

The Naturalist

By Adrian Tchaikovsky

The smell was a thin acid reek even from the top of the stairs: the biting, chemical scent of the preservatives. Kaelia paused to steel herself, knowing that it would be far worse below in Dinsawl's workroom and that, for perhaps a minute and a half, she would be all but unable to breath, until the smell had bludgeoned her nose into insensibility. The only consolation was that the place would smell a good deal worse *without* the preservative: better the chemicals than the overwhelming perfume of massed decay.

She still found it hard to believe that the man would voluntarily subject himself to this nasal assault on a daily basis, but then it was a Spider-kindens article of faith that their senses were keener and more refined than most other kindens's. Perhaps to Dinsawl it was all just a minor unpleasantness. Certainly the city of Collegium had always seemed unnecessarily pungent in the long, hot summers, especially on days like this when barely a breeze came in off the sea to relieve the stagnant air.

Mustering all the fortitude she possessed she began her journey into the darkness. That was how she thought about it, anyway. In truth the cellars of the Great College were cheerily lit with some manner of artificial fire that the Beetles had devised, tame little flickers locked behind glass. Most of the College's cellars were appendices to the library or the museum wings, crammed with stacks of books and documents in various stages of cataloguing, or cluttered with potsherds, old armour and the varnished shells of long-dead animals. This particular warren, however, was reserved for areas of study like Dinsawl's, which profited from being kept cool.

In fact, on blistering days such as this, she was surprised that more of the locals weren't down in the cold rooms, but then again perhaps their noses weren't as unfeeling as all that, and the stench below had proved the worse evil than the heat above.

Certain artificers kept cold rooms for their studies, arcane matters of mechanics that, for some reason required constant cooling. However, most of the rooms here were set aside for dissections. More than once Kaelia had come down to visit Dinsawl and, glancing through an open door, seen a Beetle-kindens lecturer guiding his class through the mysteries of the human digestive system, which was enough to put anyone off their lunch. These days she had taught herself not to be so curious.

The welcome chill seeped out of the cold rooms into the corridor. Combined with the slightly unreal effect of the unwavering artificial light it always reminded Kaelia of the old stories: the kingdom beneath the earth, where all manner of ancient evils had been sealed by the great magics, and how some bold woman would inevitably be put to find a way in and rescue her beloved. The thought made her smile. *I'm a bit past that, I fear.*

She had asked Dinsawl, once, how they made it cold down here. He had given her some rambling explanation of pipes within the walls, and pumps, and some way that the clever Beetles had devised of turning water into ice. She had understood not one word of it, but her report had winged its way back home to someone with enough of a purse to hire up some Beetle engineers, and now the summer palaces of a half-dozen Aristoi houses enjoyed a reprieve from the season's excesses without even having to endure Dinsawl's smell.

She had with her two goblets, together with a bottle of wine from the far, far Deluciel vineyards, which she knew travelled very comfortably indeed and which Dinsawl was extremely partial to. Approaching the man's room, letting the stinking air wash past her until her nose grew

numb to it, she rang the brass rim of a goblet from the stone-clad wall to let her host know she was approaching. A moment later a tousled head poked itself out from his doorway, not Dinsawl's but that of his assistant, a young Beetle-kind woman called Limer Steadry.

Steadry retreated inside to confirm their visitor's identity for her master, and Kaelia swaggered in, bracing herself for the sight of Dinsawl's workroom, which always seemed to her as though someone had let off some Beetle-kind explosive in the midst of a taxidermist's.

The study of the natural world was by no means a great preoccupation of the Beetle-kind, coming far behind history and artifice and philosophy. The Beetles, or at least those of Collegium itself, preferred to live their lives without any particularly close contact with the animal world, save those parts of it that might contribute, on a day-to-day basis, to their diet. However, it was unavoidable that, given the number of enquiring minds that the College hosted, some number of them would turn to matters of natural history and, being Collegiate Beetles, that they would in turn divide themselves into opposing schools of thought.

By far the more fashionable kind of naturalist was the Observationalist, as Kaelia understood the terminology. Observationalists held that the true study of animals was that of their behaviour. There were various sub-divisions of Observationalist, she had been told. The most fervent applied themselves in the field, travelling great distances to sketch and study the objects of their admiration. Those lacking either the funds or the courage for such sport would arrange for isolated creatures to be brought to them, to be prodded and poked and tested, and occasionally released onto Collegium's streets by pranking students. Still more Observationalists paid pittance amounts for the unreliable accounts of travellers, and based their academic studies upon those. Dinsawl had noted with waspish humour that, as the latter two wastrel breeds spent far more time at the College than the former diligent one, and therefore had more influence, the entire Observationalist credo was based on error and hearsay, and it was no wonder that the science of natural history was in its current parlous state.

Dinsawl was an Anatomist, a little-regarded subset of naturalist. His claim was that true knowledge of the animal world could only be had by cutting it into as many small pieces as possible, or so Kaelia had surmised. Recent reports, admittedly, had stung her into a keener appreciation for what he had meant.

"My dear Master Dinsawl," she declared, setting down her wine and goblets. She had known Dinsawl for more than a year now, but the contents of his workroom still gave her a shudder of discomfort. The cold walls were lined with sturdy shelves, and the shelves themselves bore a regiment of clear jars, some as small as her thumb, others bigger than her head. Beneath the lowest shelves were reinforced tanks, their thick glass warped and cloudy enough to obscure their contents. Each held a specimen, and some held many. There were so many dead creatures arrayed in their ranks about the room that Kaelia sometimes had trouble believing that any live ones were left beyond it.

In a single glance she took in mantids, scorpions, a dozen different kinds of beetles, a lacewing, five small ants arranged in size from an inch to a foot long, a harvestman with its dot of a body caged by the delicate lace of its half-folded legs, earwigs and millipedes and the sad, drowned bodies of butterflies. They hung suspended in their preservative solution, buoyed up enough by the thick liquid that a single leg-tip at the jar's base would suffice to support the entire cadaver's weight. If someone walked too close to a wall, the slight vibrations of their footsteps would cause each captive to stir minutely, their compound eyes seeming to search the room for their tormentor. Despite this, for Kaelia the most upsetting quality to this necrotic menagerie was the way the preservative itself had leached the colour from each captive, bleaching them a

uniform pallid white like fishbellies. It was as though Dinsawl had somehow discovered, in some lightless reach of the deep dark, an entire mirror bestiary that echoed all the forms of the daylight world but that had never seen the sun.

But she had visited here plenty of times and, although her imagination occasionally twitched, she could recline amongst these pickled prisoners with equanimity.

Master Archer Dinsawl, for what it was worth Collegium's pre-eminent Anatomist natural historian, turned from his workbench and beamed at her. His parents, Kaelia had long ago decided, had been somewhat optimistic with his warlike monicker. She had never seen a man less likely to take up the bow. Dinsawl was a broad-bodied man who gave the impression that, just as he spent his days in the disassembling of animals, some greater scholar had somehow assembled him from body-parts intended for very different men. He had the heavy, stocky torso of a wrestler, out of proportion to all the rest of him. A scrawny neck thrust his head awkwardly forwards from between his shoulders and his arms and legs were surprisingly thin. Countless days of bending close to his specimens, making delicate incisions and dissections, had given him a hunched pose, his knees always slightly bent, his arms held with the elbows crooked out and his large, long-fingered hands close to his chest. His face was pleasantly regular, mahogany-dark and bespectacled. He was somewhere in his late middle years, but these Beetle-kindens always looked older than they really were, to Spider eyes.

Not for the first time she failed to suppress the image of Dinsawl, after his eventual demise, being interred floating in an enormous belljar, preserved for all eternity until one of his successors should come to dissect him.

To his eyes she would look younger than her true age, although she had her ritual of morning cosmetics to thank for that. Still, by the best outward appearance the two of them were a close enough match, two scholars who had applied themselves sufficiently to their disciplines that the prime of their lives had passed by unnoticed.

"My dear Mistress Kaelia, once again you grace us with your company. We are very lucky, Steady, aren't we?" Dinsawl exclaimed.

His assistant made some muted affirmation. That Kaelia had brought only two goblets yet again was no doubt a bitter pill.

Dinsawl was already washing his hands, his half-attacked specimen abandoned on the work-bench. Kaelia saw that it was a whip-scorpion, its pinned-out legs spanning almost two feet across. For a moment her imagination rebelled, conjuring the image of a pet her family had doted on, when she had been young. *This squeamishness is unfit for someone of your profession*, she reminded herself sternly.

"Now, to what do we owe the considerable pleasure? What brings a distinguished lecturer in fine arts to my humble workshop?" Dinsawl enquired. He had stripped off his stained tan smock to reveal paler woollen robes, the sleeves rolled up at the elbow. Spending so much time down here, he was one of the few people in Collegium who kept a cold-weather wardrobe. He was also one of the few Beetles who had mastered unfailing and effortless good manners which made up somewhat for the preservative's pervading odour.

"You have been down here for a good tenday without coming up for air, Master Dinsawl," Kaelia chided him. "Some of your colleagues thought that you might have died." *And pickled yourself*, the immediate thought came, and she clamped down upon it.

"Alive, alive and well, Mistress Kaelia." He had a remarkably warm smile, and she returned it easily. "However, you dissemble. I'll wager my colleagues have a little more than that

to say about me?" His bantering tone could not keep the hope out entirely. A little-marked man toiling in a little-regarded field, she knew he was desperate for recognition.

"Perhaps I've heard something. You have made some great discovery, down here amongst the dead?"

"The dead, yes," he confirmed happily. "You can watch a cricket chirp all day long, yes indeed, but you can't know *how* it chirps until you look within it."

"At which point it will never chirp again," she noted sadly. "However, there are always more crickets, I suppose."

"You are, as ever, correct. And correct, in equal magnitude, when you speak of a great discovery. I am at the point of organising my proofs and setting it down. A small matter, to the greater flow of humanity yes, but a punch in the eye, if I might use the somewhat violent image, for the Observationalists. Yes, we shall see a swell of followers for the Anatomist cause, when I present my paper."

"Why Master Dinsawl," she told him, "I have all respect for your devotion, but your opponents will still say that to know a thing best you must know how it moves, how it acts, its society and work. Surely knowing how to take one apart, they will say, is no great matter. Not that I agree, necessarily, but you know what they will say." She measured out a little wine into each goblet.

"Let them say it. I will rock the foundations of their science."

"You have learnt, perhaps, to put your subjects back together and restore them to life?" she needled gently, with a brief, sad thought of the piecemeal whip-scorpion.

He chuckled at that. "To listen to our medical anatomists, they are within reach of doing the same for a human cadaver, on any given day. No, I have humbler ambitions. A matter of classification is all." He picked up on her expression immediately and, even as he accepted the goblet from her, was waving his free hand in admonition.

"I know, I know, but it's *important*, my dear. Just as you and yours must needs group your art into schools and styles and whatnot, so it is that we naturalists, all of us, are united in our belief that there is an order to the natural world. There are similarities and differences to animals that divide and subdivide them into nations and tribes and families. There is a cartography of the animal world, my dear, and where to draw the borders is a matter of constant debate." He smiled, all pomp abruptly banished. "We have so little, Mistress Kaelia. Allow us our tiny battles."

"Well, well," she said, managing a laugh. "I suppose I shall permit them. So, you are about to marshal your troops and redraw some boundaries, are you?"

"Indeed I am, and in a manner that will make the Observationalists tear up their maps, and no mistake," he assured her. "You may not be aware, but for some time now there have been a few of the grander divisions that all naturalists have accepted." He had adopted a self-consciously bombastic tone now, playing the academic grandee. "Here we have the nation of true insects, and somewhat distant is the nation of spiders, here the undiscovered country of centipedes and millipedes and other things whose parts vex the Anatomist, initially in their proliferation and subsequently in their tedious uniformity. More distant still, offshore we might say, are the kingdoms of the marine insects, the lobsters and gribbles and what have you. A naturalist, I assure you, would take no issue with any of this, yes?"

"Ah... yes?" she echoed, making plain her uncertainty.

"Ah, *today*, yes! Tomorrow, no! I am changing the boundaries, as of this moment. Or as of whenever I finish my paper, anyway. The Observationalists are wrong. The Anatomists shall

rub their noses in it. True science triumphs over myth yet again. I present to you the humble scorpion."

He indicated one of his jars in which a ghost-white example of the breed hung, claws-down, its tail coiled forever in useless threat.

"A dead scorpion?" she exclaimed. "Why Master Dinsawl, you spoil me." Within her, her sense of unease stirred.

"I have disassembled some two score of scorpions of all kinds, these last few months," he explained to her. "I have anatomised them, by word and by picture, every part of them."

"Surely deserving of some kind of award in itself," she jibed.

"Ah, but wait. Spiders, also, I have had on my table." The look he gave her was perfection, academic detachment almost but not entirely hiding a precisely calculated leer. "Silk-spiders, jumping spiders, hunting spiders, recluses, orb webs, widows, quite the variety. They have been reduced to their component segments. They have no secrets from me."

She refilled the goblets carefully. "And...?"

"It is a simple thing, my dear - for an Anatomist. A scholar could Observe all he wanted, and it would avail him nothing. I redraw the boundaries. Scorpions are spiders, or the other way around."

Kaelia blinked at him. "But Master Dinsawl, scorpions are land-lobsters, surely. They have ten legs and pincers. Or else they are some other thing entirely. What else has a sting like a scorpion, after all?"

"No, no no," Dinsawl fussed, obviously delighted to be able to expound. "Superficial, my dear. An Observationalist argument."

"Master Dinsawl, how can it be superficial? Lobsters have claws, scorpions have claws, spiders... not so much." She managed a jovial look, imitating snapping pincers with her fingers.

"But they are not claws, my dear. Rather call them *teeth*. I can show you the most carefully annotated diagrams to support it. The claws of a lobster are arms and hands, but a scorpion is a more inventive fellow. He has made his mandibles into a new set of arms. A lobster has ten limbs, a scorpion only eight and a great deal of dental cutlery. However, his more regular teeth tell a clear story, to those who have the wit to read it. The fangs of a spider, you see, are the veritable siblings of the fangs of the scorpion, or of our poor friend the whip-scorpion whom you found me interrogating. An Anatomist values such similarities, for they show us where the true borders should be drawn."

"You are certain of this, are you?" Kaelia asked. "Surely your opponents will have a dozen arguments, all equally persuasive to the general herd of academia?"

"I think not," he said, with quiet satisfaction. "Raise the barricades as they may, my proofs shall batter them down. A new dawn, my dear, a new dawn."

She swilled the wine in her glass distractedly. "Master Dinsawl, have you considered that this news may prove...unpopular? I don't mean with the Observationalists, I think we can take that as a given. I mean to a wider audience."

"I wouldn't have thought a wider audience would much care, much as I'd have it otherwise," he said glumly. "No, I'll carve my tiny fiefdom in the halls of naturalism, and let the rest of the College do what they will."

"I'm not even thinking of the College as such," she said, picking her way carefully. "Master Dinsawl, have you met many Scorpion-kinde?"

"Not in person, not this far west, but I'm appraised of them," he replied.

"You would characterise them as...?"

"Oh, barbarous louts, the lot of them," he agreed. "Thugs, raiders, slavers, exponents of brute force over all else, yes, I know."

She remained still, watching, waiting for him to meet her half way.

"Bah!" he exclaimed. "Really, my dear, I'm not talking about *kinden*. Kinden have nothing to do with it. By *anatomical* rights our human nation shares a border with the principality of goats and sheep!"

"Yes, I understand that, *but...*" her level stare secured his full attention, "most people do not see the world as an Anatomist does, Master Dinsawl. You are Beetle-*kinden*, and you cannot divorce yourself from those beetles up on your shelves. We see these creatures as reflections of us. The Mantis-*kinden* hold their beasts in high regard. The Ant-*kinden* see their herds working strong and hard and with a single mind, and they see these qualities mirrored in themselves. The Fly-*kinden* see a bluebottle dart and dance in the air, and know it as one of their own. When some Collegium malcontent wishes to satirise his betters then I'll give you good odds he represents them in his pamphlets as the animal their *kinden* takes its name from. Our very Art is imitation of these species that you so easily pick apart. A spider is patient, elegant and ingenious, a weaver of beauty. A scorpion is a brutal hunter, savage in sting and claw, and the Scorpion-*kinden* are the same, and what does it matter who gave the bad name to which? It is enough that when you say the word 'scorpion,' that image will come to mind whether you speak of beast or man. A spider is not a scorpion, just as a Spider is not a Scorpion." Her emphasis made the different meanings clear.

He waved his hands irritably. "No, no, this is *science*. I am Beetle-*kinden*. I am not a *beetle*, to crawl on the ground or push a heavy load. That there is a link between my *kinden* and the insect is undeniable, for the Art is there to prove it, but that is a talent that we, as humans, have learned, which is why we are masters of the natural world, and not the other way round. The fact remains that beetles are animals, and subject to science. The fact remains that scorpions and spiders are close neighbours within the same nation of animals. The truth is the truth, my dear. It's not *political*."

She took a deep breath, feeling the last sense of the chemical air rasp at the back of her throat. "No doubt you're right, Master Dinsawl, but I do hope that you know what you're doing."

Afterwards she was more affected than she had thought. Standing in that odious workroom, with a thousand glassy witnesses, she felt as unhappy as she had ever been since childhood.

She carefully retrieved the goblet from where Dinsawl had dropped it, tipped the bottle so it spilled half its contents over the floor.

There was a slight shifting from Limer Steadry, who was staring wide-eyed at her master's body. "What... what will happen now?"

"I would like to think that his colleagues will institute a respectable period of mourning," stated Kaelia sombrely. "However your *kinden* never did know how to mourn, and he never had the recognition he deserved, and so more likely they'll just send him to the earth with as little accolade as they think they can get away with."

"No but... they'll know," Steadry said awkwardly. "A murder..."

"Murder? Nonsense," Kaelia snapped. "After all, hasn't he been convinced that he had some great discovery for tendays? And now it's come to nothing, he's a broken man. Small wonder that, when your back was turned, he mixed himself a special bottle of wine and ensured his own demise. Poor Archer Dinsawl. If there's any justice some of his colleagues may at least feel ashamed of the way that they snubbed him."

“You speak as if you liked him,” Steadry accused her.

Kaelia met the young Beetle woman’s gaze without flinching. “I liked him more than any other Beetle I ever met. He was good company. He had that worst of flaws, though, slightly less rare in your kinden than any other: he was too fond of truth. Nothing good ever comes of that.”

Steadry visibly forced herself to stand over the body. “The poison, they’ll ask where he got it.”

“Hardly,” Kaelia corrected her. “What else would the man use, in his most desperate hour, but his own beloved preservative? Remarkable, how something brewed to maintain dead flesh should be anathema to the living. I suggest you come in and discover the body by the next bell, having begun to wonder why he had not sought you out before.”

Steadry’s mouth was opening and closing, but she was sharp enough to catch the purse that Kaelia threw her.

“Don’t draw attention to yourself in the spending of it,” the Spider warned her.

“What... what happens to me now?” asked the Beetle woman faintly.

“You’re a bright girl. You’ve proved that by your diligence in keeping me apprised of Dinsawl’s progress. I imagine that your career will advance shortly. You will find some patron or other within the College suddenly takes an interest in you. At some point in time, perhaps tomorrow, perhaps next year, a colleague of mine will make herself known to you. You will start to report to them, and do what they say. If you decide that anyone else needs to know what has happened here then your career as an academic is likely to be cut very short.”

“But you... You’re just leaving me?”

“I am leaving all of Collegium,” Kaelia stated. She looked back at the corpse, the one dead thing in the room that time would have a natural hold on. “I have done a cruel, wrong thing, and it has cut me deeper than you can know, and I need to return to my own people to regain my perspective.”

Her sense of bitter misery stayed with her as she climbed up from the cellars, and only grew as she left the College itself. Seven years ago another Beetle naturalist had made the same discovery as poor Dinsawl, but that man had possessed the acumen to bring the news secretly to the Spider-kindens Aristoi. He had been well rewarded for his discretion, and the shameful conspiracy of natural history had remained a secret. Ever since then, however, one Spider house or another had maintained a spy in the College, and now their caution had proved justified.

But Kaelia knew that all she had bought, with his life, was another turn of the hourglass. The discovery would get out eventually, some other academic springing on the world before anyone could dissuade him, and then... the way that others looked at the Spider-kindens would be forever tarnished, by a small but intolerable degree, all her work would be undone, and poor Archer Dinsawl would still be dead.