hand them in. Actually Blaise would have betrayed all three generals for free, and never mind his cousin either, but he'd seen no need to say that.

The broad black hat cocked to one side, as if to convey a quizzical stare. "Tell me, friend Blaise, did it occur to you that traitors who betray so many times over often meet with ill ends?"

"Nope," said Blaise, looking straight into the black mist under the hat. "Everyone knows that nothing *really* bad ever happens to students in Hogwarts."

Mr. Hat and Cloak gave a whispery chuckle. "Indeed," said the whisper. "With the murder of one student five decades ago being the exception that proves the rule, since Salazar Slytherin would have keyed

his monster into the ancient wards at a higher level than the Headmaster himself."

Blaise stared at the black mist, now beginning to feel a little uneasy. But it ought to take a Hogwarts professor to do anything significant to him without setting off alarms. Quirrell and Snape were the only professors who'd do something like this, and Quirrell wouldn't care about fooling *himself*, and Snape wouldn't hurt one of his own Slytherins... would he?

"No, friend Blaise," whispered the black mist, "I only wished to advise you never to try anything like this in your adult life. So many betrayals would certainly lead to at least one vengeance."

"My *mother* never got any vengeance," said Blaise proudly. "Even though she married *seven* husbands and every single one of them died mysteriously and left her lots of money."

"Really?" said the whisper. "However did she persuade the seventh to marry her after he heard what happened to the first six?"

"I asked Mum that," said Blaise, "and she said I couldn't know until I was old enough, and I asked her how old was old enough, and she said, older than her."

Again the whispery chuckle. "Well then, friend Blaise, my congratulations on having followed in your mother's footsteps. Go, and if you say nothing of this, we will not meet again."

Blaise backed uneasily away, feeling an odd reluctance to turn his back.

The hat tilted. "Oh, come now, little Slytherin. If you were truly the equal of Harry Potter or Draco Malfoy, you would have already realized that my hinted threats were just to ensure your silence before Albus. Had I intended to harm, I would not have hinted; had I said nothing, *then* you should have worried."

Blaise straightened, feeling a little insulted, and nodded to Mr. Hat and Cloak; then turned decisively and strode off toward his meeting with the Headmaster.

He'd been hoping to the very end that someone *else* would show up and give him a chance to sell out Mr. Hat and Cloak.

But then Mum hadn't betrayed seven different husbands at the *same time*. When you looked at it *that* way, he was still doing better than her.

And Blaise Zabini went on walking toward the Headmaster's office, smiling, content to be a quintuple agent -

For a moment the boy stumbled, but then straightened, shaking off the odd feeling of disorientation.

And Blaise Zabini went on walking toward the Headmaster's office, smiling, content to be a quadruple agent.

Aftermath: Hermione Granger.

The messenger didn't approach her until she was alone.

Hermione was just leaving the girl's bathroom where she sometimes hid to think, and a bright shining cat leaped out of nowhere and said, "Miss Granger?"

She let out a little shriek before she realized the cat had spoken in Professor McGonagall's voice.

Even so she hadn't been frightened, only startled; the cat was bright and brilliant and beautiful, glowing with a white silver radiance like moon-colored sunlight, and she couldn't imagine being scared.

"What are you?" said Hermione.

"This is a message from Professor McGonagall," said the cat, still in the Professor's voice. "Can you come to my office, and not speak of this to anyone?"

"I'll be there right away," said Hermione, still surprised, and the cat leaped and vanished; only it didn't vanish, it traveled away somehow; or that was what her mind said, even though her eyes just saw it disappear.

By the time Hermione had got to the office of her favorite professor, her mind was all a-whirl with speculations. Was there something wrong with her Transfiguration scores? But then why would Professor McGonagall say not to tell anyone? It was probably about Harry practicing his partial Transfiguration...

Professor McGonagall's face looked worried, not stern, as Hermione seated herself in front of the desk - trying to keep her eyes from going to the nest of cubbyholes containing Professor McGonagall's homework, she'd always wondered what sort of work grownups had to do to keep the school running and whether they could use any help from her...

"Miss Granger," said Professor McGonagall, "let me start by saying that I already know about the Headmaster asking you to make that wish _."

"He *told* you?" blurted Hermione in startlement. The Headmaster had said no one else was supposed to know!

Professor McGonagall paused, looked at Hermione, and gave a sad little chuckle. "It's good to see Mr. Potter hasn't corrupted you too much. Miss Granger, you aren't supposed to *admit* anything just because I say I know. As it happens, the Headmaster did *not* tell me, I simply know him too well."

Hermione was blushing furiously now.

"It's fine, Miss Granger!" said Professor McGonagall hastily. "You're a Ravenclaw in your first year, nobody expects you to be a Slytherin."

That *really* stung.

"Fine," said Hermione with some acerbity, "I'll go ask Harry Potter for Slytherin lessons, then."

"That *wasn't* what I wanted to..." said Professor McGonagall, and her voice trailed off. "Miss Granger, I'm worried about this *because* young Ravenclaw girls shouldn't have to be Slytherins! If the Headmaster asks you to get involved in something you're not comfortable with, Miss Granger, it really is all right to say no. And if you're feeling pressured, please tell the Headmaster that you would like me to be there, or that you would like to ask me first."

Hermione's eyes were very wide. "Does the Headmaster do things that are wrong?"

Professor McGonagall looked a little sad at that. "Not on purpose, Miss Granger, but I think... well, it probably *is* true that sometimes the Headmaster has trouble remembering what it's like to be a child. Even when he was a child, I'm sure he must have been brilliant, and strong of mind and heart, with courage enough for three Gryffindors. Sometimes the Headmaster asks too much of his young students, Miss Granger, or isn't careful enough not to hurt them. He is a good man, but sometimes his plotting can go too far."

"But it's *good* for students to be strong and have courage," said Hermione. "That's why you suggested Gryffindor for me, wasn't it?"

Professor McGonagall smiled wryly. "Perhaps I was only being selfish, wanting you for my own House. Did the Sorting Hat offer you - no, I should not have asked."

"It told me I might go anywhere but Slytherin," said Hermione. She'd *almost* asked why she wasn't good enough for Slytherin, before she'd managed to stop herself... "So I *have* courage, Professor!"

Professor McGonagall leaned forward over her desk. The worry was showing plainer on her face now. "Miss Granger, it's not about courage, it's about what's healthy for young girls! The Headmaster is drawing you into his plots, Harry Potter is giving you his secrets to keep, and now you're making alliances with Draco Malfoy! And I promised your mother that you would be safe at Hogwarts!"

Hermione just didn't know what to say to that. But the thought was occurring to her that Professor McGonagall might not have been warning her if she'd been a boy in Gryffindor instead of a girl in Ravenclaw and *that* was, well... "I'll try to be good," she said, "and I won't let anyone tell me otherwise."

Professor McGonagall pressed her hands over her eyes. When she took them away, her lined face looked very old. "Yes," she said in a whisper, "you would have done well in my House. Stay safe, Miss Granger, and be careful. And if you are ever worried or uncomfortable about anything, please come to me at once. I won't keep you any longer."

Aftermath, Draco Malfoy:

Neither of them really wanted to do anything complicated that Saturday, not after fighting a battle earlier. So Draco was just sitting in an unused classroom and trying to read a book called *Thinking Physics*. It was one of the most fascinating things that Draco had ever read in his life, at least the parts he could understand, at least when the *accursed idiot* who refused to let his books out of his sight could manage to *shut up* and let Draco *concentrate* -

"Hermione Granger is a *muuudblood*," sang Harry Potter from where he sat at a nearby desk, reading a far more advanced book of his own.

"I know what you're trying to do," said Draco calmly without looking up from the pages. "It's not going to work. We're still ganging up and crushing you."

"A *Maaaaalfoy* is working with a *muundblood*, what will all your father's *frieeends* think -"

"They'll think Malfoys aren't as easily manipulated as *you* seem to believe, *Potter!*"

The Defense Professor was crazier than Dumbledore, no future saviour of the world could ever be this *childish* and *undignified* at any age.

"Hey, Draco, you know what's really going to suck? *You* know that Hermione Granger has two copies of the magical allele, just like you and just like me, but all your classmates in Slytherin don't know that and *yoouuuu*'re not allowed to *explaaaaain* -"

Draco's fingers were whitening where they gripped the book. Being beaten and spat upon couldn't possibly require this much self-control, and if he didn't get back at Harry soon, he was going to do something incriminating -

"So what *did* you wish the first time?" said Draco.

Harry didn't say anything, so Draco looked up from his book, and felt a twinge of malicious satisfaction at the sad look on Harry's face.

"Um," Harry said. "A lot of people asked me that, but I don't think Professor Quirrell would have wanted me to talk about it."

Draco put a serious look on his own face. "You can talk about it with *me*. It's probably not important compared to the other secrets you've told me, and what else are friends for?" *That's right, I'm your friend! Feel guilty!*

"It wasn't really all that interesting," Harry said with obviously artificial lightness. "Just, *I wish Professor Quirrell would teach Battle Magic again next year.*"

Harry sighed, and looked back down at his book.

And said, after another few seconds, "Your father's probably going to be pretty upset with you this Christmas, but if you promise him that you'll betray the mudblood girl and wipe out her army, everything will go back to being all right, and you'll still get your Christmas presents."

Maybe if he and Granger asked Professor Quirrell extra politely and used some of their Quirrell points, the two of them would be allowed

to do something more interesting to General Chaos than putting him to sleep.

CHAPTER 36

STATUS DIFFERENTIALS

Wrenching disorientation, that was how it felt to walk out of Platform Nine and Three-Quarters into the rest of Earth, the world that Harry had once thought was the only real world. People dressed in casual shirts and pants, instead of the more dignified robes of wizards and witches. Scattered bits of trash here and there around the benches. A forgotten smell, the fumes of burned gasoline, raw and sharp in the air. The ambiance of the King's Cross train station, less bright and cheerful than Hogwarts or Diagon Alley; the people seemed smaller, more afraid, and likely would have eagerly traded their problems for a dark wizard to fight. Harry wanted to cast *Scourgify* for the dirt, and *Everto* for the garbage, and if he'd known the spell, a Bubble-Head Charm so he wouldn't have to breathe the air. But he couldn't use his wand, in this place...

This, Harry realized, must be what it felt like to go from a First World country to a Third World country.

Only it was the Zeroth World which Harry had left, the wizarding world, of Cleansing Charms and house elves; where, between the healer's arts and your own magic, you could hit one hundred and seventy before old age really started catching up with you.

And nonmagical London, Muggle Earth, to which Harry had temporarily returned. This was where Mum and Dad would live out the rest of their lives, unless technology leapfrogged over wizardry's quality of life, or something deeper in the world changed.

Without even thinking about it, Harry's head turned and his eyes darted behind him to see the wooden trunk that was scurrying after him, unnoticed by any Muggles, the clawed tentacles offering quick confirmation that, yes, he hadn't just imagined it all...

And then there was the other reason for the tight feeling in his chest. His parents didn't know.

They didn't know *anything*.

They didn't know...

"Harry?" called a thin, blonde woman whose perfectly smooth and unblemished skin made her look a good deal younger than thirty-three; and Harry realized with a start that it *was* magic, he hadn't known the signs before but he could see them now. And whatever sort of potion lasted that long, it must have been terribly dangerous, because most witches didn't do that to themselves, they weren't that desperate...

There was water gathering in Harry's eyes.

"*Harry?*" yelled an older-looking man with a paunch gathering about his stomach, dressed with ostentatious academic carelessness in a black vest thrown over a dark grey-green shirt, someone who would always be a professor anywhere he went, who would certainly have been one of the most brilliant wizards of his generation, if he'd been born with two copies of that gene, instead of zero...

Harry raised his hand and waved to them. He couldn't speak. He couldn't speak at all.

They came over to him, not running, but at a steady, dignified walk; that was how fast Professor Michael Verres-Evans walked, and Mrs. Petunia Evans-Verres wasn't about to walk any faster.

The smile on his father's face wasn't very wide, but then his father never was given to huge smiles; it was, at least, as wide as Harry had ever seen it, wider than when a new grant came in, or when one of his students got a position, and you couldn't ask for a wider smile than that.

Mum was blinking hard, and she was trying to smile but not doing a very good job.

"So!" said his father as he came striding up. "Made any revolutionary discoveries yet?"

Of course Dad thought he was joking.

It hadn't hurt quite so much when his parents didn't believe in him, back when no one *else* had believed in him either, back when Harry hadn't *known* how it felt to be taken seriously by people like Headmaster Dumbledore and Professor Quirrell.

And that was when Harry realized that the Boy-Who-Lived only existed in magical Britain, that there wasn't any such person in Muggle London, just a cute little eleven-year-old boy going home for Christmas.

"Excuse me," Harry said, his voice trembling, "I'm going to break down and cry now, it doesn't mean there was anything wrong at school."

Harry started to move forward, and then stopped, torn between hugging his father and hugging his mother, he didn't want either one to feel slighted or that Harry loved them more than the other -

"You," said his father, "are a very silly boy, Mr. Verres," and he gently took Harry by the shoulders and pushed him into the arms of his mother, who was kneeling down, tears already streaking her cheek.

"Hello, Mum," Harry said with his voice wavering, "I'm back." And he hugged her, amid the noisy mechanical sounds and the smell of burned gasoline; and Harry started crying, because he knew that nothing *could* go back, least of all him.

The sky was completely dark, and stars were coming out, by the time they negotiated the Christmas traffic to the university town that was Oxford, and parked in the driveway of the small, dingy-looking old house that their family used to keep the rain off their books.

As they walked up the brief stretch of pavement leading to the front door, they passed a series of flower-pots holding small, dim electric lights (dim since they had to recharge themselves off solar power during the day), and the lights lit up just as they passed. The hard part had been finding motion sensors that were waterproof and triggered at just the right distance...

In Hogwarts there were real torches like that.

And then the front door opened and Harry stepped into their living-room, blinking hard.

Every inch of wall space is covered by a bookcase. Each bookcase has six shelves, going almost to the ceiling. Some bookshelves are stacked to the brim with hardcover books: science, math, history, and everything else. Other shelves have two layers of paperback science fiction, with the back layer of books propped up on old tissue boxes or two-by-fours, so that you can see the back layer of books above the books in front. And it still isn't enough. Books are overflowing onto the tables and the sofas and making little heaps under the windows...

The Verres household was just as he'd left it, only with more books, which was also just how he'd left it.

STATUS DIFFERENTIALS

And a Christmas tree, naked and undecorated just two days before Christmas Eve, which threw Harry briefly before he realized, with a warm feeling blossoming in his chest, that of course his parents had *waited*.

"We took the bed out of your room to make room for more bookcases," said his father. "You can sleep in your trunk, right?"

"*You* can sleep in my trunk," said Harry.

"That reminds me," said his father. "What *did* they end up doing about your sleep cycle?"

"Magic," Harry said, making a beeline for the door that opened upon his bedroom, just in case Dad *wasn't* joking...

"That's not an explanation!" said Professor Verres-Evans, just as Harry shouted, "*You used up all the open space on my bookcases?*"

Harry had spent the 23rd of December shopping for Muggle things that he couldn't just Transfigure; his father had been busy and had said that Harry would need to walk or take the bus, which had suited Harry just fine. Some of the people at the hardware store had given Harry questioning looks, but he'd said with an innocent voice that his father was shopping nearby and was very busy and had sent him to get some things (holding up a list in carefully adult-looking half-illegible handwriting); and in the end, money was money.

They had all decorated the Christmas tree together, and Harry had put a tiny dancing fairy on top (two Sickles, five Knuts at Gambol & Japes).

Gringotts had readily exchanged Galleons for paper money, but they didn't seem to have any simple way to turn larger quantities of gold into tax-free, unsuspecting Muggle money in a numbered Swiss bank account. This had rather spiked Harry's plan to turn most of the money he'd self-stolen into a sensible mix of 60% international index funds and 40% Berkshire Hathaway. For the moment, Harry had diversified his assets a little further by sneaking out late at night, invisible and Time-Turned, and burying one hundred golden Galleons in the backyard. He'd always always *always* wanted to do that anyway.

Some of December 24th had been spent with the Professor reading Harry's books and asking questions. Most of the experiments his father

had suggested were impractical, at least for the moment; of those remaining, Harry had done many of them already. ("Yes, Dad, I checked what happened if Hermione was given a changed pronunciation and she didn't know whether it was changed, that was the very first experiment I did, Dad!")

The last question Harry's father had asked, looking up from *Magical Draughts and Potions* with an expression of bewildered disgust, was whether it all made sense if you were a wizard; and Harry had answered no.

Whereupon his father had declared that magic was unscientific.

Harry was still a little shocked at the idea of pointing to a section of *reality* and calling it unscientific. Dad seemed to think that the conflict between his intuitions and the universe meant that the universe had a problem.

(Then again, there were lots of physicists who thought that quantum mechanics was weird, instead of quantum mechanics being normal and them being weird.)

Harry had shown his mother the healer's kit he'd bought to keep in their house, though most of the potions wouldn't work on Dad. Mum had stared at the kit in a way that made Harry ask whether Mum's sister had ever bought anything like that for Grandpa Edwin and Grandma Elaine. And when Mum still hadn't answered, Harry had said hastily that she must have just never thought of it. And then, finally, he'd fled the room.

Lily Evans probably *hadn't* thought of it, that was the sad thing. Harry knew that other people had a tendency to not-think about painful subjects, in the same way they had a tendency not to deliberately rest their hands on red-hot stove burners; and Harry was starting to suspect that most Muggleborns rapidly acquired a tendency to not-think about their family, who were all going to die before they reached their first century anyway.

Not that Harry had any intention of letting *that* happen, of course.

And then it was late in the day on December 24th and they were driving off for their Christmas Eve dinner.

STATUS DIFFERENTIALS

The house was huge, not by Hogwarts standards, but certainly by the standards of what you could get if your father was a distinguished professor trying to live in Oxford. Two stories of brick gleaming in the setting sun, with windows on top of windows and one tall window that went up much further than glass should go, that was going to be one huge living room...

Harry took a deep breath, and rang the doorbell.

There was a distant call of "Honey, can you get it?"

This was followed by a slow patter of approaching steps.

And then the door opened to reveal a genial man, of fat and rosy cheeks and thinning hair, in a blue button-down shirt straining slightly at the seams.

"Dr. Granger?" Harry's father said briskly, before Harry could even speak. "I'm Michael, and this is Petunia and our son Harry. The food's in the magical trunk," and Dad made a vague gesture behind him - not quite in the direction of the trunk, as it happened.

"Yes, please, come in," said Leo Granger. He stepped forward and took the wine bottle from the Professor's outstretched hands, with a muttered "Thank you," and then stepped back and waved at the living room. "Have a seat. And," his head turning down to address Harry, "all the toys are downstairs in the basement, I'm sure Herm will be down shortly, it's the first door on your right," and pointed toward a hallway.

Harry just looked at him for a moment, conscious that he was blocking his parents from coming in.

"Toys?" said Harry in a bright, high-pitched voice, with his eyes wide. "I love toys!"

There was an intake of breath from his mother behind him, and Harry strode into the house, managing not to stomp too hard as he walked.

The living room was every bit as large as it had looked from outside, with a huge vaulted ceiling dangling a gigantic chandelier, and a Christmas tree that must have been murder to maneuver through the door. The lower levels of the tree were thoroughly and carefully decorated in neat patterns of red and green and gold, with a newfound sprinkling of blue and bronze; the heights that only a grownup could reach were carelessly, randomly draped with strings of lights and wreaths of tinsel. A hallway extended until it terminated in the cabinetry of a

kitchen, and wooden stairs with polished metal railings stretched up toward a second floor.

"Gosh!" Harry said. "This is a big house! I hope I don't get lost in here!"

Dr. Roberta Granger was feeling rather nervous as dinner approached. The turkey and the roast, their own contributions to the common project, were steadily cooking away in the oven; the other dishes were to be brought by their guests, the Verres family, who had adopted a boy named Harry. Who was known to the wizarding world as the Boy-Who-Lived. And who was also the only boy that Hermione had ever called "cute", or noticed at all, really.

The Verreses had said that Hermione was the only child in Harry's age group whose existence their son had ever acknowledged in any way whatsoever.

And it might've been jumping the gun just a little; but both couples had a sneaking suspicion that wedding bells might be in the offing a few years down the road.

So while Christmas Day would be spent, as always, with her husband's family, they'd decided to spend Christmas Eve meeting their daughter's possible future in-laws.

The doorbell rang while she was right in the middle of basting the turkey, and she raised her voice and shouted, "*Honey, can you get it?*"

There was a brief groan of a chair and its occupant, and then there was the sound of her husband's heavy footsteps and the door swinging open.

"Dr. Granger?" said an older man's brisk voice. "I'm Michael, and this is Petunia and our son Harry. The food's in the magical trunk."

"Yes, please, come in," said her husband, followed by a muttered "Thank you" that indicated some sort of present had been accepted, and "Have a seat." Then Leo's voice altered to a tone of artificial enthusiasm, and said, "And all the toys are downstairs in the basement, I'm sure Herm will be down shortly, it's the first door on your right."

There was a brief pause.

Then a young boy's bright voice said, "Toys? I love toys!"

STATUS DIFFERENTIALS

There was the sound of footsteps entering the house, and then the same bright voice said, "Gosh! This is a big house! I hope I don't get lost in here!"

Roberta closed up the oven, smiling. She'd been a bit worried about the way Hermione's letters had described the Boy-Who-Lived - though certainly her daughter hadn't said anything indicating that Harry Potter was *dangerous*; nothing like the dark hints written in the books Roberta had bought, supposedly for Hermione, during their trip to Diagon Alley. Her daughter hadn't said much at all, only that Harry talked like he came out of a book, and Hermione was studying harder than she ever had in her life just to stay ahead of him in class. But from the sound of it, Harry Potter was an ordinary eleven-year-old boy.

She got to the front door just as her daughter came clattering frantically down the stairs at a speed that didn't look safe at all, Hermione had claimed that witches were more resistant to falls but Roberta wasn't quite sure she believed that -

Roberta took in her first sight of Professor and Mrs. Verres, who were both looking rather nervous, just as the boy with the legendary scar on his forehead turned to her daughter and said, now in a lower voice, "Well met on this fairest of evenings, Miss Granger." His hand stretched back, as though offering his parents on a silver platter. "I present to you my father, Professor Michael Verres-Evans, and my mother, Mrs. Petunia Evans-Verres."

And as Roberta's mouth was gaping open, the boy turned back to his parents and said, now in that bright voice again, "Mum, Dad, this is Hermione! She's really smart!"

"*Harry!*" hissed her daughter. "Stop that!"

The boy swiveled again to regard Hermione. "I'm afraid, Miss Granger," the boy said gravely, "that you and I have been exiled to the labyrinthine recesses of the basement. Let us leave them to their adult conversations, which would no doubt soar far above our own childish intellects, and resume our ongoing discussion of the implications of Humean projectivism for Transfiguration."

"Excuse us, please," said her daughter in a very firm tone, and grabbed the boy by his left sleeve, and dragged him into the hallway - Roberta swiveled helplessly to track them as they went past her, the boy

gave her a cheery wave - and then Hermione pulled the boy into the basement access and slammed the door behind her.

"I, ah, I apologize for..." said Mrs. Verres in a faltering voice.

"I'm sorry," said the Professor, smiling fondly, "Harry can be a bit touchy about that sort of thing. But I expect he's right about us not being interested in their conversation."

Is he dangerous? Roberta wanted to ask, but she kept her silence and tried to think of subtler questions. Her husband beside her was chuckling, as if he'd found what they'd just seen funny, rather than frightening.

The most terrible Dark Lord in history had tried to kill that boy, and the burnt husk of his body had been found next to the crib.

Her possible future son-in-law.

Roberta had been increasingly apprehensive about giving her daughter over to witchcraft - especially after she'd read the books, put the dates together, and realized that her magical mother had probably been killed at the height of Grindelwald's terror, *not* died giving birth to her as her father had always claimed. But Professor McGonagall had made other visits after her first trip, to "see how Miss Granger is doing"; and Roberta couldn't help but think that if Hermione said her parents were being troublesome about her witching career, something would be done to *fix* them...

Roberta put her best smile on her face, and did what she could to spread some pretended Christmas cheer.

The dining room table was much longer than six people - er, four people and two children - really needed, but all of it was draped with a tablecloth of fine white linen, and the dishes had been needlessly transferred to fancy serving plates, which at least were of stainless steel rather than real silver.

Harry was having a bit of trouble concentrating on the turkey.

The conversation had turned to Hogwarts, naturally; and it'd been obvious to Harry that his parents were hoping that Hermione would trip up and say more about Harry's school life than Harry had been

STATUS DIFFERENTIALS

telling them. And either Hermione had realized this, or she was just automatically steering clear of anything that might prove troublesome.

So *Harry* was fine.

But unfortunately Harry had made the mistake of owling his parents with all sorts of facts about Hermione that she hadn't told her *own* parents.

Like that she was general of an army in their after-school activities.

Hermione's mother had looked very alarmed, and Harry had quickly interrupted and done his best to explain that all the spells were stunners, Professor Quirrell was always watching, and the existence of magical healing meant that lots of things were much less dangerous than they sounded, at which point Hermione had kicked him hard under the table. Thankfully Harry's father, who Harry had to admit was better than him at some things, had announced with firm professorial authority that he hadn't worried at all, since he couldn't imagine children being allowed to do it if it was dangerous.

That wasn't why Harry was having trouble enjoying dinner, though.

...the problem with feeling sorry for yourself was that it never took any time at all to find someone else who had it worse.

Dr. Leo Granger had asked, at one point, whether that nice teacher who'd seemed to like Hermione, Professor McGonagall, was awarding her lots of points in school.

Hermione had said yes, with an apparently genuine smile.

Harry had managed, with some effort, to stop himself from icily pointing out that Professor McGonagall would never show favoritism to any Hogwarts student, and that Hermione was getting lots of points because she'd earned *every, single, one*.

At another point, Leo Granger had offered the table his opinion that Hermione was very smart and could have gone to medical school and become a dentist, if not for the whole witch business.

Hermione had smiled again, and a quick glance had prevented Harry from suggesting Hermione might also have been an *internationally famous scientist*, and asking whether that thought would've occurred to the Grangers if they'd had a *son* instead of a *daughter*, or if it was unacceptable either way for their offspring to do better than them.

But Harry was rapidly reaching his boiling point.

And becoming a *lot* more appreciative of the fact that his own father had *always* done everything he could to support Harry's development as a prodigy and *always* encouraged him to reach higher and *never* belittled a single one of his accomplishments, even if a child prodigy was still just a child. Was this the sort of household he could have ended up in, if Mum had married Vernon Dursley?

Harry was doing what he could, though.

"And she's really beating you in *all* your classes except broomstick riding and Transfiguration?" said Professor Michael Verres-Evans.

"Yes," Harry said with forced calm, as he cut himself another bite of Christmas Eve turkey. "By solid margins, in most of them." There were other circumstances under which Harry would have been more reluctant to admit that, which was why he hadn't gotten around to telling his father until now.

"Hermione has always been quite good in school," said Dr. Leo Granger in a satisfied tone.

"Harry competes at the national level!" said Professor Michael Verres-Evans.

"Dear!" said Petunia.

Hermione was giggling, and that wasn't making Harry feel any better about her situation. It didn't seem to bother Hermione and *that bothered Harry*.

"I'm not embarrassed to lose to her, Dad," Harry said. Right at this moment he wasn't. "Did I mention that she memorized all her schoolbooks before the first day of class? And yes, I tested it."

"Is that, ah, *usual* for her?" Professor Verres-Evans said to the Grangers.

"Oh, yes, Hermione's always memorizing things," said Dr. Roberta Granger with a cheerful smile. "She knows every recipe in all my cookbooks by heart. I miss her every time I make dinner."

Judging by the look on his father's face, Dad was feeling at least some of what Harry felt.

"Don't worry, Dad," Harry said, "she's getting all the advanced material she can take, now. Her teachers at Hogwarts know she's smart, *unlike her parents!*"

STATUS DIFFERENTIALS

His voice had risen on the last three words, and even as all faces turned to stare at him and Hermione kicked him again, Harry knew that he'd blown it, but it was too much, just way too much.

"Of course we know she's smart," said Leo Granger, starting to look offended at the child who'd had the temerity to raise his voice at their dinner table.

"You don't have the tiniest idea," said Harry, the ice now leaking into his voice. "You think she reads a lot of books and it's cute, right? You see a perfect report card and you think it's good that she's doing well in class. Your daughter is the most talented witch of her generation and the brightest star of Hogwarts, and someday, Dr. and Dr. Granger, the fact that you were her parents will be the only reason that history remembers you!"

Hermione, who had calmly got up from her seat and walked around the table, chose that moment to grab Harry's shirt by the shoulder and pull him out of his chair. Harry let himself be pulled, but as Hermione dragged him away, he said, raising his voice even louder, "It is entirely possible that in a thousand years, the fact that Hermione Granger's parents were dentists will be the only reason anyone remembers dentistry!"

Roberta stared at where her daughter had just dragged the Boy-Who-Lived out of the room with a patient look upon her young face.

"I'm terribly sorry," said Professor Verres with an amused smile. "But please don't worry, Harry always talks like that. Aren't they just like a married couple already?"

The frightening thing was that they *were*.

Harry had been expecting a rather severe lecture from Hermione.

But after Hermione pulled them into the basement access and closed the door behind them, she'd turned around -

- and was smiling, genuinely so far as Harry could tell.

"Please don't, Harry," she said in a soft voice. "Even though it's very nice of you. Everything's fine."

Harry just looked at her. "How can you stand it?" he said. He had to keep his voice quiet, they didn't want the parents to hear, but it rose in pitch if not in volume. "*How can you stand it?*"

Hermione shrugged, and said, "Because that's the way parents *should* be?"

"No," Harry said, his voice low and intense, "it's not, my father *never* puts me down - well, he *does*, but never like that -"

Hermione held up a single finger, and Harry waited, watching her search for words. It took her a while before she said, "Harry... Professor McGonagall and Professor Flitwick like me because I'm the most talented witch of my generation and the brightest star of Hogwarts. And Mum and Dad don't know that, and you'll never be able to tell them, but they love me anyway. Which means that everything is just the way it should be, at Hogwarts and at home. And since they're *my* parents, Mr. Potter, *you* don't get to argue." She was once again smiling her mysterious smile from dinnertime, and looking at Harry very fondly. "*Is* that clear, Mr. Potter?"

Harry nodded tightly.

"Good," said Hermione, and leaned over and kissed him on the cheek.

The conversation had only just gotten started again when a distant high-pitched yelp floated back to them,

"*Hey! No kissing!*"

The two fathers burst out in laughter just as the two mothers rose up from their chairs with identical looks of horror and dashed toward the basement.

When the children had been brought back, Hermione was saying in an icy tone that she was never going to kiss Harry ever again, and Harry was saying in an outraged voice that the Sun would burn down to a cold dead cinder before he let her get close enough to try.

Which meant that everything was just the way it should be, and they all sat back down again to finish their Christmas dinner.

CHAPTER 37

INTERLUDE: CROSSING THE BOUNDARY

It was almost midnight.

Staying up late was simple enough for Harry. He just hadn't used the Time-Turner. Harry followed a tradition of timing his sleep cycle to make sure he was awake for when Christmas Eve turned into Christmas Day; because while he'd never been young enough to *believe* in Santa Claus, he'd once been young enough to doubt.

It would have been nice if there *had* been a mysterious figure who entered your house in the night and brought you presents...

A chill went down Harry's spine then.

An intimation of something dreadful approaching.

A creeping terror.

A sense of doom.

Harry sat bolt upright in bed.

He looked at the window.

"*Professor Quirrell?*" Harry shrieked very quietly.

Professor Quirrell made a slight lifting gesture, and Harry's window seemed to fold into its frame. At once a cold gust of winter blew into the room through the gap, along with a scant few flakes of snow from a sky spotted with grey night-clouds, amid the black and stars.

"Fear not, Mr. Potter," said the Defense Professor in a normal voice. "I have Charmed your parents asleep; they shall not wake until I have departed."

"No one's supposed to know where I am!" said Harry, still keeping the shriek quiet. "Even owls are supposed to deliver my mail to Hogwarts, not here!" Harry had agreed to that willingly; it would be silly if a Death Eater could win the whole war at any time just by owling him a magically triggered hand grenade.

Professor Quirrell was grinning, from where he stood in the backyard beyond the window. "Oh, I shouldn't worry, Mr. Potter. You *are* well protected against locating Charms, and no blood purist is likely to think

of consulting a phone book." His grin grew wider. "And it did take considerable effort to cross the wards that the Headmaster put around this house - though of course anyone who knew your address could simply wait outside and attack you the next time you left."

Harry stared at Professor Quirrell for a while. "What are you *doing* here?" Harry said finally.

The smile left Professor Quirrell's face. "I've come to apologize, Mr. Potter," the Defense Professor said quietly. "I should not have spoken to you so harshly as I -"

"Don't," Harry said. He looked down at the blanket that he was clutching around his pajamas. "Just don't."

"Have I offended you that much?" said Professor Quirrell's quiet voice.

"No," Harry said. "But you *will* if you apologize."

"I see," said Professor Quirrell, and in an instant his voice grew stern. "Then if I am to treat you as an equal, Mr. Potter, I should say that you have gravely violated the etiquette that holds between friendly Slytherins. If you are not currently playing the game against someone, you *must* not meddle in their plans like that, not without asking them *before*. For you do not know what their true design may be, nor what stakes they may lose. It would mark you as their enemy, Mr. Potter."

"I'm sorry," Harry said, in just the same quiet tone that Professor Quirrell had used.

"Apology accepted," said Professor Quirrell.

"But," Harry said, still quietly, "you and I really must speak further on politics, at some point."

Professor Quirrell sighed. "I know you dislike condescension, Mr. Potter -"

That was a bit of an understatement.

"But it would be even more condescending," said Professor Quirrell, "if I were not to state it clearly. You are missing some life experience, Mr. Potter."

"And does everyone who has sufficient life experience agree with you, then?" said Harry calmly.

"What good is life experience to someone who plays Quidditch?" said Professor Quirrell, and shrugged. "I think you will change your mind in

INTERLUDE: CROSSING THE BOUNDARY

time, after every trust you place has failed you, and you have become cynical."

The Defense Professor said it as though it were the most ordinary statement in the world, framed against the black and the stars and the cloud-spotted sky, as one or two tiny snowflakes blew past him in the biting winter air.

"That reminds me," said Harry. "Merry Christmas."

"I suppose," said Professor Quirrell. "After all, if it is *not* an apology, then it must be a Christmas gift. The very first one I have ever given, in fact."

Harry hadn't even started yet on learning Latin so he could read the experimental diary of Roger Bacon; and he hardly dared open his mouth to ask.

"Put on your winter coat," said Professor Quirrell, "or take a warming potion if you have one; and meet me outside, under the stars. I shall see if I can maintain it a little longer this time."

It took Harry a moment to process the words, and then he was dashing for the coat closet.

Professor Quirrell kept the spell of starlight going for more than an hour, though the Defense Professor's face grew strained, and he had to sit down after a while. Harry protested only once, and was shushed.

They crossed the boundary from Christmas Eve to Christmas Day within that timeless void where Earthly rotations meant nothing, the one true everlasting Silent Night.

And just as promised, Harry's parents slept soundly all through it, until Harry was safely back in his room, and the Defense Professor had gone.