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The University of Southern Mississippi

EXPLORATIONS: FIVE SCIENCE FICTION STORIES

by

Daniel Joseph Pinney

Abstract of a Dissertation  
Submitted to the Graduate School  
of The University of Southern Mississippi  
in Partial Fulfillment of the Requirements  
for the Degree of Doctor of Philosophy

December 2013

## ABSTRACT

### EXPLORATIONS: FIVE SCIENCE FICTION STORIES

by Daniel Joseph Pinney

December 2013

These stories explore a universe populated by the stuff of space opera—enormous space stations, mysterious alien artifacts, starships and terraforming and emission nebulae, a human civilization that over millennia has spread across the galaxy. These explorations are not conducted by the usual swashbuckling heroes of space opera, however, but rather by the sorts of people who would have to live and make a living in such a future.

The perspectives from which this future is explored include those of an asteroid miner who loses his ship even as he is discovering the wonders of art, a man whose misuse of neurological technology has robbed him of his memories but left him with skills and capabilities that he might prefer not to have, an innocent apprentice commercial attaché who comes face to face with a terrible decision that offers the solution to a banal contractual dispute, a planetary engineer turned con artist who is at the end of his life offered the opportunity to finally become what he had dreamed of being in his youth, and a young contract lawyer who discovers that the letter of the law is far less clear-cut than her studies had led her to believe.

These stories are explorations, not only of this future and the characters who live there, but also of science fiction as a genre and the creative process by which such a future as is depicted here gets created, or explored, or discovered.

The University of Southern Mississippi

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A Dissertation  
Submitted to the Graduate School  
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Approved:

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Director

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Dean of the Graduate School

December 2013

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2013

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I also want to thank the other faculty I've had the good fortune to work with, who have done enormous amounts to help me become a better scholar and a better teacher, and who have helped me in many other ways as well: Ellen Weinauer, Joyce Inman, Sheldon Walcher, Nicole Jordan, Luis Iglesias, Monika Gehlawat, Charles Sumner and the late and very much lamented Ken Watson. Thank you all so much.

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## TABLE OF CONTENTS

ABSTRACT .....	ii
ACKNOWLEDGMENTS .....	iii
INTRODUCTION .....	vi
THE DISTANCE IN YOUR EYES .....	1
SOME KIND OF MINDWIPE .....	28
CONTRACT LAW .....	59
PROSPECTUS .....	84
BEAUTIFUL, AND VIRTUOUS TOO .....	110

## INTRODUCTION

This is a collection of science fiction stories. As such, it seems appropriate at the outset to try to provide a commonly understood definition of the genre. Most of us know, or think we know, science fiction (or “sf,” as it is referred to by contemporary scholars and practitioners) when we see it, though we might disagree on whether or not a particular text qualifies. For myself, I would number many of the current zombie texts as sf—*28 Days Later* and *28 Weeks Later*, for example, despite the fact that they were billed as horror films. I would, meanwhile, with some confidence term the first *Star Wars* movie trilogy as a variety of fantasy, though with some caveats. When one sits down and tries to construct a sufficiently inclusive and exclusive definition of the genre, however, it turns out to be much harder to do so than one might expect. Science fiction proves, in fact, to be exceedingly slippery.

In scholarly circles, the contemporary thinking on what sf is comes in three main flavors, all of which make different assumptions about when sf as a genre came into existence. The first derives from Brian Aldiss, an award-winning sf writer and the first recipient of the International Association for the Fantastic in the Arts’s Distinguished Scholarship Award. Aldiss proposed in his 1973 *Billion Year Spree: The True History of Science Fiction* (revised and expanded by the author in 1986 and republished as *Trillion Year Spree: The History of Science Fiction*) that sf was a sort of scientific evolution of the Gothic or post-Gothic story that concerns itself with man’s existential place in a universe understood through scientific study and discourse (Aldiss 25), and that Mary Shelley’s *Frankenstein* is the genre’s inaugural text (18).

Darko Suvin, a literary scholar of the genre and the editor of the academic journal

*Science Fiction Studies* from 1972 to 1980, offers a competing definition and point of origin. He defines sf as a “literature of cognitive estrangement” (Suvin 4) that “takes off from a fictional (‘literary’) hypothesis and develops it with totalizing (‘scientific’) rigor” (6), and contends that sf did not begin with Mary Shelley. Instead, Suvin contends, Shelley exists at the end of an axis of coherent if concealed sf tradition dating back to the Greek writer Lucian of Samosata (12) in the first century AD.

The third flavor, offered by University of California at Riverside professor Gary Westfahl in *The Mechanics of Wonder: The Creation of the Idea of Science Fiction* (1998), begins with the very legitimate observation that both Aldiss’s and Suvin’s prospective definitions carry with them problems of vagueness, and that their contentions regarding the “origins” of SF can be accused with some justice of revising literary history to shore up the genre’s literary *bona fides*. As an alternative, Westfahl argues that sf can’t be discussed as a genre until a body of criticism emerges that recognizes it as a type of literature distinct from other kinds, and thus locates the origin of sf in 1926, when pulp publisher Hugo Gernsback founded *Amazing Stories* and coined and defined science fiction for the first time (Westfahl 8).

Gernsback’s “definition” of the genre is scattered through editorials contained in *Amazing Stories*, so in Westfahl’s concluding chapter he offers a summary definition derived and abstracted from Gernsback’s fragments:

Science fiction is a twentieth-century literary genre consisting of texts labeled ‘science fiction’ which are associated with explicit or implicit claims that each of its labeled texts has these three interrelated traits:

- A. It is a prose narrative;
- B. It includes language which either describes scientific facts, or explains or reflects the processes of scientific thought; and
- C. It describes or depicts some aspect or development which does not exist at the time of writing (292).

Seeming to recognize the limiting nature of this definition, however, he notes that many science fiction texts meet only two of those three criteria, and goes on to offer six different reformulations of that definition that range in length from three lines to half a page. In doing so Westfahl dramatizes, perhaps inadvertently, the overarching problem of definition.

For a functional descriptive definition of sf, it might be better to go back to Kingsley Amis, who avoided the question of origins entirely when in 1960 he proposed that sf is “is that class of prose narrative treating of a situation that could not arise in the world we know, but which is hypothesised on the basis of some innovation in science or technology, or pseudo-science or pseudo-technology, whether human or extra-terrestrial in origin” (Amis 18). He complicated this definition (helpfully, to my mind) by observing that, even at that time, the centrality of technological innovations in sf had begun to be supplanted by a primacy of political or economic changes rather than solely scientific ones. But, as Amis himself noted sardonically at the end of the definition he offered, “This is the kind of definition that demands footnotes” (18).

In certain respects, one is inclined to simply go with the formulation suggested in 1952 by Damon Knight, a renowned sf author and critic and the founder of the Science

Fiction and Fantasy Writers of America. In a column for *Astounding Stories*, Knight wryly stated “that trying to get two enthusiasts to agree on a definition of [sf] leads only to bloody knuckles ... [and that sf] means what we point to when we say it” (Knight 1). This, however, only brings us back to where we started, though it affords us the insight that even practitioners of the genre find it difficult to explain or agree on what it is that they’re doing.

Perhaps the most helpful critical source for me in wrestling with the questions of what sf is and how it works and what I’m doing when I’m writing it was Farah Mendelsohn’s introductory chapter to the *Cambridge Companion to Science Fiction*. In it, she argued that “[s]cience fiction is less a genre—a body of writing from which one can expect certain plot elements and specific tropes—than an ongoing discussion. Its texts are mutually referential” (James and Mendelsohn 1). The implication that I take from this is that works of sf, more than other types of fiction, function interrogatively. They interrogate each other, and they also interrogate themselves.

Another important observation arises in her discussion of Greg Egan’s novel, *Schild’s Ladder*, which she regards as an exemplary sf text. Specifically, she observes that that novel at different times appropriates the narrative mode of the thriller, the romance and the horror story (2-3). This suggests to me that sf is, among other things, a sort of “container” genre, in that the type of story being told is not essential to what makes an sf work what it is rather than something else.

Lastly, Mendelsohn suggests that what science fiction is and how it does what it does has something to do with how sf texts deal with setting, and how that differs from the role setting plays in other types of fiction. “No novelist in mainstream fiction would

expect description to stand in for characterization, but sf ... insists that the world be treated as character ... its story vital to the way in which the occupants live their lives” (8-9). This, for me, comes nearest the mark in terms of what I do as a writer of sf, and how I go about doing it. For me, the development of my setting and the methodology by which I go about doing it is what makes my work sf and not something else.

Setting, and the writer’s attention to establishing it, is crucially important to science fiction in a way that one doesn’t encounter in other fictional modes. This is not so much because it functions differently in the story (though it does, to an extent) as because there is much less that the writer can take for granted. In a literary story, much of how the characters and their actions will be understood by the reader (and the writer) are substantially inflected by the choice of setting.

Place, for instance, a college professor and a waitress, and their relationship, at the heart of a story; what can or is likely to happen between them will be radically different if the story is set in New York City, or in a small town in the Oklahoma panhandle, or a diner off I-80 in Nebraska, or in Napa Valley or Saudi Arabia. This is because known places carry with them a whole freight of implications that the writer can use to help shape or inflect the other elements of the story—political implications, cultural implications, economic implications, religious implications, juridical implications. The awareness and exploitation of those various implications and their interplay is part of what makes a fictional world seem plausible and real and alive.

The posing and subsequent dramatic exploration of a “what if?” question is at the heart of all stories—it is in many respects what defines a work of fiction as fiction. In realistic fiction that is set in the modern world, however, the features of the real world

setting not only influence and delimit what is possible or likely or plausible to transpire between the characters in the story. Those features also substantially define, and limit, the sorts of “what if” questions that can be posed.

I am, as a writer and as an interested and concerned actor in the world, profoundly interested in questions of politics and economics. Real world settings, however, if treated realistically, make it nearly impossible to explore questions of politics and economics on the systemic level. One can certainly write about political and economic issues, but only within the confines of how political and economic systems exist and operate in the world we live in: what has been tried by society in those arenas, what has been deemed successful and what has been deemed unworkable. By even posing a question like “What if we vetted our political candidates who stand for public office according to a baseline level of critical thinking and collaborative problem-solving skills?” and trying to explore that question in a story, one is already very close to sf territory. Likewise, if one uses the question of “What if participants in our capitalist free market actually behaved like the rational actors that so much economic theory posits them to be?” as the departure point for a story, one has placed oneself well beyond the purview of realistic fiction.

When I was writing the stories that follow this introduction, for instance, I had in the back of my mind the supplanting of the federal government by private enterprise as the main underwriter and undertaker of our space program—a prospect that was unthinkable even thirty years ago due to the economic expense that space exploration necessitates. And yet, in the last several years, for-profit companies have announced long-term endeavors to mine asteroids, and for-profit companies have taken over the resupplying of the International Space Station from NASA. So one of the “what if”

questions that informed the choices that I made regarding setting and the questions that emerged from those choices was whether private enterprise space exploration and colonization was even possible, and if so how could it be made to serve the profit motive, and what would a future interstellar society that had been built on those economic terms look like and be like to live in.

Leaving out the interstellar civilization aspect, it is my feeling that you can't write about big political and macroeconomic questions like these in terms of present-day realistic fiction. Conventional political novels may poke at these questions, but what they produce (and what it is possible for them to produce, given the constraints of setting) wind up being: ideological screeds of one sort or another (cf. Ayn Rand, most spectacularly); *romans a clef* that fictionally render real-world politics and politicians (Robert Penn Warren's fictional biography of Huey Long in *All the King's Men* or Joe Klein's rendition of the Clinton administration in *Primary Colors*); or inside-baseball satires of the processes of governing and the personalities that tend to gravitate to that profession (*Primary Colors* again, or political journalist Ana Marie Cox's 2007 novel *Dog Days*); or some combination of the three. Conventional contemporary economic novels, if such can be said to exist, are even more limited, between industry-specific critiques (Upton Sinclair's *The Jungle*, concerning the meatpacking industry, or Tom Wolfe's *Bonfire of the Vanities* in reference to Wall Street finance in the 1980s, for example) and satire of business practices and culture (Po Bronson's 1995 *Bombardiers* and Max Barry's 2006 *Company* being two of my favorite recent examples).

Science fiction, on the other hand, has a lot more freedom to address systemic questions in these areas. Ken MacLeod's 1990's *Fall Revolution* tetralogy explores



systemic issues related to socialist, communist and anarcho-capitalist approaches to political and economic development as humanity disperses from an Earthbound center out into the solar system and later into interstellar space. Iain M. Banks, in his “Culture” novels and stories (written between 1987 and 2012), develops a robust and rigorous vision of a post-scarcity politics and economics. Robert A. Heinlein’s *The Moon Is a Harsh Mistress* (1966) in many respects reenacts the no-taxation-without-representation economic controversies that gave rise to the American revolution, but with a substantially libertarian bent and transplanted to a future where the moon provides necessary economic inputs to an imperial Earth as an essentially colonial territory, and then rebels (successfully) against its colonial status. None of these stories, and the big questions that they explore, could be told in a conventional modern realistic setting. Neither, I don’t think, can the stories that follow.

If one believes that science fiction is or can be a realistic genre, and I do, one needs to bring a payload of political, economic and other associations to the establishment of one’s made-up planet or starship or space station or near-future urban dystopia that already exist if one’s setting is the real present-day world. One can of course draw on (or lean on) the web of pop culture associations that audiences have developed from having been exposed to Star Wars, Star Trek and the like, but doing that is making the hack’s choice, and it’s one of the reasons that sf as a genre doesn’t get as much respect as it might. Put a seedy spaceport bar in a story, for instance, and readers will probably think of the Mos Eisley cantina. Posit an interplanetary military/police organization, and readers will imagine Starfleet (or, if they have a more anti-authoritarian bent and a literacy in slightly more obscure pop culture areas, the Alliance from

“Firefly”).

The temptation to lean on such conventions is often hard to resist, because the alternative involves a lot of hard work. That’s the serious work of the sf writer, though, beyond the serious work of plot and character and style and tone and language that all fiction writers engage in. Writers of sf need to think through and make decisions about the interconnected history, politics, economics, technology of the universe they’re writing within, and how those elements inflect and inform setting, plot and character. The familiar fiction writers’ adage about action (or plot) revealing character and character generating action could be fruitfully expanded to include setting (in the expanded definition that I’m suggesting) as part of that relationship between story elements. In sf, then, action reveals setting and character; character generates action and reveals setting, and setting in turn generates action and reveals character. Or to put it another way: every element of the sf story contributes directly and functionally to building the world or the universe of the story.

If all this building took place only in the writer’s head, though, sf stories would never get written because a writer would never know enough about the world to start writing within it. Part of the work gets done through reliance on conventions, to be sure, both in the sense of hackery but also in terms of Mendelsohn’s formulation of sf as discussion. Conventional stories set in the real world gain some of their effectiveness by pushing against or commenting on the real world. Much sf functions as commentary on that same real world, but much of what it pushes against is the rest of the genre. Frank Herbert’s *Dune* pushed against exoplanetary science fiction that didn’t take planetary ecology into account. William Gibson’s *Sprawl* novels and stories pushed against the

teleological assumptions of much prior sf regarding the relationships between societal and technological progress. Writing the future involves a conversation and critique with the existing written futures that others have proposed.

Beyond that, though, building a science-fictional world most substantially involves entering into that world by writing it, and using what one discovers there to learn how it functions. This is a process that I find difficult to articulate as a generalized or abstracted model. I would observe that, when writing a story set in the real world, if one finds that one's chosen setting winds up contradicting who the characters have revealed themselves to be and what actions they seem inclined to choose in the story, one can simply modify the setting (move the diner from upstate New York to the Florida panhandle, for instance) to accommodate the characters. In sf, however, it is equally likely, and perhaps more likely, that the writer will (and should) consider more fully what has been revealed about the setting, and modify the behaviors and motivations of the characters accordingly. Beyond that, I will point out that I titled this collection "Explorations" with this primacy of setting in mind, and because each of the stories contained herein enacts, or enacted for me when I was writing them, this process. By discussing the stories through this lens, I hope that the process I'm talking about will be to some extent illuminated.

"The Distance in Your Eyes" and "Some Kind of Mindwipe" seem to me to be the closest to being effective standalone stories, as they are both beginnings in a way. "Contract Law" has an arc that the story itself largely contains, at least in terms of Cluvel, but the fact that the story ultimately hinges on John Doe diminishes its standalone functionality. "Prospectus" works pretty well on its own, I think, in part because it shares

no direct local setting with the previous three stories, and there are no shared characters. The outcome of “Contract Law” and the larger consequences of that outcome directly inform the whole setup for “Prospectus,” though, to the extent that had the events in the previous story not occurred, there would be no story here. “Beautiful and Virtuous Too” is impossible, it seems, to turn into a story that stands on its own—it is tacitly a chapter in a longer work.

It seems in retrospect like I should have foreseen this when I realized after completing “Distance” that Mnemosyne Station was a setting that I wanted to explore further. My idea was to write something along the lines of a novel-in-short-stories, as has become more common in mainstream and literary fiction in recent years, that would also follow the story-collage model of sf future histories like those depicted in Poul Anderson’s “Technic Civilization” stories, Cordwainer Smith’s “Instrumentality of Mankind” and Robert A. Heinlein’s “Future History,” and allow me to perhaps publish individual pieces of the larger narrative as they got written. One of the discoveries I made in writing these stories (and the other Mnemosyne stories that didn’t make the cut here) is that the tightly-clustered novel-in-stories model couldn’t work here, because of the redundancy of describing the station anew in every story, and somehow conveying the significance of characters and events from previous stories, became increasingly cumbersome. In retrospect it seems to me that once “Contract Law” had been added to the set, I had set myself unavoidably on a path to a longer and more cohesive work.

The first iteration of “The Distance in Your Eyes” was the penultimate story I wrote before coming to USM. I wrote it the last week of the 2008 Clarion writers’ workshop, and it’s been long enough ago now that I only remember a handful of things

that informed its initial inception. First, I'd been hanging out with fifteen or so other sf and fantasy writers for six weeks, many of us producing and workshopping a story a week, and by the end of the workshop we were all trying to do something that nobody else in the group had done before. I'd always liked space station stories (C.J. Cherryh's *Downbelow Station*, which won the Hugo Award in 1982, was and is one of my favorite sf books), and none of my fellow Clarionites had written one yet, so that was a part of it. I wanted to write a story that was emphatically not a "space opera" story (galactic empires, interstellar war, far-flung interstellar human civilizations and so forth) but situated in a space opera locale—the giant space station/alien artifact. I also had some inchoate questions about the utility of art, and a pernicious song lyric from the early '90s stuck in my head, which became the story's title and which also led to the development of Shel going blind and probably shaped the actual events of the story as much as anything else.

"Distance" produced a number of discoveries, though. There was the discovery of the station itself, first and foremost—when Toma took Shel on the walking tour to his quarters, and then on the ride out in his tug so that she could see and draw the station from outside, he was showing me around as much as he was her.

Beyond that, Toma as a worker meant that there had to be work to be done in the vicinity, which led to the asteroid belt and the Home Rock and the Uncles. Shel as a tourist meant that there had to be someplace she had come from, and someplace else she could have been on her way to. This also informed my conception of the station as a stop for interstellar liners on a sort of far-future equivalent of a cross-country Greyhound bus, which will periodically stop in someplace in the middle of nowhere and you can step off

and smoke, and people get on the bus there and get off it, but if you're staying on the bus you never have any real idea what's there. Toma's break with the Uncles and the fact that there was local asteroid mining going on led to the ore refinery (because he needed a job, to buy Shel her new eyes, and it needed to be a much worse job than what he'd previously had). Shel's condition necessitated both the autodoc in the back of Veng's Emporium and the Vrilthi.

The lasting discovery for me from "Distance," however, was the idea of the station as something older than human presence in that part of space, and something that seemed in some way or other to have a mind of its own (the reorganization of the station's geography) and something that didn't seem to be entirely right in the head (the non-functional droptubes, the general sense of degradation that surrounded the station's physical plant). This was, to a large extent, the source of my interest in exploring the station further in the second story, "Some Kind of Mindwipe."

Part of what bugs me about a lot of science fiction, especially of the Star Trek variety, is the treatment and conception of the alien—the Vulcans, Klingons and Romulans are all essentially human variants with pointy ears and various propensities that aren't actually alien at all. One of the things that I tried to do with the Vrilthi and the translation device that allows Toma to buy the eyes from them was to push back against that type of sf convention—a commercial transaction, perhaps, is possible, but it may well go horribly awry because neither party actually understands the other, but neither party acknowledges or perhaps even realizes it. When I began to think about a story that tried to explore what Mnemosyne was, and how it functioned, that same issue involving alien consciousnesses was there again, but writ much larger.

I was pretty certain that Mnemosyne was something very much older and more alien than the Vrilti, and so to explore it in a way that didn't just devolve into abstraction, I needed human lenses through which to interact with it. Doe was one of those lenses—a human who wasn't quite human, because of something or other that had happened to his cognitive processes that had left him at the same time more and less than a normal person. Abbey was the other—he was essentially my representative in the story, the investigator of this entity in the story that I was myself trying to investigate. His theory on the station's sentience and senility was essentially the one that I had adopted as a working hypothesis when thinking through it. Hirah, meanwhile, was to be the discursive connector between Doe's isolated human condition and the station's perhaps analogous (and similarly isolated) alien cognitive condition, as mediated by Abbey.

There were a number of discoveries about the larger setting that emerged for me from "Mindwipe." First was that there was history—political, military and technological—surrounding Mnemosyne and its environs that suddenly had particulars attached to it. To explain Doe's condition I posited a technology for imprinting learned skills and sensibilities on the brain pathways of a human mind that, if abused, could profoundly change the cognitive behaviors of the recipient's brain (overwriting one's long-term memories in the service of being able to run more than one or two imprinted programs at one time). I discovered a bit of what the analog of numbered Swiss bank accounts is in this future, and I learned some things about what the analogs of university student loans might look like. I gleaned a little bit more about the broad parameters of how the station itself functions, physically and cognitively, and began to be able to

impose something like a deliberate logic upon the “it rearranges rooms and stuff for reasons of its own” intimation that Toma had offered in “Distance.”

Doe took over “Mindwipe,” in a manner not unlike how the station itself took over “Distance.” When I sat down to revise “Mindwipe” the second or third time, I realized that there were only two scenes from Doe’s point of view, and the first one didn’t happen until about ten pages in, but just about all the important stuff that happens in the last half of the story is focused on the scenes where he has the POV. Initially I’d imagined Doe to be kind of a black box and had intended to treat him as such—I liked (and like) Hirah and Abbey’s parallel puzzle-solving inclinations, and their shared social awkwardness, and the idea that such might allow them to come together in some way. But Doe turned out not to be a black box, and the story wound up somewhere else, though I learned a number of things about my fictional universe along the way.

One of the things that bothered me about how “Mindwipe” turned out was, coming back to the alienness of alien minds, that the recognition that Doe and the station seemed to achieve when it was swapping out rooms to show to him so that he could tell it what they did felt too directly analogous to Doe’s own cognitive experience, and because I had stayed away from Doe as an actual character so resolutely through the first half of the story, it felt a little bit easy and a little bit cheap. I still liked (and like) the idea of he and the station recognizing each other as kindred spirits in a way, but I felt like there needed to be more disruption in the communication, more noise in ratio to the signal. So I decided, when I began to write “Contract Law,” to try to minimize all that and explore some of the other questions that “Distance” had evoked about this patch of far-future human space.



It had been recommended to me by an early reader of “Distance” that rather than using the narrative move of relating Toma’s break with the Uncles through a handful of lines of elegiac exposition, I actually write that whole business out and flesh out the asteroid miners as a society and accept that the final product would probably be a novella. At the time, I elected not to do so, but the suggestion remained in my mind, and so I entered into “Contract Law” wanting to explore and flesh out the functionalities of the local economy.

Toma would have been the logical protagonist for that story, except that given how “Distance” ended Toma had been taken more or less off the table as an ongoing character on station. Cluvel started out as a Toma analog—the denizen of the Home Rock who is most familiar with life outside the Uncles’ insular society. “Distance” had implied that the Uncles didn’t have anything to do with the management of the ore refinery; otherwise once Toma had been kicked off the Home Rock, he wouldn’t’ve been able to get work there either. In addition, if the Uncles were miners but not refiners, and if the local star system was such a backwater, then the local economy wouldn’t require the raw material inputs that the miners produced. Their ores had to have another market, and the refinery would reasonably be expected to have something to do with whoever stood to profit from bringing their refined ores to that market. This led to Chartered Galactic, and in turn to the beginning of my sense of the larger economic system (and system of governance, or lack thereof) that obtained in this universe, or at least this patch of it. When Doe remarks that “[t]here’s no law out here except contract law, and there’s no enforceable contract law except that which can be enforced by the parties involved,” that was a surprise to me. I’d written the story to that point, but I didn’t have any idea

what the resolution would be. When I wrote that, I was simply thinking along with Doe.

I also discovered some other things—that the Home Rock was in fact a matriarchy, and that the whole crèche-birth thing (and much else under the High Mother’s management) boils down to proper and judicious use of the scarce supply of available resources. I discovered what had become of Toma, and that he himself had become a different sort of resource. I also discovered that the law enforcement model I’d made use of on station in “Distance” (when the local cops come to arrest Toma after he beats the crap out of his cousin at Gentry’s) didn’t really make a whole lot of sense with my evolving sense of how social life was organized and regulated on station.

The end of “Contract Law” also marks, I think, the beginning of the end in terms of the Mnemosyne stories being viable as peripherally-related one-offs. “Distance” is a small, personal story. In its way, so is “Mindwipe.” “Contract Law” was intended to be the same—learning some stuff about how the local economy functions in these parts while exploring a brushfire backwater contractual dispute. But it turned out to be a game-changer, in terms of the sorts of questions that larger-scale sf stories tend to provoke. Doe gives Cluvel some very good strategic advice, and the sort that the High Mother would appreciate, but it’s also monstrous advice. It turns Cluvel, who I’d imagined to be and who spent most of the story being a sort of apprentice commercial attaché, into someone who’s at least complicit in a commercially-motivated act of planetary genocide.

A couple of things happened in my thinking, leading into me writing “Prospectus.” One is that the previous story had taken an unexpected turn that seemed to make the smaller stories I had been focused on take on larger significance. I had been

writing about small-time stuff in a backwater precinct of this fictional universe, and a populated planet had (implicitly) gotten killed, and it seemed as if that event must have larger repercussions throughout the fictional universe that I'd been exploring thus far. The other is that a summer intervened, during which I read a book of speculative science regarding exoplanetary terraforming, and had gotten interested in how that might work, economically speaking. The collapse of Chartered Galactic in an interstellar economy where territorial expansion had stalled seemed like it might impact on that. I filled several notebook pages brainstorming economic models for how terraforming (an expensive and long-term—likely multigenerational—proposition, even in the far future) might work if financed by private enterprise. From that came the seeds of “Prospectus”.

CGMh had been characterized, in “Contract Law,” as a multi-system mineral interests monopoly. With all the various planets and systems I'd been throwing around in that story and the previous two, the implication was that this part of space was broadly settled and economically developed, so part of the establishment and maintenance of the CGMh monopoly would have involved buying up rights to planets with exploitable mineral resources and then not developing them, to maintain an artificial scarcity (and therefore a baseline profit) for their already developed mining operations. This led me to think through how discoveries and claims to new planets might be legislated and regulated commercially, and what might happen if a commercial entity that had bought up a bunch of those claims collapsed. What would happen to the undeveloped claims?

I've always liked stories about con artists and scams and the like—Ross Thomas is one of my favorite writers who worked that vein, along with Donald Westlake and his “Dortmunder” books. The idea of real estate fraud seemed like it would translate into

this futuristic milieu, and that led me to think of who would be best qualified to run that sort of con. That (and being a graduate student in English, surrounded by the apocalyptic murmurs that our discipline will disappear as a viable academic career path within our lifetimes) led me to Boerum Hackal, someone who'd graduated with a professional and technical degree in how to terraform, right before the bottom dropped out of that employment market. The idea of an old man, who'd studied in his youth to do something and then never got to do it and instead made a living conning people into believing he was going to do it, finally getting the opportunity to practice his discipline at long last was gratifying. I think it may be the strongest of these stories in terms of character.

It also allowed me to explore, from a different vector and vantage, the larger economic and societal context within which all the business on Mnemosyne Station takes place. The takeaways from "Prospectus" are, in this respect, still intangible, but they are not insubstantial because the way new aspects of this fictional environment become extant and storyable is through the telling of stories in new locales within that larger environment. The previous stories all take place on the Outer Rim, with the Core being an oft-alluded-to unreality; "Prospectus" goes there and spends some time, and thus makes it real and annexes it to the fictional environment that I have to work in going forward.

"Beautiful and Virtuous Too," the last story included here, is something else. As noted above, it doesn't and can't pretend to be anything but a continuation of the larger narrative developing in the previous installments. Amele appeared in "Contract Law," as did Jettero, and of course Abbey and Doe. In this story I learned some things about how the Core systems might project their power, even in the absence of an applicable criminal

code—from this derived the Board of Trade, which I imagine existing to provide widespread enforcement to commercial contract law. This story also begins to take into account something that I had been underestimating the importance of, honestly, since Cluvel and the High Mother took Doe’s advice at the end of “Contract Law” and fed a populated planet to some out-of-control mining biotech, which is the monstrosity of that.

This story, and the responses to it, showed me the benefit, through Bela’s description of what life was like on Sargon XII when she was a child, of exploring and including different environments than just the station, even in a station story. It also—and this was the main discovery—pointed out to me that, however much I had been making him peripheral and leaving him on the edges of the narrative since “Mindwipe”, the larger story was going to wind up being Doe’s as much as anyone’s. I see this, considering the larger story that’s been building through all of these installments (and the ones that weren’t included in the following), as the chapter past which we are out of the middle part of the story, and heading toward the endgame, whatever that turns out to be.

Of course, none of this means that these stories are perfect, or even that they’re particularly great. They continue to be works in progress, in large measure because the universe in which they take place is one that I’m still discovering. That said, there are some bits in these stories that I think are pretty excellent. The awful detail in “Distance” about the replacement eyes being not quite the right size, but that they could be made to fit if the eyelids were cut away is one. The evolution of the social convention that it’s rude to put on one’s ocular when in conversation with a stranger without asking them permission first is another. Doe’s suggestion to Cluvel that the most effective way to resolve the Uncles’ dispute with CGMh is to transform it from a contractual matter into a

jurisdictional one still blows my mind for its ruthless elegance.

There are, too, a lot of elements that demand improvement. There is a flatness and a sameness, I feel, to a number of the characters at present. The populated feel that Mnemosyne had in “Distance” seems to have gotten lost in the subsequent stories that are set on the station, as did much of the physical and visual sense of the station and its immediate physical environs. It is not lost on me that Gentry’s and Station Control sometimes feel like they’re the only places on the station that people frequent, and that the only thing they do when they’re not working is drink. Accepting these stories as the sum totals of the lives of the characters who populate them, it would seem that none of them do much of anything for fun.

Ultimately, while I recognize these flaws, I also am not unduly worried about them at present. The time will come, and it will come sooner as I go about relearning how to write outside the classroom environment, when I will have the freedom and opportunity to discover more about my characters and their universe that will mitigate the current problems that exist. A big part of the joy and pleasure that comes from writing stories like this is the ongoing process of discovery that is, for me, inseparable from the act of creating them. I look forward to resuming that process forthwith.

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## THE DISTANCE IN YOUR EYES

The plain-featured girl with the faraway blue eyes and the lusterless brown hair turned out, whether wisely or not, to be the love of Toma's life. He didn't know this right away—he'd just come back on station after three weeks in the belt, coring ore deposits out of big nickel asteroids, and as he'd made his way through the Marketplatz he'd only noted that another bunch of newcomers had set up stalls on the main promenade. Hers was a flimsy construction of scavenged shipping packets, with a roof of orange plastic tarpaulin that flapped gently in the breeze of the Station's ineffable circulation systems. On the improvised posts and guy lines were clipped pictures, on paper and on slats of plastic and other flimsy discards. Her wares weren't holos, or printouts—Toma didn't know what they were, because he'd never seen such things before. He didn't much care, in fact. After three weeks on his tug, moored to a rock with nothing to do but monitor the drilling equipment and the mechanisms that conveyed the extracted ore to the hopper barges, he wanted a drink and a meal that didn't come from a vacuum-proof tube, and some pleasant conversation.

“Wait,” she said, stepping out from the shelter of her commercial space as he strode past. “Please wait.”

He would have walked past, but she placed a blunt-fingered hand on the forearm of his coverall. Toma stopped, glared at the hand until she removed it. Newcomers rarely knew how to act.

“What do you want?”

His tone was not friendly, and she took a step back. Her eyes travelled over his



face, and he could imagine her taking him in—the peeled redness of nickel rash on his cheeks and brow, the pallid flesh around his red-rimmed brown eyes where the flight goggles had protected him, the three weeks of stubble and the sheen of sweat, the scar that twisted and puckered the right side of his face from brow to jaw line.

“I’d like you to sit for me, if you would.”

Toma didn’t know what she meant.

“I want to draw you.”

He looked at her blankly, and she gestured at the images that hung around them, and then at a pad and a stylus that lay on a crate inside her stall.

“You do these by hand,” he said, looking at her work more closely.

“Yes.”

He blinked, and wondered why someone would create likenesses in such a way.

“And you want to...draw...me?”

She nodded.

“You’re out of your mind.” His hand, stained to the third knuckles with ore dust, scratched his puckered cheek. He waved at her drawings. “Those are—” he searched for the word. “Pretty. I’m not.”

As if without her volition her hand extended to touch his scar, and his hand touching it.

“You’re wrong,” she said, her eyes shining. Looking beyond him, or through him, or into him. “You’re amazing.”

\* \* \*

Toma ran a finger idly over the rough paper on which Shel had sketched him as he looked out the window of the Station Canteen. Things were quiet in the Marketplatz—there were no ships in dock presently, and the station’s day cycle was winding down. Noise and music wafted down from Gentry’s down at the embarkation end of the long, broad avenue, and through the oblong skylights overhead, stars glinted valiantly amidst glowing red and blue nebular swirls. Whatever mind drove Mnemosyne Station’s diurnal cycles, it was winding down, dimming the light strips and altering the polarization of the skylight panels. Night, such as it was, was falling.

Shel had taken a cubicle at Gram Carlisle’s, three meters by two meters with a greenish light strip on the ceiling, a shared toilet and breakfast at 0600 standard.

“How much are you paying her?” Toma asked. She told him and he laughed, a rough and scornful bark. “Do you make enough in a week to cover that?”

Shel looked down at the glass of tea that steamed on the little table in front of her.

“I have some money for traveling,” she said quietly.

“All the more reason not to stay there. I’m just a tug jock, but I could gimmick the keypad on one of those doors with a dumb datapad and a piece of wire.”

“I have to stay somewhere.”

She sat stiffly, not looking at him, and he felt his face flush.

“Look,” he said after a moment, more gently. “Gram Carlisle uses her place to fleece tourists—” She picked up her tea, took a sip, set it down a little too hard, so that

the liquid sloshed over the side. “Newcomers. People who don’t know their way around the station. Okay?”

She nodded after a moment.

“Do you know how big this place is? There’s so much space, whole levels abandoned, that nobody should ever have to pay for a place to flop. And that breakfast she serves comes out of the same dispensers that you find all over—even the abandoned areas have them, and most of them still work. There’s commodes, too, and water. You should just find a place that suits you, someplace out of the way, buy yourself a lock and a chain, and make it your own.”

“Is that what you do?” She asked. “When you’re on station?”

“Well. I usually bunk in my tug.” Toma blushed, and looked down. His tea sat untouched—he didn’t much like tea. “But, yes, I have a place.”

“Would you show it to me?”

He fiddled with the handle of the teacup, his fingers leaving little smears on the white ceramic. “It’s not much. It’s just a flop.”

“I’d still like to see it.”

Toma shook his head. He didn’t understand her at all.

“Sure,” he said with a shrug. “Why not?”

\* \* \*

Toma led her out from the Marketplatz, into the warren of white-walled corridors that spread out beyond it. A lift carried them up a couple of decks, to a level where the lighting was more intermittent and the white floors and bulkheads were less bright for the film of dust that had adhered to the surfaces. They passed through a garden where diffuse violet light emanated from the walls and stone paths meandered among strange, night-blooming plants. They traversed a long hall with strangely-proportioned machines set into the floors, all dusty metal and mechanical pincers and claws and waldos. They rode a dark escalator that hummed to life when they set foot upon the bottom step, and stepped into a drop tube that shot them up ten levels in an eyeblink, and climbed a ladder whose metal rungs were rough and pitted with dirt and rust.

“How big is the station?” Shel asked him. They were walking along a long, wide, gently-curving corridor that was periodically punctuated by hatches on either bulkhead. “How old is it?”

Once more, Toma gazed at her and shook his head.

“Ancient. Nobody really knows who built it, originally. There are maybe two thousand people who live here, scattered throughout. There’s space, probably, for a hundred times that many, or more.” She looked at him, unmoved, so he went on. “You really don’t know about the Station? How did you come here, then?”

She smiled, and seemed to look through him.

“I liked the name. Mnemosyne.” She spoke the name as if she were tasting it.

“A liner was calling here. So I came.”

“To draw,” he said.

She shrugged, her smile serene.

“Then you haven’t seen it? From outside? Not even a holo?”

“No.”

“Well, you should. That would give you something to draw.”

She nodded, as he stopped before a hatchway framed with the black polymer gleam of a spool-seal.

“Here we are,” he said. His thumbprint unspooled the seal, which uncurled from the seams of the hatch and folded back into itself. He opened the hatch by waving a palm across the darkened scanner pad on the bulkhead.

“Most all of the stuff still works, even when it looks like it’s powered down,” he said. “Not always, though. If you use the drop tubes, make sure you find something to throw down before you step inside. If you hear it hit bottom, well...” he shrugged, and stepped into the chamber that he had made his own.

It was a large room, roughly rectangular with one wall that bulged outward, following the curvature of the station’s hull. That wall was one big window—perfectly transparent, diamond-hard, dented on the outside in places by debris impacts. In one corner a bedroll was stashed, with a packing crate beside it as a nightstand and a cheap globe light with a power cable that snaked into a jerry-rigged socket that had been attached to one of the semi-recessed conduits that broke the flatness of the bulkhead. A folding plastic stool sat centered before the window, with a short, tarpaulin-draped shape behind it.

“Like I said, it’s not much.”

Shel breathed in sharply as she entered, and went to the window as if drawn to it. The gaseous tendrils of the nebula swirled outside, casting enough light into the chamber

that Toma could see her dimly as she leaned close to the glass.

“It’s beautiful,” she said, her voice hushed. Toma looked at the gaseous swirl, a sight that he had seen, from his tug or from the portholes in the bored-out asteroid that his family had inhabited for generations, every day of his young life. He tried to see it as if for the first time, but he couldn’t. His eyes instinctively avoided the colors, drawn instead to the black patches of open space that were visible here and there.

“What’s this?” she asked after awhile. Not waiting for an answer, she lifted the tarp and pulled it back to reveal an old brass telescope, perhaps a meter long, that sat atop a dark-stained pressed-fiber tripod that gripped the deck with little rubber feet. She ran her fingers over the dully gleaming metal. She turned to look at him, and he felt his face flush.

“I like to look out, sometimes, at the stars,” he said, looking at the dusty deck plates beneath his feet. “The faraway ones. This room is one of the few I’ve found where you can usually get a glimpse of open space.”

Her fingers drifted to the tripod, and back to the telescope itself.

“Is it very old? It looks antique.”

“There’s modern optics inside. I don’t know what the brass is about. The Vrilti had it for sale, the last time they came through. It was cheap enough that I could afford it.” He shook his head. “What would I want an antique for, anyway?”

He saw Shel’s shoulders rise and then fall, and she turned back to the window, seeming somehow deflated.

“Will you show me the station?” she asked at last. “From the outside?”

“Me?”

“Yes. You have your ship. Could I ride out with you sometime? So that I can see it with my own eyes?”

“When I go out, I’ll be out for two, three weeks. It’s not a ship—it’s a tug. It’s small.”

“Could you take me out for a day, before you go back out to the asteroid belt?” She smiled at him, a little uncertainly. “I could pay—”

Toma’s mouth tautened.

“No,” he said, trying to keep the offense out of his voice. “No. I’ll take you out.”

\* \* \*

The tug’s bridge was compact with only the pilot, cramped with two. Toma folded out the second acceleration couch that was recessed into the floor, and gave her the spare goggles that had never been used since he’d been piloting it. He took them out in a slow arc, once they’d cleared the port’s intake zone, tendrils of gas wisping around them and the occasional rock spinning slowly past in the distance. He kept the burn gentle, not even a full gravity—his sense was that Shel probably hadn’t experienced spaceflight on a working ship like this. They flew in silence, and he glanced over at her occasionally as the ship’s guidance system executed the navigational maneuvers he’d plotted. The sketch pad and stylus she’d brought with her sat in her lap, her fingers moving in slow, unconscious curves across the paper. Her face was pale in the orange

glow of the instruments, and he could see the faint gleam of the course and telemetry icons that blinked and shifted in miniature on her goggles' lenses as she gazed out through the forward port. Her lips were slightly parted, and occasionally the corners of her mouth twitched upward. He wondered what she saw in the dark of space to make her smile.

It took them half an hour to get clear of the station's restricted navigation zone. Toma brought the tug around on a vector that would circle them back toward the station from its daylight side. Even at the distance of twenty thousand kilometers the gleam of the rays of the nameless yellow variable star that the station and the asteroid belt orbited were sharply visible as they reflected from the exposed metal and the countless diamond windows that comprised much of the station's hull. The goggles muted the glare and sharpened the station's lines and contours, even as its filters muted the stray wisps of colored gas that drifted around them in gossamer clouds.

The station's nav computer tried to reassert control over the tug as they drew nearer, but Toma disengaged it and went to full manual control. He brought them to within twenty clicks, and when the proximity alarm began to squawk he cut the engines, fired the retrothrusters, and let the ship drift.

Mnemosyne Station filled the forward port—hundreds of levels of metal and carbon fiber and polymer in a hundred different styles of design. Some were human, ancient or modern; some were not. Here and there spurs of rock bulged out from the superstructure, as if the station had been built around an asteroid and had, over millennia, engulfed it. Maybe it had been. Toma didn't know. The whole, as artificial and constructed as it was, had a strangely organic look to it, as if it had grown there with all



its angles and modules and extrusions and indentations. The rock that peeked through only added to that sense. Small impact craters pocked the metal skin in places, and here and there a chamber or a level seemed to have blown out, leaving the rooms and corridors exposed to the vacuum.

“Parts of it reconfigure themselves, move around,” he said to Shel, “from time to time. Nobody really knows how, or why.”

“It’s beautiful,” she said, and slid her goggles down so that they hung around her neck. Her eyes were shining as she looked out.

“Put the goggles back on,” Toma snapped. “It’s dangerous out here.”

“Why?” she asked, her eyes still fixed on the station.

Toma opened his mouth, but didn’t speak, because he realized he didn’t know. He was merely repeating what the Uncles had told him, every time he was out in the black, in a tug. He’d been hearing it since he was six years old, and the question she’d posed was one that had never occurred to him.

“The nebula,” he said, with less conviction. “It’s dangerous.”

She smiled, faintly.

“I want to see. The colors, the lines, the divisions of light and shadow.” She lifted the goggles on their strap, and let them go. “I can’t see them through the glass. Not like this. You’ve never looked at it naked, have you?”

Toma didn’t know what to say. His fists clenched, and he unclenched them with a conscious act of will. He swallowed, and shook his head.

After a moment, Shel picked up her stylus and began to draw. Toma couldn’t imagine how she could capture so much detail, the crazy patchwork of the station’s

exterior. She didn't try, however—with lines and curves and shadows she conjured the feel of it, the shape, the experience of looking at the Station in a way that made it seem new to Toma, and as real as the artifact that hung in space before them. There was magic in her hands, in her fingers, it seemed—it was like watching a fabrication unit extrude layer after layer of material from its jets and nozzles to produce a wrench or a screw that didn't become recognizable as the thing it was becoming until it was done. But it wasn't a machine doing the work, and what was produced wasn't so commonplace. The images came from her eyes and her hands, and they were visions that had never existed before.

Toma let them drift for hours as Shel filled page after page. Finally, she let go of her stylus, and it drifted toward the back of the cabin, tumbling slowly end over end in the null gravity. She smiled at him, a smile that made his breath catch in his chest.

“Ready to go back?” he asked her.

“Yes,” she said. She leaned toward him suddenly, impulsively. She kissed his mouth, and the scar on his cheek. “Thank you.”

\* \* \*

There was an angry telepresence from Toma's Uncles when he brought the tug back on station. The miners of the belt were an insular bunch, and the elders of the clan didn't approve mixing with Station folk anymore than was necessary. They also frowned on a young pilot taking out one of the tugs they owned for an unscheduled joyride. Toma

didn't respond right away; he felt light and happy, and the image Shel had drawn of the station floated in his mind, the magic of its lines glowing in his imagination.

At Gentry's they had drinks and food, and Gentry's son Walton, who had been running the place since his dad had been knifed breaking up a spacer fight, was so taken by Shel's drawings that he offered to reproduce them for the tourist trade. He also commissioned a mural for the back bulkhead, to brighten up the place. Shel and Toma spent the night in Toma's flop, and the next day she moved her meager belongings out of Gram Carlisle's.

The postcards were a minor sensation among the station residents, though when one of the occasional liners passed through they didn't sell so well with the visitors. Shel made some cash, though, and when Toma came back on station after his next run out to the belt, the chamber with the window had acquired a chemical stove and a coldbox, as well as dishes and a table and chairs that Shel had found in a wood-paneled dining room on another of the derelict levels. She moved with more confidence through the station now, and was savvier than she had been when she arrived, and the more established merchants on the promenade would call out greetings to her as they passed her stall.

She and Toma would eat together in the room with the window and the telescope and the white walls now covered with her paintings and drawings and sketches. They would spend hours on the thick foam bedroll that was never now rolled up. At night they would take turns looking through the telescope, and sometimes she would draw or paint what she had seen.

Toma's Uncles expressed their displeasure more and more frequently, and trumped up reasons for him to return to the Home Rock after a mining run rather than

coming back on station. Toma found the cramped environs of the habitat, with its stale recycled air and the meals of bland, boiled hydroponic stew and the trips to the Matrons to do his duty in contributing to the Home Rock's gene pool that the High Mother handed out as if they were rewards, to be increasingly distasteful. It made him angry, and he became adept at evading such visits, and finding excuses of his own to cut them short. Even the weeks spent in the tug, moored against the rocks of the belt as the drills bored through them, extracting the useful metals from their cores, began to chafe, as he thought of his flop on station, and Shel, and the whisper of her brushstrokes and the brushstroke of her fingertips across his bare chest, and the distant stars and pulsars and planets that they shared through the eyepiece of the little brass telescope.

If Casimir, the second most senior Uncle of his clan, hadn't insulted him just after he'd disembarked from a month of slow gleaning of chondrite and beryllium from a hard-silicate S-class rock, things might have been fine. If Toma had been able to swallow the provocation, things might have been fine. If Toma hadn't broken the uncle's lower jaw with one blow from his gloved fist, and if Casimir's hip, weakened by a life in the Home Rock's low gravity, hadn't shattered when the old man fell to the rocky floor of the corridor, things might have been different.

\* \* \*

If Shel hadn't taken off her goggles in the tug when Toma had taken her out to see

the station from the outside, things might have been fine. The goggles were more than a navigator's tool—they also shielded the most vulnerable component of a human's anatomy from the weird radiation that the nebula's exudations and the variable star could emit.

“I lost the tug,” Toma told Shel when he arrived back on station, conveyed there by his cousin Meras. He'd been locked into supply locker of his own tug, and shoved out of the lock into the tubular gangway that led to the station. Meras hadn't said a word. “I've got work at the refinery, though. Less money, but I'll be on station from now on, it looks like.”

He wanted his voice to sound happier than it did as he spoke the words.

Shel sat on the stool by the telescope, facing the swirls of the nebula. She turned at the sound of his voice, and looked toward him, and in the light of the bedside globe and the other lamps she'd scavenged he saw the milky film that had grown over her eyes since he'd seen her last.

“Come closer,” she said, with a pleading note in her voice that gave Toma a pain in his chest as if he had been knifed. “I can't quite see you.”

\* \* \*

The refinery was off-station, but less than a thousand clicks away. It was owned by Chartered Galactic, the Core conglomerate that bought most of the miners' ores.

Human labor was cheaper, they'd found, than automation, especially this far out. A woman Toma knew from Gentry's was a shift manager there, and on her authority the company took Toma on as an ore lader. Even with the hydraulic exoskeleton, it was backbreaking work. The refinery ran a shuttle between the station and the facility every morning at 0630, and another that brought the workers back at 1900. The wages were sufficient to keep a laborer in drink and the occasional prepared meal, and the work contract Toma signed provided medical care for injuries sustained while he was on the clock at the facility, as well as access to subsidized stimulants and performance enhancers at the refinery's PX.

The Uncles hadn't frozen Toma's personal credit account, but no longer was his percentage of the clan's profits getting funneled into the account. He'd been spending more freely since he'd been with Shel, and there hadn't been that much in it to start with. The refinery barely paid enough for the two of them, even when they stopped preparing meals and began to sup from a nearby dispenser. It certainly didn't pay enough for the autodoc at the back of Veng's General Store and Goods Emporium to grow her a new set of eyes.

"If you were still a pilot, we could perhaps extend you credit," Veng's robot assistant told him. The arid, programmed inflections of impersonal sympathy rasped against Toma's mind like the teeth of an ore-sander against bare flesh. "In your present occupation, however, it is regrettably impossible."

"Can I see Veng?" Toma said, his voice choked and his hands clenching into fists. "Can I talk to him?"

The robot gazed off into the space above his left shoulder for a moment, its blue

ocular units dimming.

“I’m sorry,” it said at last. “Master Veng is indisposed.”

It didn’t sound sorry, and it took all he had not to beat it to scrap with his hands.

\* \* \*

Shel went on working, or tried to, even as her eyes continued to whiten into pearls. Toma would come off shift and find the floor of their flop littered with paper—vague shapes drawn with great precision but to no effect, then ripped from her pad and flung away. One night he came home to find all of her old sketches, the ones that had decorated the walls, torn down and cast out into the corridor. He entered the chamber to find her sitting in the darkness, the nebula’s multicolored lights reflecting off the bare white walls. She sat on the floor beside his telescope, her knees bent and her arms wrapped tight around them.

Toma sat on the stool, his leg touching her back.

“It will be all right,” he whispered around a sick feeling in his stomach. “We’ll find a way. We’ll fix this.”

Shel said nothing. He sat for a time, clenching and unclenching his aching fingers, making them into fists and releasing them. He forced a smile, though she couldn’t see it, and leaned down to look through the telescope’s eyepiece. In a soft, gentle voice, he told her what he saw, until her head grew heavy and, his eyes aching, he

took her by the hand and led her to the bedroll to sleep.

\* \* \*

The Vrilti arrived as they usually did, unexpectedly and without fanfare. One morning, as he was walking to the refinery shuttle, they were there, their tentacled appendages a mottle of green and orange that gleamed wetly in the brightening light of the Marketplatz's day cycle. They had taken up Shel's old stall, he realized. He stopped for a moment, watching three of them move about on their stumpy triple-jointed legs, arranging their containers of scavenged odds and ends, junk and salvage and weird tech from who knows where dumped indiscriminately into bins distinguished by shape rather than function or value. The departure klaxon sounded for the refinery shuttle, and though his bones ached he forced himself into a jog. If you missed the shuttle, you lost a day's wages, and if you were on contract you were docked a violation fee, and Toma couldn't afford that.

When he came off shift, the Vrilti were still there, though, and while Toma had taken to stopping into Gentry's for a drink before going home, he instead veered into the stall.

"Welcome, spacer," the Vrilti behind the counter at the front of the tent said through the translator box that sat beside the cashbox. "May your parturitions be least fitful, and may you find products offered to be tasty."



That was generally the best a translator box could do with the Vrilthi tongue. Toma nodded in acknowledgement, his jaw popping as he yawned. He let his tired eyes wander over the various bins, not realizing what he was looking for until he found himself standing near the back of the stall, gazing blankly into a container filled with light globes, ball bearings, hard candies wrapped in yellowed cellophane, perfectly spherical pebbles.

Toma sifted through the round things, feeling their different textures and different compositions roll over his fingers and between them. Gradually he became aware of a presence beside him—one of the other Vrilthi had sidled up, weirdly quiet as they always were on their stumpy legs. Its eyes bobbed gently on the delicate stalks that held them, focusing on his own as he turned to face it.

“What does the spacer hunger to grasp?” The translator box on the counter behind him spoke, pitched differently to indicate that this was another of the aliens’ delegation.

“Eyes,” Toma said. “I need eyes. Replacement eyes.”

The Vrilthi paused a moment as the box translated Toma’s answer in tones that his ears couldn’t pick out, though he felt a prickling on his exposed skin as a wave of subsonics washed over him. Then it thrust its many-tentacled arms into the bin before him, sifting and sorting and eventually emerging with two small, featureless gray orbs that Toma would have taken for pebbles but which were metal, he found, when he touched them.

“Where do they come from?” he asked.

“Old tech,” said the Vrilthi. “Past the space where unpalatable pink ones go to

forage.”

Toma looked at the spheres the alien had placed in his hands. “Are you sure they’re eyes?”

The Vrilthi’s eyestalks wagged.

“Replacement eyes,” it said.

Vrilthi didn’t lie, though the vagaries of imperfect translation always added an element of uncertainty to any transaction with them. The sick feeling that Toma had carried in his gut for weeks shifted as he considered, the vibration of the discomfort changing. What it resolved into still scared him, and perhaps scared him more when he realized that what had been added to it was hope.

“How much?” he asked.

The Vrilthi at the counter answered with a figure that was absurd, but not so absurd that he couldn’t bargain down to something almost affordable. He responded with an offer that was less than half, and the haggling commenced.

\* \* \*

Toma was able to work a deal with Veng’s robot for the installation of the eyes. It was still more than they could afford, but far less than growing new eyes in the autodoc would have been. It took him another week to earn enough for the down payment. He took one of his accumulated sick days to walk Shel down to the Marketplatz. The

autodoc gave her a local anesthetic for the procedure, and in an hour it was done. Once set into the flesh and knitted to her optic nerves, the new eyes became silvery, with irises of muted cyan and pupils of fluctuating, flickering incandescent red. The eyes were fractionally larger than Shel's originals had been, but by cutting away her eyelids they could be made to fit.

Thin green liquid like hydraulic fluid leaked out of the corners of the sockets as he walked her back up to their room. The autodoc said that that should probably pass in a few days, though it couldn't say for sure, because the eyes were alien technology.

Veng was taking a twenty-percent cut of Toma's wages at the refinery, and would be for several years. The company had promoted him to supervisor, with an increase in his pay grade, but it still wasn't enough.

By the time it became clear that the eyes didn't work, or didn't work in the way they'd imagined, the Vrilti were long gone.

\* \* \*

There was nothing but blackness for the first several weeks. Toma worked six days out of seven, and kept the account balance almost steady, though he dipped into it so that he could stop at Gentry's for a cup or two. The fear and the hope had collapsed in his stomach, heavy matter collapsing into a singularity that could the standard gravitation of sobriety could not resist. Shel was largely forgotten on the promenade, but she was

remembered fondly, as an interesting novelty, and the mural she'd painted on the bar's back wall made the patrons happy. When word of the Vrilthi fraud spread, he could usually depend on one or two people standing him drinks to augment the ones he bought for himself.

"I see something," Shel said, standing at the window facing outward, when he walked very deliberately into their chamber one night. "A binary star, shooting out gouts of plasma. An arc of fire, boiling out into space. The matter cooling, gases vaporizing and boiling away, freezing." She smiled, her face grown thin, the weird eyes glowing as she turned to face him. He couldn't tell if she could see him, and when her gaze settled a meter to his right he concluded that she couldn't, and a flare of rage coursed through him, making the blood in his limbs feel hot. If the Vrilthi ever came back, and they certainly would sometime, according to their own schedule, he'd kill them.

"I can see it," she said, turning back to the window. "It's beautiful."

\* \* \*

By the third day, she had dragged her chair from the table they'd eaten at and placed it in front of the window, close up against the glass. She was seeing the binary star at Velvort's Haven, with its seven uninhabitable planetoids gyrating madly about it. Toma sat at the telescope and tried to follow her gaze, to see what she was seeing. He couldn't focus the telescope fast enough or precisely enough to keep up with her

expanding vision, but he saw enough to convince himself that she was seeing what she said she was seeing.

And she was seeing. She wasn't seeing him, and he still had to give her his arm to lead her around the room, and take her to the dispensers, though she had learned to navigate the dark corridor to the public commode. But she was seeing.

When they made love, she made noises that seemed faint, whispering echoes of what their coupling had once brought out of her, though her skin and her body and the feeling of being inside her was the same, physically, as it had been. Her metal eyes, though, were always turned toward the window, and she murmured about nebulae and stellar events and other galaxies, what time dilation looked like as one approaches lightspeed and dropping a four thousand meter liner into a wormhole gate looked like, and what planets looked like as they began to coalesce in a nascent solar system. There was a curdling in his stomach when he noticed that, and he began to make sure that he was drunk enough when he came home that he could ignore it if he chose to.

The telescope sat uncovered now, forgotten on its tripod, gathering dust that muted the gleam of its brass casing and dusted the lens of it, queering the optics. It didn't matter, though. Shel was seeing. That was the most important thing. Or so he told himself.

\* \* \*

Shel began to sketch again—strange visions of ineffable stellar events that the limited range of the telescope would no longer allow him to view alongside her. She tried to describe them, but he couldn't listen to her words, her visions that he couldn't share. His muscles ached, his eyes were raw and the lids were raspy, as if they had been coated with sand. He sat on the stool beside her chair, while she looked out, past him and beyond him, into infinities that he could not see. He worked, and he came home, and when he did he found her sitting in her chair, staring out into space. Some nights, it took her minutes to notice his presence.

\* \* \*

When he came across Meras one night at Gentry's on his way home, Meras didn't recognize him at first, though Toma recognized his erstwhile cousin instantly.

"How's my tug?" he said, on his third glass of Gentry's flammable homebrew, after he'd pushed his way into Meras's personal space. Meras was sipping a beer, and chatting with the man beside him at the bar. "Are you taking care of it?"

Meras looked at him without recognition for a long moment, and then it began to dawn. With it, a withering sneer came into being, narrowing the younger man's dark eyes and thinning his pale lips.

"Toma." He took a fastidious sip of his beer, and apologized to the man with whom he was drinking. "My apologies," he said. "It's a family issue."

Once his companion had stepped discreetly away, Meras turned back to Toma.

“You’re a mess. I hardly recognize you. The tug is fine, better than if you were driving it.” Meras looked him up and down. “I hope the refinery is agreeing with you.”

He spat into the sawdust that covered the deckplates; he didn’t see the bloom and the flush of Toma’s rage, and he didn’t see the fist coming, and he took it square on his face, and he fell. Toma, outside himself, watched as he hit his cousin again, and again, and again.

The shock of the peace officer’s baton brought him back to his body, even as it flung him against the bar and turned his knees to jelly. As the officer pulled his hands behind him, and tied them off with a self-sealing plastic cuff, he searched the crowd with his eyes. He found Walton, frozen halfway around the bar. He knew he’d be getting a week at least, so he called to Walton.

“Look in on Shel,” he said, as the officer heaved him to his feet and began to drag him out to the confinement tanks. “Make sure she’s okay.”

“Sure thing,” said Walton.

\* \* \*

Toma got two weeks, as it turned out—he’d broken Meras’s nose and several of his ribs. He worked off the offense with maintenance labor, welding reinforcement panels and laying cable in a vacuum suit on the outside of the inhabited decks. He spent

his nights on a bunk with a thin foam mattress and a bank of illumination strips in the ceiling that never dimmed. The work was hard, but no harder, really, than what the refinery had to offer.

\* \* \*

Upon his release, Toma headed to Gentry's for a beer. Two weeks' absence from the refinery had voided his contract, but there was still some money in his account, and he really needed a drink. The bartender was someone he didn't recognize, and the reader rejected his credit chit.

Walton was the first one to notice him when he stepped back into his flop. The walls were decorated again—crazy starscapes, painted right on the bulkheads, swirls of color evoking shape and form that Toma himself would never see.

“Welcome back, Toma,” Walton said, from his position at Shel's left arm. It was clear that he had spoken to alert her to Toma's presence—her head swiveled toward the door, the red laserlight from the pupils of her replacement eyes brightening and dimming, though she didn't see him at all.

There were two other men in the room, one of them in a silk coverall who was standing with Walton and Shel, the other scanning the painting on the bulkheads with a handheld recorder. Toma stepped around that one, and was intercepted by Walton, who handed him a glass of wine. Toma looked at it without seeing it, and his eyes swept the



room. A shipping crate stood open by the door, holding pigments and brushes and styluses and panels of canvas and pressed cellulose. He squinted at the manifest label—it bore the public key for his account.

“Where’s the money?” Toma said to Shel, ignoring all the rest. He knew the answer, but he still found the words forcing themselves to the surface.

“Don’t worry, Toma.” Walton stepped forward and patted him on the shoulder. Toma shrugged the hand off, wine sloshing out of the glass in his hand. He set the glass down.

“Shel has an amazing talent,” said the stranger in the silk. “With her artistic skills, and of course her eyes. Closer to the Core, we can make something of her, and her work.”

“Where’s the money?” Toma repeated, the words coming out as monotone but feeling as they came out of his mouth as if they had been ripped raw and bleeding from somewhere in his chest. It wasn’t what he wanted to ask, what he wanted to know, but the words were the only ones he could find.

Shel didn’t seem to hear him—she was looking out the window, and she had a brush in her hand, and was adding a swirl of color to one of the images on the side wall. Toma found himself looking away from it all, his eyes coming to rest on the brass cylinder of his telescope. The dust was thicker, but not thick enough to obscure the smeared fingerprints on its surface.

“Toma, relax—” Walton began to say. Toma’s hand closed around the telescope, and he wrenched it free from the tripod. He swung it without thinking, and hit Walton with it, hard, on his mouth. Teeth broke, and blood spurted as Walton’s lips split, and he

fell.

The fellow with the recorder was already out the door by the time Toma turned, and the man in the silk jumpsuit was almost there. Toma landed a glancing blow between the man's shoulder blades as he ducked out the door, and he staggered, missing a step, but the door hissed shut behind him before Toma could hit him again.

Then it was just him, and Shel. She was sitting on the floor now, her legs akimbo as if they had collapsed beneath her. Her hands were spread, flat and open, against the plating of the deck. The brush she had held had rolled away, leaving a little streak of orange paint on the white floor. He looked at the brush, at the paintings on the walls of his flop, at her hands.

"Where's the money?" he grated again, and she shook her head blindly, helplessly. His eyes focused on her spread fingers, thick and pale but dark against the white of the deck, and he was reminded of the magic he'd perceived in them as he'd watched her draw the station as she was sitting beside him in his tug. He couldn't look away, even as he raised the brass telescope above his head, and prepared to bring it down again.

"I'm sorry," he said, in the same monotone that he'd used to ask about the money. His cheeks were wet, and the telescope descended, smashing first her right hand and then her left.

"I'm so very sorry."

## SOME KIND OF MINDWIPE

Hirah sat across the table from the man with the white hair and the gaunt, unlined face and the empty blue eyes, beneath the observation dome in the first-class lounge. John Doe, her charge. She watched him more or less attentively—it was, after all, her job, and she was being paid well for it—but his own eyes were trained, as it seemed like they'd been for days, on the synthetic diamond dome above them and the empty space beyond. For Hirah, the novelty of an actual window had worn off before they'd left the Core, but for him it seemed a source of endless, if undemonstrative, fascination.

They were the only passengers in the lounge, and indeed the only ones who had elected to pay for first-class passage from Cadmus Prime to the unnamed star around which Mnemosyne Station orbited. The *Semiramis* was an old liner that had done the Harmonia run in its heyday, but its dotage was spent making the three-year circuit from Cadmus to the Bastian systems on the Outer Rim, stopping at the station on the way out and jumping back through the backwaters of Humboldt and the tawdry casino planets orbiting Jodie's Star on the way back in. Besides the dome in the ceiling, the lounge featured a burgundy carpet of medium deep pile, a scattering of couches and divans surrounding low tables of polished black granite, a view screen (currently darkened) in the forward bulkhead, and an actual fireplace (currently lit and smoldering) to the aft. John Doe was a man out of time, and Hirah supposed that it was a comfort to him to be in such settings, but she found the whole thing faintly ridiculous.

Above her, the smooth gray mineral composite of the hyperspatial jump ring flashed past, and a moment later *Semiramis's* computer announced their entry into

Mnemosyne's local space. Hirah shut her eyes.

It had been a lengthy transit, and she was glad they'd be docking soon. The novelty of trying to diagnose and treat John's condition had worn off, too—whatever was going on in the man's brain, it wasn't a consequence of the centuries he must have spent in coldsleep, or if it was it was an effect she'd never seen either in her own experience or in the literature.

"It's a good thing we're outside Core jurisdiction now," Doe said. "Our captain would be fined a substantial sum for coming out of a gate with that much velocity. Thirty thousand credits, easy. He might lose his certification, and rightly so."

"I didn't feel anything," Hirah said, because she hadn't. She didn't open her eyes. "Did you?"

"No. I was watching. Standard gate circumference is 1.2761 kilometers. Place shaped charges of no more than twenty grams of  $C_3H_5N_3O_9Y_6$  at 120 degree intervals around the ring, detonate them simultaneously, you collapse the wormhole, shut the whole thing down." He cleared his throat. "If you know the circumference, or the diameter, you can count it out from the visual. We came through and the ring was out of our field of vision far too quickly. The math is easy."

"For you," she muttered, ignoring the guerilla warfare factoid. She had no doubt it was correct—earlier in their acquaintance, she'd taken notice of similar expressions of strangely specialized knowledge, tracking down sources, checking his facts. He was always right, and always incapable of shedding any light on where those insights came from. Because it was her job, though, at least nominally, she asked, "How do you know that? About the circumference."

John Doe was silent for a long time, gazing up into the blackness beyond the dome.

"I don't know," he said finally. It was what he always said.

\* \* \*

John Doe had washed up against the contested boundary of the Inner Core and the Rim, in a generic coldsleep capsule that was at least 700 years old. His retina, fingerprints and genetic profile appeared nowhere in the Core's linked data systems, but a tattooed emblem on his left forearm had given access to an account in one of the black banks housed on the third moon of Epsilon Theta. No photographic or holographic image, no biometric information, just a twenty-seven-digit encryption key to access an account where interest had been compounding for generations. He didn't even know his own name, and neither did anyone else. He did, however, have a great deal of money.

\* \* \*

Steerage class had a lot more passengers, and Hirah found herself in the forward lounge as *Semiramis* approached the station. Not only were there more people, people

other than Doe—four men playing cards at one of the lounge's plastic tables, a couple of men standing, a stout red-haired woman aptly wrangling identical triplets—but the view screen was on and she could watch their approach. The jump gate was above the system's elliptic, and the ring of asteroids that surrounded the yellow dwarf tumbled below them, and then around them, as they descended into their approach vector. Blue and red tendrils of nebular cloud splayed across the entire system, and as the ship advanced and leveled out, the fingers of gas seemed to reach forward to draw them in. Doe would probably tell her something about how the gas and the rocks could be used to some sort of tactical advantage, but Hirah was glad to just be looking at it.

"Never seen anything like that before," said a man standing beside her. Hirah glanced at him. He was middle-aged, black hair going to gray around his temples, his face and frame fleshy and pale in the way that suggested he'd grown up on an orbital. He wore a tan coverall with no insignia that looked a bit frayed at the elbows and the knees.

"It's beautiful," she offered, because it's what she had been thinking. "I haven't seen anything like it either."

"You're from Upstairs, right? "

"Upstairs?"

"Yeah. First class. Sorry. You and your husband haven't been down before, but we've talked about you. Not a lot to do down here, three weeks in transit."

Hirah felt her face redden, but she laughed.

"Believe me, there's not a lot to do up there, either. And he's my patient, not my husband. I'm a neurologist. A doctor." She extended her hand. "Hirah Nism."

He took her hand, squeezing a bit too hard. "My name's Del. That's my wife,

Katia," he said, indicating the woman with the children with a wave of his arm. "And our girls, Sal, Leiti and Kam. Nice to meet you, Doc."

He picked up a plastic cup from a nearby table and drained it. It occurred to Hirah that he was perhaps a little bit drunk.

"Nice to meet you, too. Are you going to the Bastian worlds?"

Del shook his head, held up a finger, and took his empty glass to a dispenser in the starboard wall for a refill.

"No," he said. "Going to Mnemosyne, and that's far enough. You don't have to pay for quarters there, and there are food dispensers you don't have to pay for. We're going to set up a stall on the main drag, get us a fresh start."

Hirah wasn't sure what to say in response to that, but she was saved by the first glimpse of the station on the view screen. One of the men playing cards stood up from his table, went to the panel on the wall, and stabbed repeatedly at a button that caused the image to zoom in. Suddenly, Mnemosyne Station filled the screen—hundreds of levels of metal and carbon fiber and polymer in a hundred different styles of design. Here and there spurs of rock bulged out from the superstructure, as if the station had been built around an asteroid and had, over millennia, engulfed it. As artificial and constructed as it was, the structure had a strangely organic look to it, as if it had grown there with all its angles and modules and extrusions and indentations. The rock that peeked through only added to that sense. Small impact craters pocked the metal skin in places, and here and there a chamber or a level seemed to have blown out, leaving the rooms and corridors exposed to the vacuum. Measurement bars on the top and left sides of the view screen gave a sense of scale—roughly sixteen kilometers high, and twelve wide at the broadest

point.

"Will you look at that?" said Del, waving his wife and children over. "Will you look at that."

Hirah had read about Mnemosyne in the Spacefarer's Gazeteer she had on her datapad, but seeing it on screen, getting closer, was a wholly different experience. It filled her with something like wonder.

"Good luck to you," she murmured to Del, though he was no longer paying attention to her, and after a moment she stepped aside, still staring at the rock that was their destination. She watched for a long time, until *Semiramis* drew close enough that the umbilical docking tube extended from the station's port, eliciting a cheer from the steerage passengers. It would be good to disembark, she thought as she returned to the lift that would take her back upstairs.

\* \* \*

Cryogenic complications had been Hirah's research specialty in medical school. As a result, she'd been shipped out for a ten-year stint as the assistant medical officer to a colony ship bound for Beta Ophiuchi. Two of those years had been live, in transit, thirty-five had passed in coldsleep, and then there were eight more years after they'd made planetfall. The cryogenics had functioned flawlessly, with no adverse reactions among the colonists (except for the handful who died in transit, but there was nothing to be done



for them). She finished up her tour in a corrugated plastic dome in the center of the main camp, treating colonists for acute sunburn, radiation poisoning, terraforming allergies, accidents involving tool and exoskeleton malfunctions, sand blindness and dust blindness and, in the occasional harsh and brutal winter, snow blindness. As soon as her tour was done, she signed on with the first passing ship that was bound for the civilized worlds of the Core.

The *Dawn Treader* was a self-propelled salvage barge: a big, flat slab of meteoric iron with a superstructure at one end and a set of ion drives at the other. Slow and sluggish, it crept around the edges of settled space, scooping up metal and machinery and stray cargo pods from the sites of interstellar catastrophes and dragging them to any port where they could be sold at a profit. Their previous medic had gotten poisoned in a bar on Vilma Station, and they had been flying without a doctor for seven months when they passed by Beta O.

John Doe's cryo pod was partly embedded in an asteroid in an uncharted belt around a massive green gas giant. They'd found other swag as well—undetonated munitions, prefab defensive structures, unbreached cargo containers filled with old but serviceable military tech. Hirah revived Doe, the obese Svart named Unghal who was the ship's robotics and systems hand identified the bar code tattooed on his arm and used it to access Doe's bank account. They had harvested what there was to harvest amidst the asteroids and sped on back to the Core. Hirah was the first person Doe had seen and spoken to upon waking from his centuries-long sleep, and while he displayed an instinctive distrust of almost everyone he encountered, that distrust didn't extend to her.

\* \* \*

Doe was dressed for debarkation when Hirah returned to the part of the ship that held their quarters, wearing his sharply tailored charcoal gray tunic. He stood at the top of the grand staircase that descended to the passenger airlock, their luggage packed and piled behind him on a robotic drayage platform. The vidscreen above the stairs was active, showing footage of the station's exterior.

"Thousands of people could live here," he said, his voice as flat as his eyes as he studied the image on the screen. "Hundreds of thousands, maybe. They don't, though. Only a couple of thousand, according to the last informal census."

"How do you know that?" Hirah asked. "Is there something in your brain that allows you to calculate population density or something?"

She sounded annoyed, and Doe turned his eyes away from the screen to look at her. She looked annoyed, too. In the mild way that most emotions seemed to affect him since he'd woken up, he felt slightly sad, and he gave her a small smile.

"No. I read your guidebook after you went downstairs." He had stared at the approaching station for an hour or more, bracing himself for what had come to seem like the inevitable explosions of information that his mind would belch up, unprovoked, but it hadn't happened. Nothing about attack vectors, or points of structural vulnerability, or advantageous blind spots or points of entry for a covert assault. He felt all of that squirming around in his brain, but the *mélange* of old and new, organic and constructed,

as well as the orbital complexities of the surrounding asteroid field, seemed to have cancelled out whatever his brain had been optimized to do. It had been a relief, really, but an unexpected one. He didn't say that to Hirah that, though. "It's remarkable, looking at it," is what he said instead.

"Why did you pick this place?" Hirah asked.

Doe thought for a moment, then shrugged. "I don't know. I saw it on the manifest of ships out of Cadmus, and it seemed like a good idea. Maybe something in my deep memory, if that's actually a thing. Or maybe dumb luck."

Hirah squinted at him, her brown eyes narrowing with the look of resigned skepticism he'd grown used to from her. He motioned to the drayage platform, which began to drift forward on its nullgrav cushion, following him as he started down the stairs to the airlock.

"Shall we?"

\* \* \*

Abbey Philm lit a cigarette and stabbed a few buttons as *Semiramis* nuzzled up to the docking bay and, achieving congress with the boarding tube, began disgorging its passengers. Mnemosyne Control was a low, dark room, illuminated mainly by the wallscreens that gave him a view of the local space around the docking bay, and the disembarkation airlock, and aerial views from different angles of the Marketplatz. It was

late, and Abbey had the room to himself.

When a liner arrived it was always big news for a couple of hours. The casual vendors were out in force with their makeshift stalls, the Station Canteen had steam tables set up on the concourse for those who had had enough of shipboard food, Gentry's son Walton was shilling cheap well drinks in front of the bar, and the poor bastards who worked the counter at Veng's Emporium had set out bins of soap and toothpaste and painkillers and pirated holos and inflatable pornbots to service whatever other needs the other businesses didn't cover. It was nighttime on station, and he was the duty officer, so far as that went. The station kids weren't out playing their nightly kickball game, thanks to the arrival of *Semiramis*, and that was usually the only thing worth paying attention at this time of day on the Platz.

"Cognitive map," he muttered into the desk mike, and a schematic popped up on the top left-hand screen, replacing the exterior view of the station. The schematic was of his own design, and it utilized the information the station's sensors fed to the control screens to track the processing power of Mnemosyne's data systems. In a previous life, Abbey had administered the data networks for the starport facilities on Harmonia, one of the busiest freight and passenger hubs in the Core. Things were different out on the Rim, and he'd grown used to the jerry-rigged, ad hoc nature of the station's systems in the decade he'd been here, but he'd never gotten used to the fact that nobody really knew what Mnemosyne was doing, or how, or why. Successive generations of inhabitants had grafted human interfaces onto the station's data-gathering and processing arrays, but nobody seemed to have ever taken an interest in measuring and quantifying the full scope of those arrays—what they did, what they didn't do, how and why.

He'd first called his project a systems map, but as he'd charted, via diagnostic subroutines and trace programs and passive tracking code, the various data facilities that Mnemosyne drew from and their linkages and periods of utilization, he'd begun to apprehend a truly labyrinthine level of complexity. He'd begun to think not in terms of systems but cognition—he knew something about AI development and emergence theory, and what he had painstakingly mapped over a number of years certainly rivaled the levels of systemic complexity beyond which a machine intelligence could reliably be expected to emerge. He'd begun to imagine the station's various data facilities as regions of a giant brain.

The only flaw in this conception was that, if the station did function as one big brain, it was a brain that was either mostly dead or one whose processes were mostly undetectable by him. Mnemosyne's sensory apparatus was truly formidable—even as passengers were disembarking from *Semiramis*, the areas of his cognitive map indicating active scanning and data collection were lit up with dozens of input streams. The station was compiling detailed molecular scans of the newcomers, interfacing via needlecast with systems in the Core to correlate public records data with those scans. It was also recording neural activity, physiological responses to the station's habitat, speech patterns and inflections, and a hundred other things Abbey could only guess at. Where all that accumulated data went once it had been recorded, and what was done with it, was still a mystery.

There weren't many passengers disembarking permanently at the station, though it was hard to be sure given that *Semiramis* was continuing on to the Bastian worlds further out on the Rim. Abbey watched the compiled dossiers flash up on the right-hand screen,

flashing through page after page as fast as his eye could follow. A dozen or so laborers from the Core worlds, presumably looking for work in the mining and refining facilities of the system's asteroid belt. Husband and wife traders, and their three children, affiliated with one of the merchant collectives out of Nestor Prime. A cybernetically augmented Casmiri spacer—mercenary, soldier-of-fortune, bounty hunter, something like that. All those had travelled steerage class. And there were two first-class passengers. Some kind of mindwipe case—but a rich one—and his personal doctor, a pretty young woman with a specialty in brain disorders. This last stayed on the screen, because a few years before he'd instructed the scanners to flag anyone who had a neuroscience background.

"Hello, Doctor Hirah Nism," he said out loud, as he took a last drag from his cigarette and crushed it out. There was rarely anyone on station with whom he could discuss his project. He switched the display to a tracker—they'd gotten rooms at Gram Carlisle's, at the far end of the Platz, and were wandering the upper corridors. Sightseeing, like people do here when they've first arrived. They had ascended the Grand Escalier and taken the corridor that led to the Topside Greenhouse and the rooms full of defunct machinery that Abbey had dubbed, in his own mind, the Galleries of Broken Toys. It was good that they were taking an interest, and seeing the strange wonders Mnemosyne had to offer.

Abbey instructed the station to signal him when they were heading back to their rooms, so that he could buy them a drink. "It'll be nice to have someone to talk to."

\* \* \*

He didn't catch them that evening, but the next night, when Abbey came on shift, he discovered his cognitive map behaving strangely. There was a whole area, heretofore dark, that was lit up in the station's cold-storage memory banks. He dispatched a passive redirect script to that location, and watched as it transmitted a duplicate stream of the data access back to his console. Like all celestial objects, the station was periodically bombarded by signals that had been bouncing around the cosmos for years, or decades, or centuries, or millennia. If you were in the right place with the right reception capabilities at the right moment, you might stumble upon the broadcasts that the original humans of Earth had beamed out into space. Mnemosyne had, apparently, captured many such signals, and recorded them. For the first time since Abbey had been looking, it seemed to be accessing those signals. By tracing the bidirectional traffic between that memory core and the processing centers that were calling it, he realized that the station was scanning visual media streams, seeking points of comparison between human faces in those streams and John Doe, the doctor's peripatetic patient.

“Why in the seventeen hells would it occur to you to do that?” he wondered, as he revised his map to incorporate these new data behaviors. “Why do you care?”

\* \* \*

A pale, balding man in the gray one-piece coverall that seemed to function in this place as a uniform approached them as they sat at one of the Station Canteen's tables that overlooked the Marketplatz's main thoroughfare. The doctor was busying herself with the strange puzzle cube that they had found earlier while exploring some of the station's deserted chambers. She had managed to disassemble the cube, and it was spread out over the table in a pile of glittering shards. Doe could visualize how to put it back together, but he resisted the impulse to take up the pieces of the puzzle. The doctor had tired of him, he knew, and for him to interfere with her activity would only make her unhappy. Instead, he cupped his hands around a glass of dark beer, lifting it from the table and taking a slow, reflective sip, then setting it down again.

He liked beer, he had discovered, which surprised him a little, because he didn't seem to feel a great deal about anything, one way or the other. It wasn't good beer, he knew—he could taste the hydroponic fluid in which the hops and barley had been grown, and the traces of the chemicals that accelerated the fermentation process, and the faint bitterness that resulted from the dehydration and rehydration processes that made it economically viable to ship the stuff from its origin in the orbital factories around Tirol to points throughout inhabited space. It was interesting, though, to be able to taste the history of its production in a single sip.

“Welcome to Mnemosyne,” said the bald man, bouncing up and down on the balls of his feet. “Abbey Philm, at your service.” The doctor glanced up, smiled nervously, and returned her attention to the shards of her puzzle. She had managed to affix three of the pieces to each other, though in a way that would prevent her from placing a fourth interlocking piece where it needed to go. Doe lifted his beer, sipped it, set it down again.



“I don’t know you,” he said mildly. In the months since he’d woken from coldsleep, he had broken himself of the habit of searching his memory. He didn’t know anybody, and increasingly he was able to accept that state with equanimity.

“No, you don’t. I was the duty officer when you arrived the other night. I wanted to welcome you to the station.” Philm cleared his throat. “I have a sort of hobbyist’s interest in matters of cognition, and I noted in your dossiers that you both have experience in such matters—Miss Nism from her medical training, and you due to your...” he licked his lips, glanced down at the puzzle, “condition.”

Doe smiled faintly.

“My condition,” he said. “Yes.”

As he studied Philm’s face—deep-set brown eyes, jowly cheeks dusted by gray stubble—he felt his mental processes shifting. It was a feeling he’d gotten used to—it no longer frightened him, or made him unduly uncomfortable. The spatial awareness that had allowed him to visualize the solution to his doctor’s puzzle evaporated like a wall of fog burned away by sunlight, and he waited it out, raising his glass of beer again, sipping some, and returning it to the table. He found himself noticing the faint twitching of a muscle in the bald man’s cheek, the thin veneer of perspiration that caught the illumination from the lighting strips in the Canteen’s ceiling, the narrowing of the man’s eyes, the rhythm with which he was still bouncing faintly back and forth on his feet. The man was nervous, he decided, unaccustomed to speaking to strangers, discomfited by the doctor’s physical attractiveness and shy about expressing a genuine interest in whatever it was he was interested in—he was shy, badly socialized, and rather lonely.

“Have a seat,” Doe said, indicating a chair with a wave of his hand. “That is, if

my companion doesn't object."

"No," said the doctor, looking up, her fingers still fiddling the shards of the puzzle cube. She was getting frustrated, he could tell, and while she wasn't sure what to make of the newcomer, she was not displeased with the distraction he provided. "No. Please, sit down."

"Thank you," Philm said, and settled himself heavily into the proffered chair.

"You'll want to talk to Doctor Nism, I expect," Doe continued. "My experience with cognitive matters, as you describe them, is experiential at best, and my experiences are primarily those of living with profound cognitive dysfunction."

Philm's cheeks reddened, and Doe smiled in an attempt to put the other man at his ease.

"You seem to be remarkably capable for someone suffering from your... dysfunction."

Doe nodded. "Thank you. I do seem to manage."

The man struck him as oddly charming, and Doe was aware that his suddenly sharpened perception of physiological social cues was facilitating that response. He wondered, with the part of his mind that watched the behavior of the rest, what use this set of perceptions might have served him in the past. "Interrogation" was the word that popped unbidden into his mind, and he nodded as he took another drink of beer.

"John's condition is a strange one," the doctor offered, setting down the puzzle pieces and taking a gulp of her wine. "My area of expertise is centered around the effects of cryogenics on brain and body function, but what's happening with his mind is something far beyond the usual run of negative coldsleep reactions. I really don't

understand it.”

Her frustration was palpable again, in the indrawn breaths and the sharp inflections she gave to her words. Like the cube, Doe realized, he was a puzzle that she was in the process of giving up on being able to solve. He sighed, and dropped his eyes to the shards on the table. Staring at them didn't bring back his spatial acuity, so he picked up two of the pieces, and closed his eyes as he ran his fingers over their sharply-angled contours. The material was smooth and cool, like glass, the edges sharp and precise. He felt the shifting begin again in his brain as the station man replied to the doctor and she said something more in response. It was the first time he had tried to deliberately manipulate one of the shifts, and he was faintly surprised when it worked. He felt a cold sensation take hold at the top of his head and then flow down into and around his brain. It wasn't uncomfortable, exactly, though it certainly didn't feel natural, and when he opened his eyes he could see the puzzle again, and its solution. As the others continued to talk he slowly, deliberately, unerringly fitted the pieces back together, recreating the cube from the collection of fragments it had been reduced to.

“Would that be all right, John?” she said to him, as he slid the last piece into place and set the restored cube in the center of the table. He looked up, but she was looking down at the puzzle now, her expression giving away nothing.

“I'm sorry,” he said. “I didn't hear you.”

“Abbey asked me if I'd like to come to Station Control during his next duty shift, to consult with him on a project of his. I'm not sure I should leave you alone, though.”

Doe glanced at Philm, and back at his doctor, intrigued that he no longer had any idea of what either one was thinking.

“I’m sure I’ll be fine,” he said, and picked up his beer, and finished it. He smiled. “The gentleman’s project sounds very interesting, and like something you might be able to shed some light upon. Take all the time you like.”

The doctor’s eyes rested on him for a long moment, and then she nodded.

“Great,” she said. “That’s great.”

\* \* \*

Hirah Nism had arranged to meet Abbey at Gentry’s when the station began cycling into nighttime. He spent the afternoon shaving with an old steel straight razor and a tube of soap he’d bought from Veng, and availed himself of the Barbermatic that Del and Katia Wilpon, the Nestor merchants, had set up at the back of their stall on the Platz, and had put on his cleanest duty coverall.

The doctor hadn’t dressed for their meeting, he noticed when he stepped up beside her at the bar. She was wearing a loose tan unitard, and her auburn hair was inartfully contained in a microfiber hairnet. She was sipping a glass of wine, listening to Walton, Gentry’s son, as he told her the story of the station mural that was painted on the wall behind the bar. Walton’s replacement teeth, crafted by Veng’s autodoc from surgical steel, gleamed in the restaurant’s dim light.

“That is exactly what the station looks like from outside. Tug’s-eye view, you could say.”

“It’s a terrible story, though,” the doctor said, her eyes on Walton’s scarred mouth.

“It ended badly,” Walton allowed. “We miss Shel, though. Still, she has real talent, so it’s probably best that she’s back in the Core.”

Hirah nodded, and drank some wine.

“Hey there, Abbey,” Walton said, picking up a rag and wiping it across the facsimile wood grain polymer of the bar. “What can I get you?”

“Nothing,” Abbey said. “I’m just about to go on shift.”

“I’m not sure that needs to stop you,” Walton said, with a crooked grin that was rendered somewhat macabre by his scars and his gleaming teeth. “Doesn’t stop me.”

“You’re a bartender, Ross. I’m a duty officer. Maybe later. I’ve got the lady’s drink, by the way, on my tab.”

Walton nodded, set down his bar rag and turned to the register console. Hirah turned to him.

“Thank you.”

“My pleasure,” he replied. “Shall we?”

She looked at the mural for a moment longer, then lifted her glass, drained it and set it down. He led her out of the bar and down the Platz to a recess in the avenue wall. He waved his ID badge in front of a sensor lens and the bulkhead swung back, admitting them to a long, straight corridor.

“I didn’t even notice that that was there,” she said.

“There are lots of things like that on station,” he replied, “hiding in plain sight.”

The corridor ended at a door that slid open as they approached, admitting them

into Station Control.

“So this is where it all happens,” she said wryly, her eyes taking in the wallscreens, her nose wrinkling at the stale smell of tobacco smoke. It didn’t, he realized, look like much.

“This is it.” He shrugged, and smiled weakly. “So what’s the matter with your patient?”

“With John?”

“Yeah.”

She frowned, her eyes coming to rest on the camera view of the Marketplatz that occupied the right-hand wallscreen.

“I really don’t know. He has a lot of money, which is how he could afford to make his way here first-class, and how he was able to bring me along. I suppose I thought I’d be able to solve his problem, get to the bottom of the mystery. But like I say, whatever’s going on with him, it isn’t a cryogenic anomaly, or it isn’t solely that. Why do you ask?”

Abbey thought back on what he’d seen on his map the night before.

“The station’s taken an interest in him,” he said. “I don’t know why, but it has. This is what it was doing when I came on shift last night. Have a look.”

He invoked the cognitive map, and accessed the duplicate stream that his redirect script had captured. They watched it cycle through its comparison routines, and then it went live with a set of recorded broadcasts. Apparently the facial matching it had run had borne fruit during the time since he’d last been on shift. They watched a series of broadcast newsreels of a brushfire border war on the Inner Rim that featured the exploits

of an insurgent commander whose facial features closely matched those of Hirah's John Doe. The insurgents had lost the war, ultimately. The planet they'd been fighting over—actually a moon of the gas giant where Hirah had found Doe's coldsleep pod—had been destroyed by a planet-busting munition launched from far orbit.

“What does ‘broadcast’ mean?” Hirah asked, when they'd watched what the station had found. “I'm not familiar with that term.” Abbey was gratified, because it was a question he knew the answer to.

“It refers to an old mode of media distribution, one that lends itself to random capture of extraneous signals. Instead of focused communications—narrowcast or needlecast—a signal was sent out omnidirectionally from a central transmission locus. That's why Mnemosyne got it, and was able to store it, I'd guess.”

“So why couldn't we find any of this footage when we were still in the Core?”

Abbey shook his head.

“History tends to be written by the victors, and planet-busters have been illegal for centuries. Data systems in the Core talk to each other, and if someone with enough clout decided at some point to expunge that war from the historical record, they could do so pretty easily, I think. Mnemosyne can talk to those systems, but it isn't ruled by the same protocols they are. Just because systems in the Core delete something, the same thing wouldn't necessarily happen here.”

Hirah nodded.

“Huh,” she said. “So what else has your map got?”

“Well,” Abbey replied, feeling his chest swell a little bit with pride. “Let's see.”

\* \* \*

After Hirah left for her consultation, Doe slipped out of his room at Gram Carlisle's and strolled slowly down the Marketplatz. Someone was playing music in Gentry's, and the vendors had mainly packed up their wares for the evening. Veng's General Store was still open, so he stepped inside, surveyed the shelves of goods—basic, practical, useful stuff, like filtration masks and juice boxes and wrenches and processor chips and wire. He let his mind drift as his eyes came to rest on one item or another, and he found himself learning, or remembering, things that one could do or make with the various implements that were for sale. In a dusty bin on a high shelf in a back corner, he found a sheaf of square plastic panels imprinted in conductive gold with very fine, intricate, non-repeating patterns that called to mind an imprinted circuit board on the one hand, and a programmer's flow chart on the other. Looking at them made Doe feel sick in the pit of his stomach. He selected one at random and took it to the counter.

“What is this?” he asked the robot attendant, and its eyepiece scanned the bar on the inventory tag.

“The item you have selected is an Imprintable Learned Skill Template, which affords the user professional competence in...” it scanned the tag again, “...hydroponic agriculture. The item is applied via a neural-mapping capable autodoc unit. Health concerns are associated with this item, which has been interdicted in Core space. Purchase price is ninety standard credits plus imprinting fees. Would you like to



purchase the item, and schedule time on the Veng's Emporium autodoc unit for its application?"

"How long have these templates been interdicted?"

The bot thought for a moment before replying. "Five hundred and fifty-three years. Imprintable Learned Skill Templates have since been expunged from the Core space technological record. Would you like to purchase this item?"

It might make Hirah's diagnostic task easier, he thought, if he brought it to her. But it would also spoil her fun, if that was the right word, in trying to solve the puzzle that was his brain.

"No, thank you," he said, and left the store.

The corridor that they had followed the other day, when they'd gone exploring, had taken them along the perimeter of the station—they'd seen many rooms and chambers that had windows or ports opening out to the void. Going the other way, he reasoned, would take him deeper into the station.

He passed through a number of large, empty chambers, long stripped of useful furnishings. These rooms seemed lonely, and somehow sad. The smooth white flooring was thick with dust, and streaks of rust and other discoloration stained the walls where pipes and conduits emerged from them. The air was warmer here, though not uncomfortably so. The light seemed dimmer, too, though that was perhaps imagination. It was very, very quiet.

Eventually he passed through a hatch at the end of a narrow corridor, through an anteroom and a set of sliding doors that opened as he approached, and onto to a large balcony, glassed in, that overlooked a large hall full of machinery of some sort. He

stared at it, waiting for his brain to tell him that the long mesh-steel belts were in fact conveyors, and that the chunky blackened towers that they passed through performed different functions relating to the refinement of ore. It wasn't a facility for producing large-scale mineral refinement but rather for the extraction of rare earths and heavy metals. The machinery was centuries old, Doe supposed, because he recognized it, and it looked to him as if these examples of it had been dormant for a very long time.

He blinked, and rubbed his eyes. As he did so, a faint rumbling reached his ears, and he felt a vibration in the floor beneath his feet, and the door by which he'd entered slid open. He turned from the window, and the lighting in the balcony room switched off. Doe raised his eyebrows, and as the rumbling increased, he stepped back out into the anteroom. The door promptly slid shut behind him. The rumbling grew louder, and he could hear the grinding of metal. The deck beneath him began to shake, not violently but noticeably. This continued for several minutes, and when it stopped, the door to the balcony opened again. Intrigued, Doe stepped back through.

The balcony seemed the same, but the view on the other side of the window had changed. No longer was he looking down on an ore extraction facility, but a chamber filled with piles of computer equipment, old stuff, stuff that looked antiquated even to him. It was all cabled together, though, and as he scrutinized it he recognized an improvised supercomputer—the sorts that criminals or revolutionaries once used (and probably still did) for all sorts of illicit purposes. The notion was that with proper networking and coding all of the tiny processors could work in tandem, exponentially increasing the capabilities of the whole to a point where it could rival the processing power of corporate or military data systems. Again, it didn't look like it had been used in

a very long time, though it looked to Doe like some of the component machines were still powered up.

Again, the lights went out, and the rumbling started, and the door opened.

“Okay,” Doe said. “I think I get it.”

The third room it showed him was seemed to be a baroque atmospheric regulation system, all vents and chemical tanks and ductwork. It looked to be designed to produce methane, however, rather than oxygen. The fourth room was some sort of defensive armament control center—the consoles were not scaled for human hands and the ideograms that decorated them bore no relation to any language Doe had ever encountered, but the telemetry and object tracking screens were recognizable enough. The fifth he had no idea about— hundreds of thick crystalline pillars of various heights, perfectly smooth and sliced through at the tops at different angles, that rotated either clockwise or counterclockwise at differing rates of speed.

“I’m sorry,” he said. “This one is beyond me.”

The lights flickered overhead, but did not, this time, go out.

“I’m not sure what you’re hoping for here,” he said. “I get the feeling you’ve forgotten something, too. A lot of things, maybe.” He closed his eyes, thinking. “Shifting stuff around, though, slotting different things into different places—that’s what my brain seems to do, too. That isn’t how it’s supposed to work, though. There’s something wrong with me.”

He stared at the crystal pillars. They were strangely beautiful, and there definitely seemed to be some purpose to how they were arranged and how they behaved. His mind was tired, though—shifting through a succession of different areas of expertise was

exhausting, and he felt the beginnings of a headache building up behind his eyes.

“I think I’d like to go back to the Marketplatz,” he said, “if you don’t mind.”

Nothing happened for a sufficiently long time that he began to feel foolish for talking to the station as if it could hear and understand him. He gave the pillars one last look, squeezed his eyes shut and turned away. When he opened them again, the door out to the anteroom slid open.

“Thank you,” he said, and gave the wall a little pat as he passed out of the room.

\* \* \*

“What’s this, over here?” Hirah asked Abbey, indicating a swirling icon at the edge of his station map.

Abbey looked at it.

“Those are the station’s dossier files, or the ones for you and your patient, anyway.”

“Why is it swirling?”

“Well, like I said, the station has taken an interest. It’s updating.”

“Let’s look.”

Abbey shrugged, and opened up the file. The newsreels had been added to the dossier, as had a number of entries pertaining to Doe’s neural scans.

“Open those up,” Hirah said.

“I don’t know how to read them,” Abbey told her, with a little shrug.

“I might.”

The scan data filled screen after screen, and Hirah whistled.

“Do you know what this is? Your station has been monitoring John’s brain, constantly, since we landed. This is a complete map of his mind. Remarkable. This place is better than half the diagnostic facilities on Cadmus. Can you represent it graphically, like you’ve done with your station map?”

Abbey frowned, then nodded. He picked up a microphone, and spoke quickly into it for about five minutes, in a dialect that Hirah couldn’t understand, but which she recognized as him coding, on the fly. When he’d finished, he switched the right-hand wall screen to display a semi-transparent three-dimensional image of Doe’s brain, with different lights and colors to indicate the triggering of cognitive functions operating in various parts of his mind. For much of the time the station had been recording, Doe’s brain seemed normal enough, through every now and then there would be a sudden shift, and for a little while his neurons would fire in very different, preternaturally orderly and patterned ways.

“Can you attach a time stamp to this?” she asked him.

“Sure.”

The first couple of shifts had occurred while they had been exploring, she realized. They probably corresponded with the random expositions he’d offered up about the behavior of asteroids and space station defensive mechanisms that she hadn’t paid much attention to. During the time when she and Doe had been talking with Abbey at the Station Canteen, he had apparently experienced three cognitive shifts, though they didn’t

seem quite as abrupt as the earlier ones had. Strangest of all, though, was that the station was still scanning him, and in the last hour he had gone through five more, in very rapid succession and at relatively precise intervals.

“Do you have a map of the station in here,” she asked. “An actual map, a physical one? I’d like to know where John has been for the past couple of hours.”

Abbey called one up, and they found him deep in the bowels of the station, heading back toward the Marketplatz.

“That’s strange,” Abbey said, as they watched Doe’s progress.

“What is?”

“There isn’t a direct route from that part of the station back to here. Or there wasn’t, until now. Watch—see how the bulkheads and the corridors are shifting around?”

Hirah blinked at the map. As they watched, the map was indeed reconfiguring itself, subtly, apparently with the purpose of facilitating Doe’s passage back.

“The station does that, sometimes,” Abbey said, “for reasons of its own. Moves stuff around.”

Hirah looked at him. “How is that even possible?”

Abbey just shook his head, and spread his hands.

“Okay,” she said after a moment. “So what does that look like, on your cognitive map of the station?”

“I don’t know. I’ve never recorded that happening. It’s very rare, at least in inhabited parts of the station.”

He switched back to the cognitive map, and sure enough, there was another

hitherto dark portion of the schematic that was all lit up now.

“Well,” Hirah said. “Looks like you’ve found the part that controls motor functions.”

Abbey smiled, and sent another script to flag that part of the station’s network.

“Yeah,” he said. “That’s good to know.”

“I wonder why it’s doing that, though.”

Abbey shook his head.

“I don’t know. Maybe the station’s decided that it likes him.”

“Yes. But why?”

\* \* \*

When he reached the Marketplatz, by a route substantially different than the one he had taken to arrive at the balcony, Doe found Veng’s store to be shuttered for the night. There was a vending machine in an alcove beside the Station Canteen, though, that sold various staple items, and he fed it his credit chip and it dispensed a spool-seal and some high-potency painkillers. His headache had achieved full-blown awfulness, and he had, sometime during his wandering, reached a decision.

“I don’t think I will be requiring your services anymore,” he told Hirah when he found her sitting at the bar at Gentry’s. “I’m also checking out of Gram Carlisle’s.”

She had been sipping a glass of wine and studying brain scans on her datapad

when he sat down beside her and ordered a beer.

“What?” she said, her face going blank. “Why?”

He lifted his beer, took a careful sip, and set the glass down again.

“I’m finding the station to be quite...therapeutic. I feel like this place and I have a lot in common.”

Hirah didn’t say anything for a long moment. She reached for her wineglass, and lifted it toward her lips, and glanced at her datapad.

“I think I found out who you are,” she said. “Who you were. And the station’s been scanning your neural activity since you got here, and with a little work I’m pretty sure we can figure out what’s going on with your brain.”

Doe smiled, and looked at the mural behind the bar.

“That’s the station, isn’t it? From the outside?”

Hirah followed his gaze, nodded.

“Yes. Painted by a visitor from the Core, apparently quite a famous artist these days.”

“It’s nice. I like it here.”

Hirah thought about Abbey, and the work he was doing, and the puzzles he was trying to solve.

“I do, too, I think.”

Doe nodded, and sipped some more beer.

“You don’t want to know?” Hirah said at last. “What I found out?”

Doe shook his head, and rubbed his eyes. The headache was beginning to fade, whether because of the painkillers or the beer, or both. Gentry’s beer was, he thought,



better than the stuff at the Canteen. Some of its ingredients, at least, hadn't been grown in vats.

“Not particularly,” he said after a moment. “It doesn't seem so important here. This place has forgotten far more, I think, than it remembers. And knowing what I've forgotten wouldn't be the same as remembering. In fact, given the military inflection of much of what I find myself knowing, I'm not sure I would want to remember the rest. I feel peaceful here.”

He drank some more beer. Hirah sipped some wine.

“I will be happy to pay you a bonus for your service,” Doe said after a moment. He was still staring at the mural behind the bar. “And, of course, your passage back to the Core. Or, if you want to stay, I'll be happy to underwrite you if you want to hang out a shingle here. I expect I'll be staying on here for awhile, at least.”

Hirah was silent for a long time. She drained her glass of wine, and motioned to Walton for another.

“Let me think about it,” she said at last.

“Absolutely,” he replied.

## CONTRACT LAW

Cluvel was tapped as an envoy, because he had logged as much time on station as anyone save Toma. Uncle Jettero asked him personally to attend the meeting—found him when he emerged from the main lock, before he'd even gone to the detoxification baths. Jettero, standing with crossed arms in the disembarkation bay, his hair and beard silver, his tunic gray and unattractively form-fitted, in the way of Home Rock fashion, to his aging, pot-bellied frame, the dusting of the hair on his cheeks and chin concealing the scars of radiation lesions and the decades of nickel-rash, his hands folded beneath the conelike sleeves of his uniform.

“We have a meeting,” Jettero had told him. “The refinery folk, the corporates. They mean to renegotiate the terms of our agreement. I expect you to accompany me.”

The Uncle was clean, soft, flabby—it had been fifteen years since he had been out in a tug, working the asteroid field, and the low gravity of Home Rock had taken its toll. Cluvel was dirty, wearing the same coverall he'd been living in for the last three weeks as he'd cored a secondary rock for its nickel, its chondrite, its trace elements. Nickel dust coated his skin, and in the clean air of Home Rock it made him itch. He could feel the welts and hives already arising on his skin, and there was nothing more he wanted to do than get to the showers, and then to his bunk in the dormitory. But attention from the Senior Uncles was an honor, so he kept his hands at his sides, resisting the urge to scratch at his neck and ears. Cluvel had been unlucky in the genetic lottery—the dust and his pores did not get along, and he knew he would be swollen and ugly for most of his period of rest. But there was nothing for it.

“Of course, Uncle,” he replied, inclining his head and averting his eyes. Then, unable to resist, he added, “Why me? I’m not the oldest, nor the wisest. I wouldn’t want to take someone else’s place.”

The Uncle smiled, took his arm, led him from the disembarkation bay and into the polished stone corridors that honeycombed the Home Rock.

“Your respect for the usual hierarchy does you credit, young one,” he said, not looking at Cluvel but instead at the polished basalt of the corridor, the illuminated strips of optic fiber running along the ceiling, the airtight hatches that punctuated the route every fifty feet or so, the lips of which they had to raise their legs to step over. He did not speak for awhile, which was fine with Cluvel—as usual, when he first came back to the Rock after mining, the low gravity of the asteroid they called home made him nauseous, and faintly queasy.

“The High Mother herself suggested that you join me,” Jettero said at last. “This meeting is important, and it will take place on station, and you, I am told, know the station better than any of us.”

They paused at a branching of the tunnels—to the right was the route to the showers, while straight ahead led to the domain of the Uncles themselves.

“Toma knows it better,” Cluvel said, brushing a lock of his fine, ore-dusted hair back from his brow. “The station. He lived there for a time.”

Uncle Jettero looked at him, a small smile creasing his lined face, his eyes as flat as laserproofed alloy—they were dark, and cold, and reflected nothing.

“Toma is still growing back a hand,” Jettero said, not unkindly. “And a kidney. And he is no longer one of us, though he has been remanded to our custody. He is a

different sort of resource, now. The corporates would find him grotesque. Do you understand?”

Cluvel and Toma had been berth-cousins, birth-cousins, in the Home Rock crèche. They had been born on the same day, though to different mothers. It had been coincidence, a random thing, but Cluvel wasn't sure he believed in coincidence, and he'd always felt a bond with his crèche-brother. He was a little shaken, too, that Jettero had spoken so plainly. Everyone knew what had become of Toma, but nobody spoke of it openly, especially not the Uncles when conversing with underlings. He wondered, with a little chill that was equal parts apprehension of the ominous and the tickle of hierarchical ambition, why Jettero had chosen to speak to him that way.

“Of course,” he said, after a moment, averting his eyes and nodding at the curved floor. “I understand.”

“Good,” Uncle Jettero said, and clapped him on the shoulder. “Get to the showers now, wash off the dust of the work. A briefing is waiting for you at your sleep billet. I have also placed an allotment for you with the Matrons—anyone you like will be yours tonight.”

Cluvel swallowed, still not raising his eyes. “Thank you, Uncle.”

Jettero patted him on the shoulder again, and pushed him gently to the right.

“I expect you in the bay at 08:00 tomorrow, Cluvel. We leave for the meeting with the corporates at 9. Off you go.”

Cluvel allowed himself to be propelled a pace or two down the tunnel he wanted to take anyway.

“Suck vacuum,” he muttered under his breath as another wave of itches broke

across his skin. “You old fuck.”

\* \* \*

The High Mother sat in her observation chamber, her lined and aged face illuminated by the glow of the monitors that ringed the room, and by the nebular light that bled in through the leaded diamond expanse of the dome that comprised the chamber’s ceiling. It was the only place on the Home Rock with an unmediated view of the outside—the precincts where her people dwelt were shielded from nebular radiation by at least ten feet of solid stone. The composition of the dome’s materials provided sufficient shielding from the radiation outside, at least for someone of her age—she was well past the age where she could contribute to the perpetuation of the tribe, so whatever minor mutations might come were no longer a matter of concern.

She was tired—there had been much to observe, and much to consider, both on the monitors and also regarding the upcoming summit with the representatives of Chartered Galactic. An hour before, she had watched Jettero approach the young one who knew his way around Mnemosyne. She had watched the boy shower and, his face and body looking ugly from the nickel poisoning, she watched him dress and make his way to the Matrons. He had chosen Amele, as she had expected, and she had watched the girl, almost Cluvel’s age, lead him by the hand into her bedchamber. There was no surveillance in the bedrooms themselves—the High Mother saw the value in it, but there

was a balance to be struck between dignity and oversight. She herself had risen to her present rank from the Matrons' bedrooms to her own Matronhood, and since this chair had been hers she had drawn the line at the bedroom door. She might, she thought, have to make an exception in this case.

Amele and Cluvel had been friends since childhood—she'd checked and cross-referenced both of their personnel files. The High Mother worried, distantly, that the two had formed a pair-bond, and she also worried that, behind their closed door, they were not doing their part to fulfill the Matrons' primary objective—to provide infants for the crèche, to provide young Uncles to take the places of the Elders as they passed on, over time. Probably, they weren't—she'd seen Cluvel when he came out of the detox showers, before he'd dressed. The business of mining was ugly, made a man ugly. Nobody would want to fuck him tonight.

Jettero should have let the boy be, she thought, until he'd been through detox. Next time, she would instruct him more precisely. Men were too direct, sometimes. She knew that from experience, but it still surprised her from time to time when she caught herself losing sight of that Truth. She would have to speak to Jettero, she told herself, and made a note to that effect in his file. Jettero was useful for certain tasks, but as she knew from hard experience, any resource is only as valuable as the judicious hand that directs its allocation and use.

The console beside the elevator chimed. Her cold grey eyes swept the monitors—it was late night on the Rock, and quiet, which was as it should be. Nothing appeared to be afoot. The feed from the Rock's command center showed Jettero standing in front of the elevator's other end, his thin lips squeezed taut, his right hand tapping

arrhythmically against the leg of his coverall.

“Impatience,” she said to the monitor, with a small smile, “is not a virtue.”

The High Mother tilted her head back, running a hand over her close-cropped white hair as she squinted up at the nebular tendrils, the silently spinning rocks that floated in the distance around her. She waited until the competing trajectories gave her a moment’s clear sight line to the distant star that all this rubble orbited—faintly yellow, tending toward brown, a disc she could block out by raising one fingertip in front of her eye at a distance of eighteen inches. With a gesture, she cued the realtime audio of Mnemosyne’s external transmissions, and with another she brought the realtime translation software online. She listened for a long moment, to the static and the coded, modulated whine of the station’s encrypted transmissions and the garbled, intermittent bits of recognizable language that the software offered her.

“...healing...mind reconstituted anew...rgy production fifteen percent improo...trade war...nonsense...Doe...”

Some of that was the human personnel on the station. Some of that, too, was the station itself. It was difficult to tell which was which. But the oracle that was Mnemosyne Station had spoken, however inconsequentially. It would become clear, in time. The High Mother looked at the elevator monitor again. Jettero was still standing before it.

“Send him up,” she told the system. After a moment, she heard the elevator’s electromagnetic lift mechanisms hum to life.

\* \* \*

The meeting with Chartered Galactic Material Holdings did not begin auspiciously, and it got worse from there. Their refinery had recently received a new facility director from the Core and Jettero, despite Cluvel's warnings that Core-based businesses were organized differently, Jettero greeted the woman at the other end of the table first, though she was in fact the assistant to the older man in the expensive suit who sat at the head of the table. Then there was a dispute over Cluvel's ocular, the eyepiece he wore over his right eye so that he could access details of the Uncles' contract with Chartered, and also record the meeting and transmit the live feed back to Home Rock. Jettero and the director, a thin, pale man named Crenshaw who was half his age, went back and forth for half an hour before the Uncle finally instructed Cluvel to put the eyepiece away.

Without the information access the ocular would have provided him, Cluvel had little to do—he could only sit there, silently, as his senior made small mistake after small mistake. He had arrived on station wondering why the High Mother had tapped him, but as the afternoon progressed he understood why he was there, and wondered instead why his Uncle was. It had been years since Jettero had been out in a tug, and as long at least since he'd dealt with anyone outside of Home Rock. The High Mother, certainly, was a skilled manager of resources, but it disturbed Cluvel, and frightened him a little, that she felt she had no better tool for the job.

“We regret to inform you,” Crenshaw said, with a small, cold smile that conveyed



the opposite, “that presently, and for the foreseeable future, the refinery will be able to process smaller capacities of the ores that you mine for us than has been the case to present. This is non-negotiable, I am afraid.”

Jettero’s hands clenched into fists on the genuine hardwood of the long table, and Cluvel again winced inwardly, and let his eyes drift to the pitted diamond wall behind Crenshaw, that admitted a view of the docking area and the red and blue nebular streaks beyond.

“Our deal,” said Jettero, not trying to keep the strain from his voice (or not hard enough), “was to supply the refinery with raw ore for seven standard years. It has only been in force for four and a half. If we are to accept this, you must put something else on the table.”

Crenshaw spread his hands—soft, manicured hands, hands that had never mined nickel or even touched it—and dropped his dark eyes to the tabletop. He studied the grain of the wood for a moment.

“It is unavoidable, I fear. The terms of the contract, I believe, give 90% of the refinery’s capacity to you for the processing of your ore, but alas, the refinery’s capacity is itself diminished at present, and for the foreseeable future.”

“That’s your problem, not ours. What’s the issue?”

Crenshaw tapped the table, raised his head to look Jettero in the eye.

“The contract states, if I am not mistaken, that it is our fiduciary responsibility to maintain the refinery technology and to upgrade it to accommodate the newest innovations for the mining and refining of ore when and as new technology becomes available. Such is the case now, and our engineers, regrettably, have encountered

unforeseen difficulties with the technological upgrades. So, my friend, it is indeed our problem, but yours as well. I believe that is correct, but Sira, can you find the relevant passage in the contract?”

The assistant, a slight, blonde girl with the stocky frame of one who had grown up in planetary gravity, tapped her datapad, called up the relevant passage and read it aloud in a flat, unmelodious voice. Jettero looked at Cluvel, who gestured to his ocular and lifted his shoulders slightly. He had read the contract, a copy of which had been in his briefing packet, and as near as he could recall, the clause she had read was in there. Jettero was still looking at him, eyes narrowed.

“I believe that’s right,” said Cluvel, clearing his throat with a little cough before he spoke. “But we were unaware that upgrades were taking place. Why were we not alerted to this fact, so that we could...” He swallowed—he had no idea, honestly, what he was talking about. “So that we could take this into account with regard to our own business projections?”

Jettero froze for a moment, then nodded once, sharply. Crenshaw turned his gaze on Cluvel, looked at him for a long moment, and then waved a hand, airily, as he looked away.

“An oversight, I suppose, or a communications failure. As you know, the nebular radiation makes intrasystem comms less reliable than we might like. We will resend the notification, with a notarized time-date stamp endorsing the original transmission.”

“Terrific,” Jettero muttered.

\* \* \*

“That wasn’t a negotiation,” Cluvel observed after they’d adjourned, and he was walking back through the Marketplatz.

“No,” Jettero replied with a smile. “It wasn’t. We’ll talk more when we’re back in the tug.”

They didn’t though, or at least not at first. Instead, the uncle initiated an encrypted connection with Home Rock, and retasked several of the Uncles’ mass-detection drones to observe the local space around the refinery, and also to the far-flung sector five.

“I don’t understand,” Cluvel said, once Jettero was done with his commands. “We don’t even mine in sector five anymore, not for a year or so. Why should we care?”

Jettero looked at him. “Why do you think we don’t work that sector anymore? Because the corporates told us not to, is why. Some nonsense about preserving a portion of the field for future scientific study. They were lying, every single damned word of it.”

“How do you know?”

The older man smiled grimly, his eyes drifting to the telemetry monitor. The drones were already beginning their repositioning maneuvers. He nodded, rose from the acceleration couch, strode through the hatchway into the back cabin. Cluvel heard the hydraulic hiss as the sleeping platform unfolded from the bulkhead.

“That was a good question, regarding business projections, by the way,” he called from the other room. “You noticed, I trust, that he didn’t ask his assistant before he

offered up his excuse? That was instructive. Well done.”

“Thank you,” said Cluvel, after a moment.

“Spend the night on station,” Jettero continued. “You know people here. Talk to them, see what you can discover about what’s really going on. That’s what you’re here for. Wear your ocular.”

While Cluvel thought about that, the light in the other chamber switched off. He stared at the darkened hatchway, and then got to his feet.

“Yes, Uncle,” he said.

\* \* \*

Gentry himself was behind the bar when Cluvel stepped up to the bar and took a stool. He was thinner, and paler, than Cluvel remembered, but the old man’s eyes still gleamed as he surveyed the moderate crowd, and his smile was just as bright, and he still knew the vat-distilled whiskey that was Cluvel’s drink of choice, reaching for the bottle as he noted Cluvel’s approach.

“How are you, youngster?” he said, setting the drink down a moment after Cluvel himself had taken his seat. “Long time. Are you an Uncle yet?”

Cluvel studied the sliver of dry ice that floated in the glass, enjoying as always the white mist that boiled up from it and then rolled down the sides of the glass. He took a sip, set the glass down.

“No, not yet.” He thought about Jettero—how he’d been in the meeting, how he’d been afterward. “I think maybe I’m not clever enough, yet.”

Gentry nodded with mock gravity.

“Not enough grey hairs, I’ll warrant. Still, you’ll make out.”

Cluvel sighed.

“I hope so. How have you been? Where have you been?”

Gentry laughed, and patted the shiny black microfiber tunic that covered his chest.

“Back in the Core for awhile, growing myself a new lung. That knife fight was a near thing.”

“I heard. Glad you’re better. Why go all the way to the Core, though? Veng could’ve fixed you up.”

Gentry snorted, and spat into the sink behind the bar. “Veng’s a hack, and so is his autodoc. I’d sooner trust Walton with a needle and thread.”

Walton was Gentry’s son, and had been the bartender since the old man’s injury. He also drank with the patrons, and his hands, it was widely known, weren’t the steadiest.

“Well, it’s good to see you back. You look healthy.”

Gentry laughed again, and patted the little bulge where his ample belly had once been. “No, I don’t, you politician. I look like a plastic cargo pod that got too close to the backwash of a fusion drive. But it’s nice of you to say so. What’s on your mind, if you don’t mind a bartender’s probing questions?”

Cluvel raised his eyebrows, took another sip of his drink.

“Family business. Chartered wants to cut our refining allotment. Says there’s a problem with their upgrades, they’re running on diminished capacity. Uncle Jettero

wants me to dig up some dirt, or something. I don't know."

"Well, that's quite the honor. Sounds to me like you might be closer to Unclehood than you let on."

"What do you mean?"

"Well." Gentry reached for a glass, pulled a pint, brought it down the bar for a white-haired guy who was drinking with Abbey, the station's sometime night watchman. He collected the empty, brought it back to the sink, washed it out as he continued. "I remember the Jettero of old...he was pretty good at figuring things out. A total shit of course, and a bad tipper, but if he's given you the job of gathering intelligence, you should take it as a sign of trust. Unless he's become utterly senile since last I served him, he knows his business."

"Huh," said Cluvel, his mind going back to how badly the Uncle had botched the meeting with the corporate as he traced out lines from the ring of condensation his drink had left on the surface of the bar. Maybe Jettero hadn't botched it after all? "I didn't know that."

Gentry looked around the room, which was emptier than usual, and frowned.

"None of the laders in tonight," he said, "and there's usually a handful who've just gotten off shift. Haven't seen any of those boys for a few days, in fact, when I think about it."

"So?"

"So I don't know. It's peculiar, is all. I hadn't really noticed until now. You should ask around elsewhere, maybe. Ino III got nuked a couple of months back, so I'd think if they could Chartered would be ratcheting up capacity, not cutting it back."

“Ino III?”

Gentry shrugged. “Something people were talking about when I was on Cadmus. Cutting-edge terraforming gone awry. Crown jewel of the Chartered monopoly in that system, and they had to burn it down.”

“What did they mine there?”

“No idea. The usual, I’d expect. Iron, aluminum, cobalt, nickel, rare earths. But it’s gone, now. They didn’t use planet-busters, but they might as well have. Thousands of megatons, fusion bombs, dropped from orbit.”

“Huh.”

“You didn’t hear about it? It was big news, back in the Core.”

Cluvel shook his head. “I don’t think so. Home Rock doesn’t subscribe to Core feeds. High Mother is kind of a puritan, that way.”

As soon as he’d said it, Cluvel remembered his ocular. Crap. He lifted his glass, and drained it.

“Another?” said Gentry.

Cluvel sighed. “Sure.”

Gentry fixed him his drink, set down a fresh coaster, placed the drink upon it, took the empty away. Cluvel stared into the roiling mist as the dry ice boiled away.

“Do you think Jettero really wants me to follow in his footsteps? Am I a younger him? Is that what he sees?”

Gentry was silent for a long moment.

“Yes, I think maybe he does. And no, you’re not a younger him. You’re better.”

“Why do you say that?”

Gentry picked up a rag, wiped a perfectly clean patch of bar, looked Cluvel—and Cluvel’s ocular—in the eye. He winked and grinned, showing all his teeth.

“Because, youngster, you know how to tip. And you’re not a dick.”

\* \* \*

Jettero returned to the Home Rock in the morning, leaving Cluvel on station to see if he could learn anything about the absence of the refinery workers on station. It took a few days, because the workers’ shuttles weren’t running. In fact, it turned out to be a matter of being in the right place at the right time: as he was ambling back to his room at Gram Carlisle’s after another fruitless evening coring rocks with Gentry, a stretcher was rushed past from the dock, on its way to the clinic that the neurology doctor who had recently taken up residence on Mnemosyne had opened. On the stretcher was a woman in work coveralls that bore the Chartered Galactic logo on the collar. The pilot of the shuttle that had brought in the patient wouldn’t talk to him, so he hung around outside the clinic and waited for the doctor to emerge.

“Doctor Nism?” he asked when, some hours later, a brown-eyed woman wearing unfastened operating scrubs and with her hair encased in a hairnet stepped out.

“Yes?”

“How’s your patient?”

Doctor Nism shut her eyes, then opened them. “She didn’t make it. Are you a



relative?”

Cluvel swallowed.

“No, I was sent to check. Uh, from the refinery.”

The doctor fixed him with a hard stare, then looked away.

“Well, she died. Maybe you idiots don’t realize, but when you have your production line overseers jacked into the physical plant and you run the refining systems at overcapacity for days on end, things like this are going to happen. I did my best.”

She still wasn’t looking at him, which was a relief.

“I’m...I’m sure you did. What did she die of?”

Nism let out an exasperated breath. “An aneurism, of course. Feed that much data into a worker’s brain at such a high rate for long enough, you’re pretty much signing her death warrant.”

Cluvel felt an unpleasant fluttering in his stomach, even as his heartbeat quickened with something like excitement.

“So you think that this happened due to overwork?”

“Of course it did. You people told me when you brought her in that she’d been on shift for thirty-six hours without a break, that you all were working overtime there, that the whole damn refinery was running at capacity. This is going to happen again, if you keep this up. The only reason this girl even had a chance is because she’s your boss’s cousin, so you put her on a shuttle and brought her to me. Mark me, it will happen again, if you keep using your people that way. Now fuck off back to that hellhole of yours, and leave me be.”

She turned to go back inside, then stopped and glared at Cluvel.

“And make sure, make damn sure, I get paid.”

“Of course,” Cluvel muttered as the door to the clinic swung shut behind her.

Once she was gone, Cluvel headed back to his flop to contact Jettero. His heart was still pounding, and he had trouble sleeping as he waited for the Uncle to come and collect him the next day.

\* \* \*

When they arrived back on Home Rock, the automated work assignments posted on the wallscreen above Cluvel’s bunk alerted him that he had received another allotment with the Matrons.

“I’m being watched,” Amele told him, once the door to the bedchamber had hissed shut. “More carefully than the other Nieces.”

“How do you know?”

“It’s just a feeling, but I worry. Whenever you get an allotment, you always pick me. That doesn’t go unnoticed. I had an unscheduled medical inspection while you were on station.”

Cluvel sighed, reached out a hand to touch Amele’s reddish curls. His eyes drifted to the stacks of bound printouts that were heaped on the shelves beside the bed.

“I’m sorry,” he said. “How are your studies going?”

She followed his gaze.

“I think I have a gift for Core contract law,” she replied. “It’s fascinating. So detailed, so painstaking, so fantastically corrupt. There are loopholes you can fly a tug through.”

Cluvel nodded, thinking of Crenshaw—his manicured hands, the thin-lipped smile that didn’t reach his eyes.

“Like contractually binding technology requirements?”

Amele frowned.

“I don’t know. I haven’t looked at that.”

“You should, maybe.”

She nodded.

“I will.” She placed a hand on his shoulder, and smiled, and with her other hand found the zipper of his coverall. “But not tonight. Tonight, we need to do what we’re supposed to do in here. The Matrons expect it, and if we don’t, I think they’ll know.”

Cluvel smiled, too, and pulled her close, and kissed her.

“I can live with that,” he said.

She pulled the zipper down, and helped him slip out of the coverall.

“Me, too.”

\* \* \*

“Who is this man?” the High Mother asked Cluvel the next day, as he stood in her

observation chamber, looking directly out at the space outside Home Rock for the first time. He dragged his eyes down to the screen she to which she was pointing—it was a frame from his ocular recording of the night at Gentry’s.

“The man on the left is Abbey Philm, a member of the station’s administrative staff. I don’t know who the other man is.”

The High Mother pursed her lips.

“Very well,” she said, and gestured toward the screen. A video stream replaced the still image—a faintly luminous, faintly translucent body with organic contours. As they watched, it approached an asteroid—Cluvel couldn’t tell how big, because the stream provided no sense of scale—and wrapped itself around the rock, enveloping it.

“What is that?”

“I have no idea,” Cluvel replied, clenching and unclenching his fingers behind his back. “What is that feed?”

“It is a realtime stream from one of the drones your Uncle redirected to sector five. I thought you might know.”

“I don’t. It appears to be organic, but beyond that I really couldn’t say.” Cluvel coughed. His instincts told him to say nothing more—this was the High Mother, after all—but if he was being groomed to follow, in whatever fashion, in Uncle Jettero’s footsteps, she would expect him to ask questions, to gather information. “Why are you showing me this, Mother, and asking me these questions? You have the ocular footage, so you know what I know, certainly.”

The High Mother gazed at him for a long moment, her lined face unexpressive and her green eyes cold. Then she smiled, faintly.

“The man in the still image is called Doe. He is connected to the station in ways we do not understand. The stream concerns Chartered Galactic’s move to limit our access to refinery capacity, though the drones conducting surveillance there do not indicate that the refinery is any less busy. In fact, it seems to be more busy, as your report of your conversation with the neurologist seems to corroborate. If Doe speaks to the station, and speaks for the station, I want you to talk with him.” She pressed a button on the console, and a datachip popped out from a slot below the monitor where the live feed was running. She took it, and held it out to him.

“Why me?” he asked. “Uncle Jettero is better accustomed to this sort of activity, or so I have been led to understand.”

The High Mother raised her eyebrows, and looked upward, toward the dome.

“Jettero, in his younger years, revealed to us the importance of intelligence-gathering in the space around us. It is due to him that we know what we know about what goes on on the station, and at the refinery. His methods have involved cameras, recording devices. Those are useful, as far as they go, but they’re not enough. We need eyes, and ears, and brains, as well—human intelligence—to supplement what Jettero has put into place.”

“And you see me as the person to do that?”

“Yes, I do. My role is to properly allocate resources. Jettero is admirable for what he has achieved, but as Gentry...dear Gentry...observed to you, you are not a dick.”

Cluvel felt his face redden.

“I wish he hadn’t said that.”

The High Mother laughed, gently, softly.

“He didn’t say that to you, dear boy. He said that to me. And he isn’t wrong.”

“I don’t know Doe, though.”

“You know his friend. If you play it right, that will be enough, because you can get to him.”

Cluvel took a deep breath, held it, let it out slowly.

“I’m not sure how I feel about that,” he said finally. “I don’t know Abbey all that well, but he’s always been friendly to me.”

The High Mother’s smile vanished, and she held out the datachip. After a moment, he took it.

“I don’t care how you feel about it,” she said. “Not in the slightest. It is what you will do. Amele may graduate from the Nieces in the crèche soon—especially if she is now with child, as I believe may be the case after last night. Or she may not. Do I make myself clear?” Cluvel swallowed and nodded. “Good. Consult the oracle of the station, and report back to me.” She looked at him for a moment longer, then swiveled her chair so that she was facing her consoles and screens, and he stared at the back of her white-haired head, feeling a little bit ill, as if he’d just come home from three weeks on a tug in the belt. “You may go.”

\* \* \*

Cluvel did what he was told. He was back on station two days later, alone; Jettero

was waiting for him on the tug. He caught up with Abbey at Gentry's, and Abbey took Cluvel to see his friend. Cluvel didn't know what to make of Doe, though the man was personable enough. His eyes would go distant from time to time, though, and he would speak flatly of things that one would not expect him to know about. Station things, other things, very specific things—maybe he *was* an oracle, Cluvel thought, like the High Mother has said.

They watched the chip the High Mother had given him, in the chamber Doe had apparently selected for himself. It was several levels down and inward from the Marketplatz—large and oblong and empty, save for a wallscreen and a cot in one corner of the room, and a food dispensary terminal in the middle of the portside wall. Doe's eyes became unfocused for a moment, in the way Cluvel had noticed, when the recording began to play, and then he watched the wallscreen with an unexpected intensity of attention.

“That's old tech,” he said, once it was done. He was still looking at the screen, which had gone black. “Biotech, outlawed in the Core, because of the dangers of using it in inhabited space.”

“What is it?” Cluvel asked.

“I don't know exactly—there were different variations, back in the day—but, to put it plainly, it eats raw materials, and excretes semi-processed ore. Out here, there's not a lot that could get them—Chartered—into trouble. There's no law out here except contract law, and there's no enforceable contract law except that which can be enforced by the parties involved.”

Cluvel looked at the blank screen, glanced around the room, reached up and

unclipped the ocular, switched it off and put it in the breast pocket of his coverall. Doe went fuzzy again, and then snapped back again, with a more upright stature, a military bearing.

“You should go, Abbey,” Doe said. “The boy and I need to speak freely, about things that wouldn’t do you any good to hear. I’ll see you at Gentry’s later.”

Abbey looked startled, like Cluvel felt, but he shrugged, gave them both a wave, and left.

“You can’t fight something like that, in the traditional way,” Doe said once Abbey was gone. “Something would kill it, no doubt, but if you killed it, they’d just grow another one. The chink in the armor is the jurisdictional question.”

“How do you mean?”

Doe smiled, a cold smile, and closed his eyes for a moment.

“Biotech entities like this one are subject to a pretty rudimentary command-and-control model. You have the right resources, you can herd them. Especially if you have mining tech, which your force has, yes? Mass detectors, tractor beams, ore deposits waiting to be refined?”

“Yes.”

Doe laughed, again in a flat, impersonal way, as if the person who was laughing wasn’t the person Abbey had introduced him to in the bar. It was disturbing.

“Lay it a trail to follow,” Doe said. He tapped the screen, touched some menu buttons, called up a map of local space. “As I was saying, it’s a jurisdictional question. The thing on the feed isn’t illegal here, but it’s illegal somewhere else. What I’d do is move it to that somewhere else, and trust due process to deal with the aftermath. Lead it



to the gate back to Cadmus, and push it through. It's the most viable option, given your own tech and your munitions, which are pretty much nil. And if you do it right—even if you don't, perhaps—Chartered Galactic should get the blame, for utilizing banned tech and letting it get out of control.”

“But what happens, if the thing they're using gets introduced into Core space?”

Doe raised his eyebrows and shrugged as if to suggest that the question was irrelevant at best. “Hard to say. It will probably be attracted to the first mineral-rich mass that it encounters. Might eat a planet—preferably an inhabited one—or two, before they figure out how to kill it. Then they trace it back, through the gate, and you show them your footage and tell them it came from CGMh, and they do the rest.”

Doe grinned, but Cluvel was aghast.

“That sounds like it would kill a lot of people,” he said.

Doe shrugged, and his eyes grew distant again, then came back into focus. “The closest planet to the jump gate is Sargon XII, if they haven't moved the gate since then. Last population estimate is thirteen million, give or take. In a war, people die, my young friend. Killing people is what wars are for. But it will achieve your objective, and it is tactically viable.”

Cluvel stared at the white-haired man with the ageless face for what felt like a long time. The white-haired man stared back.

“Thank you,” Cluvel said at last. “You've given me a lot to think about.”

\* \* \*

“You look even worse than you did the last time I saw you,” Gentry said as Cluvel slumped onto a stool at the bar. Cluvel took his ocular out of his pocket, set it next to his glass, tapped the lens of it with a nervous finger.

“Yeah,” he replied. “You don’t say.”

“Want a drink?”

He really did, but instead he shook his head. “No.”

“Like that, is it?” Gentry said, with a laugh.

“Pretty much,” Cluvel answered.

“So what’s on your mind tonight?”

Cluvel just shook his head.

“Nothing I can really talk about.” He looked at the ocular, thought about what he had heard once he’d switched it off. Thought about Amele, thought about himself, thought about the Uncles and the High Mother and about the refinery.

“I just have a decision to make,” he said at last, “and I don’t know what I’m going to do.”

## PROSPECTUS

Boerum Hackal leaned his forehead against the porthole as the interplanetary liner C648-W spiraled down through the atmosphere toward the Gatsby spaceport. Gatsby was the largest settlement—the only settlement, really—on DSA1771, known locally as Europa. He smelled, the cabin smelled, his travelling companion smelled, and while Gatsby didn't look like much from 125 clicks up, Hackal was old, and tired, and he didn't much care what it looked like. Eighteen days in transit from Cadmus Prime via two short-hop wormhole gates on a ship with no reliable clientele to support a real market for first-class cabins. He wanted to disembark, have a shower, have a drink. Europa was a swampy planet, and cold, he recalled—he'd passed through, twenty years or so before. An orbit too far from its dim and swollen sun, and some minor fuckups with the initial terraforming. The air had turned out a bit too moist for woody plants to grow, but the planetary biosphere, while not ideal, was stable, and the natives had plenty of combustible peat. So not only was water cheap on the surface, heating it wouldn't be prohibitively expensive.

“If we're in a ship, how are we landing?” Wilbur said, with a vague, dreamy inflection that made Hackal wonder if the kid was stoned. Again. He sighed, and pushed himself back from the window, turned his head. Wilbur was reclining on his foldout bunk, arms crossed behind his head, his feet resting on Hackal's pillow, which he'd pulled down from the top bunk when Hackal wasn't paying attention.

“What?”

“It's a mixed metaphor, is all. And it makes no sense. We're in a ship. A space

*ship*. Right?”

Hackal nodded after a moment, reluctantly acknowledging the added emphasis.

“So?”

“And yet we’re *landing*. But we’re landing in a port, which is a term typically used for boats. Or ships. But ships dock in ports. They don’t land.”

Hackal sighed.

“I’m just saying. Space is three dimensional. The sea, judging from ones I’ve seen, functions mainly as a two-dimensional plane. Ships float on the sea. If they break the plane along a downward vector, they are referred to as submersibles. If they break the plane on an upward vector, they are referred to as seaplanes, or as airplanes. If they move on land only, they’re something else altogether. A different category of thing. So the metaphor doesn’t work. Neither one does.”

Hackal squeezed his eyes shut. He very much wanted to disembark.

“Who cares?” he said.

“I care,” said Wilbur. “It bothers me.”

“You’ll get used to it.”

“I suppose I will.” Wilbur sat up, swung his legs down off the bunk, ruffled his lank, greasy black hair, and grinned. “They’re stupid here, though. And they have money. And that’s what matters.”

“Some of them do,” Hackal murmured. He turned back to the porthole, and looked down again, taking in the small cluster of hi-rises around the port, and the shanties stretching out past them in every direction, getting bigger and at the same time smaller as they descended. Gatsby. Europa. Money.

\* \* \*

There wasn't a conference room at the Gatsby Arms, the only solvent and functioning hotel on the surface, so they'd hired the restaurant and bar that was just off the lobby and overlooked the muddy main drag that led away from the port. Wilbur hadn't liked it—it seemed to offend his dignity—but it pleased Hackal, not only because it had been his long experience that you were likely to attract more investment on fringe worlds like Europa from well-heeled and well-liquored drunks than you were from people attending a “development conference,” but also because there was a pretty young girl, named Sara in this place, who could periodically bring him glasses of the bitter brown liquid they called whiskey and thus make it easier for him to listen to Wilbur's part of the pitch.

He was three whiskeys in, and he'd thoroughly surveyed the desultory crowd—maybe sixty, of whom maybe fifteen had sufficiently valid credit to be worth cultivating and of whom maybe six were either drunk or foolish enough to transfer some of that credit. Time was, he'd done the whole pitch himself—the holo of the world, the extolling of its virtues and potential, the likelihood of massive profit and untold riches waiting just around the corner, and then just enough science to back it up. The Seeyoh wanted his young nephew to learn the business now, though, so Wilbur did most of the lifting, leaving Hackal to spout the science. Hackal had, after all, been one of the last graduates

of the Terraforming Institute on Harmonia, so he could talk the talk and sound like he knew what he was talking about, because he did. It was hard listening to Wilbur, though, spinning the fictions of the nonexistent “candidate planets” they’d discovered.

“Castellia III” was just outside the prime zone of viable planets, with a thick atmosphere that could be converted to oxygen/nitrogen with an influx of genetically engineered microbes, which had detectable deposits of water ice at the polar caps, and which had sufficient basalt and other dark, heat-absorbent rock that its albedo (the measurement of the amount of heat that the planet and its atmosphere absorbed or reflected) could be modified so that it could be made to fall within the plausible range. Castellia III would be beautiful, he thought. It could be flawless. If only it were real.

Hackal swallowed the last of his drink, enjoying the strange, spicy organic aftertaste it left in his nasal cavity as well as the warm burn it left going down. Peat whiskeys were, he thought, his favorite. He motioned to red-headed Sara for another, and began listening to Wilbur. The kid was a useless little shit, pure huckster, but Hackal had to admit that he did the close of the pitch better than he himself ever had.

“Terraforming works,” Wilbur said, with a deceptive shrug. “About 90% of the time it works. You find a planet within the orbital range where temperatures can support human life, and you drop the lifebombs from an orbiting craft, and then you wait. It’s not a bad bet...nine times out of ten it comes up platinum. The other one time, well, you burn it down from the same orbital craft, and walk away.

“Humanity, in its various guises, has established footholds on 7,264 planets. Sixteen of those planets were tailor-made for humanity, and required nothing but colonists, and machines, to make them productive members of the interplanetary

community. Of the other 7,248, 1,917 are sealed habitations that orbit, or hover, in the middle of the gaseous layers of a non-solid planetary mass, staying closed and using drones to harvest the clouds, which doesn't entirely count. The other 5,331 of them are the results of terraforming. Just so you know. It's not a bad bet.

“If it sounds like I'm trying to sell you something, well, I am. There aren't a lot of investment opportunities that have a 90% certainty of some positive rate of return. This is one of them. Sometimes it's brilliant from the get-go, sometimes it takes some time to find out what profit can be extracted from a terraformed world, and sometimes, of course, one chance in ten, you will lose. But on the whole it's a good bet. Nine to one, with a profit at the end of it, is one of the best bets that you will ever see. If you want to gamble, but don't like the casino odds—where the house always wins—you should think about putting your money with us.”

\* \* \*

After the sales pitch, Hackal spent the rest of the evening playing cards with the locals. Doing so was part of the con—show the marks that you're a human being (if you're in human space, anyway), that you work hard and play hard, just like them, that just because you're based on the central world of the sector you aren't too good for them. Over the course of three or four galactic standard hours, Hackal made sure to lose a little bit more than he won, to engineer some brilliant hands that got sucked out by a weaker

one held by another player, to engineer a handful of amazing comebacks to almost balance out the bad beats. The goal here wasn't to make money from the game, but to acquire social currency. Also, given the gambling metaphor that Wilbur had employed, it would be a bad thing to come off as too unlucky. Hackal had been doing this for decades, and had gotten very, very good at cheating at cards.

The game had broken up twenty minutes or so, and Hackal was sitting alone at the bar, staring into his glass, rattling the cubes of water ice in it from time to time to listen to the sound, and aimlessly riffling the deck of cards he'd taken from the abandoned table. Wilbur was across the room, loudly plying some of the more amenable and ostensible high rollers with lots and lots of the local alcohol. Wilbur didn't have the hands, or the mind, yet, or the ego to do the gambling thing right. So he was buying round after round, like he always did. The kid was playing to his strengths, Hackal supposed, such as they were.

After awhile, he became aware that the stool to his left was no longer empty. He blinked, left off fidgeting with the deck, and looked at her.

She was a handsome woman. Her face was deeply lined and the skin of her cheeks pocked with faint traces of radiation and mineral scarring—nickel dust and the like. The effect could have been unattractive, but it wasn't—her eyes were blue and hard, her lips unadorned, her hair brilliant white and cropped short, her frame fit and trim, her coveralls sturdy and well-made, but worn. She seemed supremely confident, and she looked like someone who had lived. Her age, it appeared, was probably near to his—ninety or a hundred standard years. When he glanced at her she met his gaze evenly, and when he smiled at her, wondering for a passing moment what he looked like to her (there



was no mirror behind the bar where he could check), she smiled guardedly back.

“Hello,” he said.

“Hello,” she replied. “Doctor Hackal, isn’t it? From the ‘development conference’?”

Hackal could hear the implied quotation marks she put around the phrase. He frowned, casting his mind back through the faint haze the cards and alcohol had left to locate her voice.

“You’re the woman who was sitting in the back? The one who was asking me some very good questions, I think.”

She nodded, accepting her due. “I have a proposition for you, Doctor.”

Hackal raised his eyebrows, and chuckled. She was indeed a handsome woman.

“Aren’t you even going to buy me a drink first?”

Her smile broadened, and her eyes flicked down to the deck of cards between them.

“I’ll cut you for it.”

At this, Hackal laughed outright. This was a different game than the one he’d been playing all night. It was a relief. He knew the order of the entire deck, but for a moment he wasn’t sure whether he wanted to win or not. He looked her over again, and decided that he did. Not taking his eyes from hers, he lifted the proper portion of the cards from the pile, and turned over the bottom one.

“Trey,” she said, glancing down. She nodded, took the cards, quickly reshuffled them, and cut a card of her own. “Deuce,” she said, looking at the card, and then back at his face, appraisingly. “Bad luck, Doctor.”

Hackal lifted his mostly empty glass and drained it.

“Perhaps,” he said, and gestured to the bartender to bring them both a round.

She waited until their drinks had been delivered, then lifted her glass to him, took a sip, and set it down on the scratched zinc of the bar with the particular care of someone who had logged a lot of time offplanet.

“Spacer?” he asked. She nodded.

“I’ve spent time above. So have you. It shows.”

Hackal shrugged, sipped his drink, waiting.

“My name is Cromp. Imber Cromp.”

He bobbed his head downward, and turned on his stool, and grinned, making a show of looking her up and down.

“A pleasure to make your acquaintance, then, Imber Cromp.” He widened his grin a notch. “So what’s this about a proposition?”

She rolled her eyes at him, stood up from her stool, and picked up her drink. She nodded to one of the unoccupied booths against the wall. He rose and followed her, and when they were both seated she touched the stud on the round table’s centerpiece that activated the privacy shield.

“You come straight to the point,” Hackal said, eyeing the shimmering field of visual static that now screened the booth’s interior from view. “I like that,” he added after a moment, though he was not sure if that was true.

She sipped her drink, and tapped her fingertips on the table.

“When you’re talking about your trade to an audience, you sound like a lecturer at Harmonia.”

Hackal shrugged. “Class of ’61,” he admitted.

“Class of ’54, for me. Certification in astrophysics and applied starship engineering.”

He looked at her appraisingly. Her own eyes were narrowed as she studied his face.

“We just missed each other, then,” he said.

“Yes.”

He reached into the breast pocket of his coverall, removed his ocular, turned it over in his fingers as if it were a gaming chip, then held it up.

“Do you mind?”

She laughed and spread her hands.

“Go right ahead.”

Hackal fitted the lens over his right eye, let it scan her biometrics, read from the visual overlay that she was, according to the public databases, who she said she was. Net worth in the millions of credits—she held several small yet lucrative drive technology patents, owned a tiny starship of her own design, had logged and then sold several discovery claims to various undeveloped celestial objects. He was silent for awhile, and then removed his eyepiece, replaced it in his pocket, took a deep breath and then let it out.

“You’ve done well for yourself,” he said at last. She cocked her head, then nodded, once, modestly, and dropped her gaze to the tabletop.

“Castellia III. It sounds almost perfect.” She inflected the statement as if it were a question.

“No,” Hackal replied, the lingering smile disappearing from his lips as he fell back into the rhythm of the sales pitch. “To be sure, there are a lot of positives, or potential positives, about it. The atmosphere is dense, gravitation is close to standard, there seem to be primitive cyanobacteria in the biosphere that can, if encouraged, produce oxygen at a rapid rate. But it’s too cold, too far out from the system’s sun, the atmosphere is mainly ammonia and methane. Besides, we’d have to get the seismic activity under control. All these things can be modified, but Castellia III is by no means a sure thing. I’m sorry if during our presentation Wilbur and I gave you the wrong impression.”

Imber sighed, and smiled coldly. She nodded, and looked at him directly.

“No, I got all that. That’s what I mean, though. The imperfections, such as they are, are just imperfect enough to remind potential investors that it isn’t a sure thing, while still being tractable enough to fit in with your partner’s sales pitch about gambling. Almost perfect. Too perfect, in fact.”

Forty standard years before, give or take, Hackal had visited a moon of Ino VII with Seeyoh Mallan, back when the Seeyoh still worked the circuit himself. The audience had twigged to the con, and they’d barely gotten offworld with their lives. Ino VII was a desert world—lots of sand, lots of glass—and he still had a scar across his chest from an angry “investor” who had opened him up with the shard of a moonglass stanchion that had been pressed into service as an improvised weapon.

“I’ve been to Castellia,” Imber went on, still holding his eyes with her own. “One gas giant in a decaying orbit around a brown dwarf star that’s about two millennia off from collapsing in on itself. Most astronomical catalogs don’t even have a full entry for

it...just the name.”

“I’ve heard of the system you’re describing, actually. You’re confusing the one we’ve identified with Carvalis, however. There are a lot of systems in this part of space. It happens.”

Imber sighed, and closed her eyes for a moment.

“No, Doctor. I’m not mistaken.”

Since the long-ago trip to Ino VII, Hackal had carried an electrostatic stun baton in a pocket concealed within the right leg of his coverall. He lifted his glass with his left hand, and took a sip of his drink, while he let his right drop down to his thigh. Imber followed the movement with her eyes, and she laughed.

“You misunderstand me,” she said. “I know you finished in the last class that Harmonia graduated, and I could tell from your part of the presentation that you genuinely know your business. I suspect that you’ve never actually gotten to practice it, though, because the market for your skills dried up.” She paused, and looked at him for what felt like a long time, the smile gone from her face but her eyes somehow warmer than they had been. “I also suspect that that is why you have such a sadness about you.”

Hackal squinted, the feeling of old age washing over him again, and looked away. He lifted his glass and emptied it, the burn in his throat not feeling as good as it had earlier.

“What’s your proposition, then?”

He heard the rustling of her garment in the silence the privacy field created, and the clatter of ceramic rattling as she tossed something onto the table between them. He looked down and saw a standard data chip, unlabelled, lying beside his empty glass.

“We both know what we both know. Castellia III is nonsense, and your intention was to fly off from this place tomorrow or the next day with as much money as you could harvest, never to be seen again. But what if I could give you a real world, in many respects not unlike the one you invented? One where you could actually do the work that you were trained to do?”

Hackal didn't look at her. Instead, he stared at the chip. His mouth was dry, suddenly, and his heart was beating a little bit faster.

“Where did you get your planet? I didn't see it on your financials.”

“Actually, I got it, and then I sold it, and I only recently got it back. You know Chartered Galactic?”

Hackal frowned. Chartered Galactic Mineral Holdings was the largest mining conglomerate in the sector. Or rather it had been, until its recent and sudden implosion. Something involving banned mining technology that they were using in some out-sector backwater that had found its way back to civilized space and had destroyed a planet of thirteen million souls.

“I do.”

“You know they failed?”

Hackal shrugged. “So?”

Imber smiled.

“I sold them my claim to a resource-rich planet I'd discovered in an unexplored system, which they purchased so that they could keep it away from possible competitors to their iron and nickel monopolies. They never developed it, because they didn't need to and it wasn't cost-effective. They just took it off the market so that nobody else could

have it.” She tapped her glass on the tabletop. “Do you know, in Cadmus contract law, what happens to an undeveloped claim when the entity that owns it ceases to exist?”

“No.”

“It reverts to the original claimholder. So it’s mine again.”

Hackal glanced down at the chip. “I see.”

“So take a look,” she said. “See what you think. If you’re interested, I’m easy to find.”

Hackal swallowed.

“We’re leaving tomorrow,” he said after a moment, and she laughed.

“I don’t think that will be a problem.”

He heard the click of the button as she deactivated the privacy shield, and the sounds of the barroom washed in—music, the drone of conversation, Wilbur’s slurred and drunken laughter. She slid out of the booth, and he could feel her looking at him as his wrinkled fingers reached slowly, as if of their own volition, for the data chip.

“Think about it,” she said, and then he listened to her footsteps receding as she walked away.

\* \* \*

The liner was scheduled to depart for its next stop a few hours after Europa’s red-tinged, watery dawn, but Imber Crompt had turned out to be correct. Something in the old

liner's control systems had failed, and it wasn't a part that could be fabricated, cheaply or quickly, from the resources and facilities that Gatsby had to offer. It would be days, perhaps weeks, before a replacement component would arrive. Over a breakfast of smoked marsh eels, vat-grown protein tinted yellow that left a gritty coating on the tongue and some sort of shredded tuber that tasted faintly sour, Wilbur unleashed a monologue, amply larded with obscenities, about the accommodations, the food, the quality of the liquor, the stupidity of the locals, and so on that Hackal listened to with his jaw set.

"I don't know why we go to places like this to do this stuff," was Wilbur's final summation. "It's awful. It's uncivilized."

"Well," Hackal said, when Wilbur had finally flung his napkin into his half-eaten breakfast and fallen into a disgusted silence, "like you said as we were landing, there's money here."

"There's money everywhere. We could make more, under better conditions, if we worked the actual Core."

Hackal closed his eyes, counted to nine, opened them again. He'd been up late the night before, surveying the prospectus contained in Imber Crompt's data chip, and doing some research, and when he finally went to bed he had not slept soundly.

"We'd get caught in the Core systems," he said, as patiently as he could manage, as he speared the last of his smoked eel with his fork.

"There could be ways around that," Wilbur said sulkily. "I hate places like this."

Hackal chewed his eel, and swallowed it, and looked around the largely deserted dining room. There was something wan and slightly shabby about the plastic paneling,



yellowing with age, that covered the walls of the hotel, and the interaction of the light strips in the ceiling with the pinkish daylight that leaked in through the windows that looked out on the street outside. He'd spent most of his life in places like this, or in travelling between them. It wasn't pretty, but there was something comfortable about the familiarity of it.

“If that's how you feel, Wilbur,” he said after a moment, “then maybe you're in the wrong line of work.”

\* \* \*

Hackal had taught Wilbur his first game of cards, when he was a younger man and Wilbur had been just a boy. Wilbur's father, the Seeyoh's brother, had been a genuinely nice and friendly man, well-placed within the legal profession on Cadmus Prime. The boy, then, had been innocent, and pampered, and Hackal spent many hours with him, playing games and regaling him with stories of the planets he and the boy's uncle had visited. Their itinerant life sounded romantic to the boy, though it was not that way in fact. Over the years, Hackal watched that wide-eyed boy who had hung upon his every word grow up to turn aside from his father's path and instead apprentice himself to his uncle, and he wondered how much responsibility he himself bore for encouraging him on that path. Hackal didn't like to think too much about that question, because he suspected that he wouldn't be happy with the answer.

\* \* \*

They spent the afternoon back in the bar, where Hackal dealt out games of solitaire while Wilbur sulked with a local-interest datasheet he'd gotten from the Gatsby Arms' gift shop. When Imber Crompt sat down in one of the empty seats at their table, Hackal felt a mixture of unease and relief.

"You were right, as it turned out," he said flatly, "about the liner."

She smiled. "The C6 liners should have been retired decades ago. The design of their quantum telemetry modules is unstable and outdated. I'm surprised that this sort of malfunction doesn't happen more often. They're hard to fabricate, too, and impossible to fix."

She didn't sound surprised. Hackal just shook his head.

Wilbur, without looking up from his datasheet, said "Did you know they have invertebrates on this world that fly? There's an image. They look like giant floating parameciums or something. Fucking disgusting. What a planet."

He dropped the datapad on the table, shaking his head, looked up to the newcomer, blinked at her.

"Who are you?"

Hackal cleared his throat. "This is Imber Crompt, of New Pollux. Madame Crompt, this is my colleague, Wilbur."

“Hello,” she said, smiling politely. Wilbur studied her for a moment, then reached into his pocket, removed his ocular and put it on. Imber raised her eyebrows, and Hackal winced.

“Imber Crompt,” Wilbur said after a pause. “You haven’t agreed to invest in Castellia III, though you were in the audience last night. Affiliated with the Ten Families of the Pollux system.”

She glanced at Hackal, and smiled faintly.

“Yes, I am. And no, I did not.”

“You could make a lot of money with us on this. Let me buy you a drink.”

She shook her head.

“Maybe I could. I haven’t decided yet.”

“What’s not to like about it?”

Hackal sighed.

“Well,” she said, a note of teasing laughter in her voice, “you’re stuck on Europa for the foreseeable future, I hear. So I have plenty of time to make up my mind.”

Wilbur frowned. Hackal waited.

“I have a ship of my own,” she said after a moment, her eyes firmly on Hackal now. “I could give you a lift to your next port of call, so you can continue to spread the good news. Some travelling time together will also give you a further opportunity to persuade me.”

Wilbur muttered a praise to the Infinite, rather more loudly than Hackal suspected he realized. He was still squinting through his ocular, and Hackal had no doubt that the kid was bringing into focus the summary of Imber Crompt’s financials.

“I can’t take you there directly, though. There’s a stop we’ll need to make along the way.”

Hackal stared at her, and she stared back, and tilted her head to one side, and shrugged.

“Sure,” said Wilbur. “Great. Anything to get us off this rock.”

“Yes. Great.” She planted her hands on the tabletop and pushed back her chair. “I’m leaving at dawn. See you at the spaceport.”

Hackal stared at her. She smiled at him, and raised her eyebrows, and stood and turned and walked away. He shook his head.

“Great,” he muttered quietly at her retreating back.

\* \* \*

The gravity on Imber’s ship was barely a third that of Cadmus standard, and after throwing up on the bulkhead leading to the bridge an hour into open space, the kid had fled to the small cabin he’d been assigned.

“Poor boy,” she said to Hackal, after they’d cleaned up the mess. They were sitting in her cabin, compact but comfortably furnished with a small table, two chairs, a bed and a data console with a small cupboard above it. The bulkheads were concealed by green silk hangings, and the exterior wall was one large sheet of flawless, inch-thick synthetic diamond. “Have you been travelling together long?”

Hackal shrugged. “Ten months or so. This is his first trip out. He doesn’t quite have his space legs yet.”

They sat in silence for a time, looking out at the distant glow of Small Magellanic Cloud.

“There’s no money in it,” Hackal said at last. “Your planet. It seems like a good candidate, but the mineral resources won’t justify the investment.”

Imber’s lips creased in a slight smile, though she didn’t look at him.

“Why do you say that?”

“There are some radioactives, some rare earths, but the majority of it is iron, nickel, cobalt. Nobody’s been able to make a profit developing new claims like that in decades.”

“No,” she agreed. “They couldn’t. But that has changed. Chartered Galactic is gone. So is their monopoly. I have investors lined up, on New Pollux, who are ready to seize the opportunity, if we can come up with a viable prospectus and attract some seed money to reinforce their confidence. You need to stop thinking like a con man, Boerum, and start thinking like a terraformer again. That’s what you are, really, I think, if you can remember how to be.”

It was the first time she’d used his first name. She was right, too. He’d been looking at it as if he were brainstorming another fake investment opportunity.

“So why me?”

She turned to him now, and laughed.

“You’re one of the only ones left in this part of space. The Institute hasn’t trained terraformers since you received your certification. That’s what? Seventy years? There

might be a few others still around, and if you refuse I can probably find someone, but you and I were both in the right place at the right moment, weren't we?" She reached across the table and laid a rough palm on his wrinkled cheek, and Hackal's heart squeezed a little in his chest. "It could almost be destiny, couldn't it?"

\* \* \*

The next morning, after he'd left her bed and returned to his own cabin, he lay on his bunk, a strange feeling swirling around inside his chest. It wasn't love, or it wasn't yet. Perhaps it could be—Imber Crompt was a remarkable and formidable woman, and she'd chosen him to accompany her on this new adventure. If he in fact agreed to accompany her, that was. No, it wasn't that. It was hope

He plugged the data chip into the console beside the bed, and looked over her planet again. Pelagon's star was a red giant, a mere 10,000 years into its expansionary phase. The inner planets of the system had been consumed as the solar radius had expanded, while the single frozen outer planet had begun to warm and thaw. The last survey of the system, before hers, had been taken centuries before, which explained why nobody had found it before. There was water and CO<sub>2</sub> ice at the poles, and various basic minerals, and Pelagon also had the necessary iron core and an appropriate rotational speed and a magnetic field to ensure, once the cyanobacteria were introduced and albedo modifications commenced, the planet would be able to hold its thickening atmosphere

rather than seeing it boil out into space.

If the planet existed, if Imber wasn't conning him the way he and Wilbur had tried to con her and the others on Europa, it could be done. Hackal did some calculations and sketched out some provisional notes, and when he finally shut down the terminal, he did so with an unaccustomed sense of possibility. He had worked out such calculations in the past, but always to fit an imaginary planet that he and Mallan (now Wilbur) could take on the road and sell on spec. For the first time since he'd been at the Institute, he was working the problem in the right direction. It felt good.

Imber had raised the question of whether he could remember how to be what he had trained to be. He hadn't been sure of that the night before, but having begun to do the work, he felt, with increasing confidence, that he could. He smiled, and closed his eyes, and listened for a moment to the almost subliminal hum of the ship's drives.

\* \* \*

Pelagon, from orbit, was a cold brown sphere, capped with white at the poles and tinted a dull pink by the light of its aging sun. Hackal looked at it through the main viewscreen on the bridge, and then activated his ocular, deploying its own scanning apparatus to confirm the readings that Imber and her ship's sensors had given him. His own scans seemed to confirm what she had told him. The planet did indeed exist, and it seemed to be exactly what she'd promised.

“Terrific. Another damn rock,” said Wilbur, stepping up beside him. Hackal glanced at him—the kid still looked a little green, but at least he was out of his cabin.

“What’s this, then?”

“That stop Imber said we needed to make,” Hackal told him. “It’s a claim she owns.”

“Is there a spaceport? Or a station?”

“No, it’s undeveloped.”

“Well, shit.”

Hackal removed his ocular, and slid it into his breast pocket. “Wilbur, how much investment did we get from Europa? And the other stops? How much are we in the black, this trip?”

Wilbur shook his head. “Europa was slim. You were right. Not all of them had money, and the ones who did didn’t want to give theirs up, mostly. Maybe 90,000 credits.”

“And the total, at this point?”

“A half million, give or take. Why?”

Hackal looked at the screen, at the planet below them.

“No reason.” He took a deep breath, and let it out slowly. “This is quite a planet we’re looking at, Wilbur. It could be, anyway.”

Wilbur snorted. “Doesn’t look like much.”

“No, it doesn’t. It could, though, with some work. Could even be profitable, too. Have you ever thought about what it would be like if, rather than selling people the promise of making new planets livable, we actually did it? Have you?”



Wilbur was silent, and Hackal glanced away from the screen to find the kid staring at him, a strange expression on his face.

“You okay, Boerum?”

Hackal looked away again, coughed, smiled. “Sure. I’m fine. But you know, we could do it. Take a frozen rock like this one, and in a generation or two turn it into a place where people could live, and work, and thrive. We could turn it into a gold mine.”

It would be an iron mine, strictly speaking, but that was neither here nor there.

“Maybe we could,” Wilbur said after a moment, a note of something wistful, not complaining, not bitter, in his voice. He stepped forward, closer to the screen, and studied the uninviting sphere slowly rotating below them for a long time. Then he turned to face Hackal.

“Maybe we could,” he repeated. “But why would we fucking want to?”

Hackal sighed, and said nothing. Wilbur looked at him for a moment longer, then shook his head and headed back to his cabin. Hackal heard his cabin door close, and Imber’s cabin door slide open, and then her hand, warm on his shoulder, her breath on his cheek as she brought her mouth close to his ear

“Is he going to be a problem?” she asked quietly. Hackal stood still for a moment, then slowly shook his head.

“Why is this important to you?” he asked after a moment. “I know why it is for me, but why for you?”

Imber was silent for a long time.

“Let’s just say,” she said finally, “that you’re not the only one with disappointments.”

\* \* \*

It was their second night in orbit around Pelagon, and Hackal was sound asleep in his cabin when he was wakened by the flaring red light and the distinctive two-tone blaring of the decompression klaxon. He pushed himself from his bunk, feeling momentarily dizzy from the lessened gravity as he floated across his small cabin and his feet settled to the deck. Imber was already in the corridor.

“We’re losing atmosphere,” he said, trying to keep the fear from his voice.

“Where’s the breach?”

Imber laid a hand on his arm.

“Don’t worry,” she said. “It’s the aft cargo hold, probably a micrometeorite strike. They’re not uncommon in this system. The ship sealed the hold as soon as the alarm was triggered. The rest of the ship is fine.”

Hackal went to Wilbur’s cabin, palmed the sensor that opened the door, looked inside. It was empty. From there he ran aft, until he was brought up short by the sealed hatch that would admit to the cargo hold.

He found Imber on the bridge, tapping keys on the life support console.

“Wilbur’s not in his cabin. Where is he?”

Imber said nothing, and Hackal pushed past her in the narrow space. He punched up the monitor displays for the ship’s various compartments, finally finding the camera

that gave him a view of the hold's interior. The leak was there, and it was a small one—he could see the moisture vaporizing in the air and rushing toward the aft bulkhead, narrowing in a swirling cone as it approached the pinpoint breach in the hull. In the corner of the frame he could see Wilbur, unconscious, sprawled on the deckplates. He stared at the image, feeling sick.

“Wilbur's in there! There's still air, though. Where are the atmosphere suits? We can still get to him.” Imber simply looked at him, and Hackal felt his voice rising to a shout. “What did you do?”

She opened her mouth and hesitated, as if she were going to lie. “I found him at the communications console,” she said, her voice raised to carry over the alarm. “He was needlecasting to someone on Cadmus Prime, someone called Mallan.”

“My boss,” said Hackal. “His uncle.”

“He was saying that he didn't think he could trust you anymore.”

Hackal didn't say anything. He couldn't think of anything to say.

“You can still save him. There's an override switch beside the hatch. I didn't shoot him, I just put a hole in the exterior bulkhead. There's still time. I won't stop you.”

Hackal pushed past her and went to the hatch. The monitor camera had iced over, and there was nothing to see. He stood with his thumb on the override, and shut his eyes, but he couldn't press the button. He stood that way for a long time, the decompression klaxon beating in his head like a drum until the moment it fell silent and he bent over, and vomited onto the deck between his feet.

After a moment, he felt her beside him. He felt her hand on his arm, turning him

around and leading him back to the viewscreen at the front of the room.

“Look at it,” she said. “Open your eyes and look.”

After awhile, he did what she said. Below them lay Pelagon with all its potential—cold and frozen in the blackness of space, slowly turning. He looked.

“It will be beautiful,” she said, holding out her hand. After a moment, he reached out and took it.

“You killed him,” he said.

“We killed him, lover. We did, together.” She gave his hand a gentle squeeze.

“Just look.”

In his mind’s eye, he could see the tweaks he’d need to apply to the bacteria’s DNA. He imagined the polar ice melting, the greenhouse effect accelerating the warming of the surface, the biospheric seeding that would, in five generations, make the world green and alive, a place where people could live in the open air, and work, and thrive.

“It will be flawless,” he said, in spite of himself. “It will be flawless.”

## BEAUTIFUL, AND VIRTUOUS TOO

“I’m not sure what happened to that kid,” Abbey said, arrhythmically tapping a broken light pen he’d been fooling with all evening against the tabletop. “When he came on station full-time, he seemed stable, didn’t he?” Doe raised his eyebrows, lifted his glass of beer, sipped. It was clearly a rhetorical question. “As stable as any of those asteroid jockeys ever are, anyway, but you know what I mean. When I think back though, little things, he’s been unraveling for months.”

“Maybe station life didn’t agree with him,” Doe said.

It was what everybody was talking about—Cluvel, the junior envoy of the clannish asteroid mining collective known as the Uncles, who just the other day had freaked out in the Marketplatz, high on who knew what, and eventually thrown himself (or fallen) down a dead droptube. The kid had come to the station just before the failure of Chartered Galactic, when the biotech mining apparatus they’d been running in the asteroid belt had found its way through the hyperspatial ring that connected Mnemosyne with Core space and eaten the first rock it found on the other side—Sargon XII, a planet of thirteen million souls. The bottom of the tube down which Cluvel had fallen was a flooded chamber sixteen levels down, and while the kid had been badly damaged, the water had broken his fall enough so that it didn’t kill him. A couple of ore laders, day laborers at the Uncles’ refinery, had rigged up a spool of cable and rappelled down the tube in time to keep Cluvel from drowning, at least. A tug had appeared yesterday to collect the boy and take him back to the Uncles’ Home Rock.

Abbey continued to tap on the tabletop, and Doe stood, drained his beer, turned

toward the back of Gentry's bar, and the asteroid field outside its diamond-plate window. His eyes focused on the distant lines of glowing chemtrails, descending from a few degrees above the field's elliptic. He felt the cold flush over his scalp as the modalities of his brain shifted: three craft, thirty-six or so standard hours out, the ships themselves mere glimmers in the faint light of the system's distant sun. A Board of Trade frigate from Cadmus, with the usual two-gunship escort. Various telemetry vectors traced themselves over his retinas, until he shut his eyes, breathed deeply, then opened them again once he felt the cool wave of his changing cognition rise and recede.

"Tough luck for Uncle Jettero," he said blandly, still looking at the distant streaks, which were once more just streaks. "Losing his assistant just before the traders arrive. You should have the station keep an eye on them, Abbey, when they get here. They'll be wanting to make trouble."

Behind him, he heard Abbey stop with the incessant tapping.

"What trouble? The delegation's looking to finalize a production agreement for the refinery, to help stabilize the market for nickel and chromium. Chartered Galactic going down fucked up a whole bunch of things across the Core. Besides, Jett will be fine. Cluvel's replacement arrived on the same tug that took him away, and from what he's told me, she's even sharper on contract law than he is. Was. Whatever."

Doe strolled over to the bar, where one of the handful of remaining journalists, a dark, stocky woman named Bela, was trying somewhat desultorily to interview Walton about Precursor archaeology. Walton was grinning—he was very proud of his new teeth. Everyone else wanted to talk about Cluvel. Doe waggled his glass and set it on the bar, while Walton flashed the teeth at him and pulled him another pint.

“Looking good, Walton,” Doe said as Walton handed him his fresh beer.

“Thank you,” said the bartender, and turned back to the journalist.

“Would you believe,” he said to her, “that there’s a room here that can read your mind? I lost my virginity in that room.”

Doe walked away, back to Abbey.

“I still think you should keep an eye on the Board delegation.”

“Why? The investigators have come and gone. They want ore.”

“You really think that? You ran the spaceport at Cadmus, Abbey. You know the Board. They want ore, yes, but they still want answers.”

“We don’t have any, so there’s nothing to worry about.”

Doe set his glass of beer down, and looked at his friend. Balding, a bit paunchy, very good at certain sorts of systems. A functionary. And not entirely correct, in terms of answers. He frowned.

“Thirteen million, under their protection, died on their watch. You know the Board of Trade, or you did. ‘No law but contract law’ out here, to be sure, like Cluvel was so fond of saying. But there are all sorts of contracts. And there’s certainly more than one sort in play right now, still. Don’t think that their investigators are done yet.”

Abbey blinked at him with watery eyes, and tucked his light pen into the pocket of his coverall. “I don’t think anything, John, but I’m not sure why I should care.”

The footsteps of someone fast approaching reached both their ears then, and Abbey’s eyes widened as Doe began to turn, only to be thrust back against the base of the bar by the crackling discharge of an electrostatic shock baton being thrust into the small of his back. Doe’s body went taut, and then limp, as the charge of the baton coursed over

him, disrupting his muscles and making his fingers and toes twitch uncontrollably. He thought he had blacked out for a moment, though it might have been longer. When his vision cleared and he managed to slowly regain his feet, he saw Abbey and another man, one of the other residual journos, restraining a very slim woman with short black hair and olive skin.

“That’s for whatever you did to Cluvel,” she said, one slender hand grasping the baton that Abbey was still trying to wrestle out of her grasp. Doe cleared his throat, and waited for his cognition to shift to hand-to-hand combat routines. It didn’t happen—his brain, too, was scrambled by the electrostatic charge he’d absorbed, apparently.

“I’m sorry,” Doe said, after a moment, weakly. “Have we met?”

Abbey managed to force the baton to drop, and he looked from Doe to the woman and back.

“John,” he said, “this is Amele of the Home Rock. Cluvel’s replacement.”

Doe stared at her for a moment, remembering what Cluvel has told him about life on the Home Rock, and his beloved.

“I had understood that pair-bonds were forbidden in microcultures like yours,” he said. “Exceptions and rules, I suppose.” He bowed, slightly, from the waist, then turned to Abbey. “Remember what I said. Be watchful.”

He gave Amele a faint, cool smile as he stepped around her and made his way to the exit.

\* \* \*



The Board of Trade's delegation arrived the next evening, and summoned Amele and Jettero, her Uncle, at the break of the next day cycle. The Board's chosen chambers extended off a landing on the Grand Escalier, a staircase forty meters wide that descended ten levels from the Marketplatz, into a vast cylindrical hall whose floor was decorated with crystalline pillars that emitted light in varying hues and brightnesses. Jettero was a large man and heavy—he'd gotten paunchy and soft in the fifteen years he'd spent on the Home Rock, but since he'd assumed responsibility for the Uncles' permanent presence on the station, the standard gravity had begun to firm him up and give definitions to his muscles once again. His cropped hair and trimmed beard had whitened in the year he'd been here, and while the set of his mouth had softened his eyes were still dark and hard and generally disapproving. He had been keeping up a grumbling monologue about the peremptory nature of the summons as they had proceeded through the gradually brightening corridors, which continued as they reached the head of the Escalier and he began to descend. It took him nine steps before he realized that Amele was no longer beside him, and he stopped, let out a disgusted grunt, and turned sharply to look back at her.

“Well? What's wrong with you? Are you ill?”

Amele had stopped at the top of the staircase, her eyes wide and her heart suddenly pounding as she took in the hall they had emerged into, the far wall nearly a quarter kilometer distant and the floor nearly as far below. Above them, the room's ceiling was lost in shadow.

“There’s so much space,” she said, her voice barely a breath.

The Uncle looked at her, hard lines of irritation cutting sharply down his jowly cheeks. He frowned, then took a deep breath, and climbed back so that he stood on the stair below hers.

“There, niece,” he said, his voice softer. “Of course, you’re not used to this. You’ve never been off the Home Rock, have you?”

Amele shook her head slowly, as a wave of dizziness crept over her.

“Look at me,” he said gently, before repeating it more sharply. “Look at me.”

With an effort, Amele focused her eyes on the older man’s face, which was level with her own.

“Good,” he said and grimaced, an expression that Amele recognized after a moment, from Cluvel’s descriptions in his often hilarious private correspondence with her, as Jettero’s attempt at a smile. “Good, good. Now breathe. You’ll get used to this place, in time, and there’s no shame in being taken strange with it when you’ve just arrived. We’ve only got thirty more paces, and we’ll be at the Board’s office. Focus your eyes on me, and don’t look around. What you’re feeling is something they call vertigo, and it will pass. Come.”

He looked at her until she nodded, then turned, and began slowly descending to the Escalier’s first landing. After a moment, she followed, keeping her eyes fixed on the coarse gray weave of the Uncle’s tunic. Cluvel had always talked of Jettero as being a bombastic ass, but as they made their way down the steps, she found her pulse slowing down and the dizziness receding.

“This is one of the reasons, probably, why the Board called this meeting here,”

Jettero said over his shoulder as they approached the landing. “To unsettle you, and thereby to wrong-foot us both. Let’s not give them the satisfaction.”

The hatchway that gave entry to the Board’s offices was attended by two bulky figures in the black combat armor of Board of Trade militia, who wore sidearms at their belts and regarded them through reflective visors that Amele knew would be displaying biometric data as well as personal information and the results of the armament scans that the helmets’ sensor arrays had been conducting since they came into view. After a moment, the one on the left said, “Your credentials, please?”

Jettero withdrew from beneath his tunic the sheaf of identification documents that hung from a lanyard around his neck. “My associate is newly arrived on station, and has not yet received Board accreditation,” he said, with a nod to Amele. “We hope to resolve that today.”

The marine nodded. “We were sorry to hear of your previous assistant’s... distemper.”

“Yes,” Jettero replied, his inflection suddenly clipped. “Thank you.”

The door they were guarding slid aside, and the Uncle stepped through, Amele a step behind.

\* \* \*

The first meeting was a formality as much as anything. They were introduced to

the Board of Trade delegation: an older woman with black skin and silver orbs with traces of circuitry in place of eyes, whose name with Kirch and who bore the title of director; and her two assistants, a pale, smiling man with the slight frame of one who, like Amele, had not grown up in a planetary environment whose name was Wallis, and a short, dark, wiry man in an ill-fitting uniform named Cornelian, who served as the delegation's documentary and technical assistant. Also present were a handful of journalists, several of whom Amele had glimpsed at Gentry's the previous evening, whose names she didn't try to remember because her ocular was recording everything for her. Kirch and Jettero gave a joint statement regarding the purpose of the coming negotiations—the ultimate disposition of the Chartered Galactic refinery that the Uncles had taken possession of after the corporation's collapse, and the crafting of a longer-term trade agreement between the Core systems and the local mining interests to help bring the Uncles' nickel, iron and chromium to market and to help stabilize the market for those commodities in Core space in the wake of the dissolution of Chartered's monopoly and the subsequent economic upheaval that it had caused on the bourses of Cadmus and Harmonia.

They clasped hands and raised glasses for the journos' cameras, and after the press had filed out, Kirch and Wallis and Jettero retreated from the conference chamber, while Cornelian set up an array of small, black data rigs and scanners that recorded Amele's biometrics and spat out a set of identification documents akin to the ones Jettero had presented to the guards. As Amele glanced over them, Cornelian grinned, revealing bright and perfect teeth that were at odds with his otherwise somewhat ruffled appearance.

“Your holo sure came out a lot better than the first guy’s,” he said, and let out a low whistle. “The cameras like you.”

He winked at her, one olive-skinned eyelid obscuring one hazel-green eye. His lashes were very long, part of her noticed, even as she felt a tightness in her chest at the thought of Cluvel.

“Do you have his ident image?” she asked. “Cluvel’s.”

Cornelian’s grin dampened markedly, though Amele didn’t notice. “Sure,” he said, and muttered some instructions into the microphone that allowed him to give instructions to his consoles. After a moment, he swiveled a small flatscreen around, so that Amele could see it.

And there he was. Cluvel, who she hadn’t seen since he’d been sent to Mnemosyne for good, who she hadn’t seen since she’d given birth to their son and placed in the Home Rock crèche, to be cared for by the Matrons who oversaw the raising and education of the next generation of Uncles. His face more flushed than she recalled, and lined with strain, and his eyes dark and haunted. Her breath caught in her throat, and she coughed a little to mask it. *Oh, my love*, she thought. *What did they do to you?*

“See what I mean?” said the tech, after muttering another couple of commands that split the screen between Cluvel’s image and her own.

Amele blinked. “Yes. Yes, I do. Thank you. I should be going.”

\* \* \*

Following Jettero's directions, Amele found her way to Cluvel's flop, at the end of a long, dim corridor several levels below the Marketplatz, that reminded her with its low ceiling and intermittently dark fiber optic lighting of the passages of the cored-out asteroid where their people lived, that they called the Home Rock. The door was sealed with a spool of dark polymer bonded to the metal of the hatch and the plastic sheathing of the surrounding bulkhead, but when she entered the code—the numeric representation of her own name—it unspooled into her hand, and the hatch slid open. The air inside was close, as if it hadn't been opened in days, and it took her a moment to find the panel on the wall that caused the lightstrips in the ceiling to flare to life, but it smelled like him, and she breathed deeply as the hatch behind her slid shut.

It was a small, square room, six meters on a side. A bedroll in the corner, rumpled and unmade. A small shipping crate, upended beside it, with several empty bottles and a bowl crusted with the remains of the goo the station's food dispensers spat out on demand. An unframed still image of her affixed to the bulkhead above the bedding, and a darkened datascreen on the opposite wall, beside the door through which she'd entered. On the side walls were mounted sheets and sheets of smart paper, clippings of the stories that the Core feeds had run after the destruction of Sargon XII. She stared at them, feeling slightly sick.

"Clu, my love," she said, out loud this time, looking at the recorded streams of the biotech monstrosity that Chartered had unleashed approaching the planet, surrounding it, engulfing it, and the casualty spreadsheets, and the rest. "What did you do?"

She sat down on the bed, and after awhile let herself recline. The smell of him, of

his body was stronger here, and it comforted her in a sad way, and eventually she closed her eyes, and slept.

\* \* \*

It was late in the station's night cycle when she awoke and, after sealing the door to the flop, wandered fruitlessly through the dim corridors in search of a food dispenser. Finally, she gave up, and retraced her steps to the Marketplatz. Veng's Emporium and the Station Canteen was shuttered for the night, and the vendor stalls at the far end of the concourse had been broken down, and aside from her the only traffic was a handful of small, crablike metal-and-plastic automatons that scuttled slowly across the deckplates, harvesting the trash and detritus that had accumulated during the day and disappearing with it into small panels in the walls, only to emerge again to collect more. A faint wash of light and conversation and prerecorded music spilled out from Gentry's, so after watching the spidery maintenance bots for a time, Amele headed there. The bartender, Walton, was mopping the zinc surface of the bar, but he froze, watching her intently with nervous eyes as she approached. He licked his lips, and grinned half-heartedly.

"Do you serve food?" she said after a moment, looking over his shoulder at her reflection in the mirror. She looked, she thought, tired. "I'm starving, and I couldn't find a food dispenser."

"Are you going to zap me if I say no?"

Amele's eyes snapped back to Walton's face. His grin seemed more confident, though when her gaze met his, he raised his eyebrows, and she felt her cheeks flush.

"I'm sorry about that. It won't happen again. So no."

Walton nodded, and picked up his rag again to wipe his hands.

"Good. We have a dispenser in the back, so I can dish something up for you. Anything to drink?"

Amele looked at the bottles behind the bar, thought of the empties in Cluvel's flop, shook her head. "Not right now. Just water."

Walton tucked the rag into one of the pockets of the half-apron that he wore over his coverall. "Water and a dish of whatever Nemo has in store for us tonight, then. Coming up."

He filled a glass from a spigot above the sink, set it in front of her.

"Thank you," she said, settling onto a stool as Walton proceeded to a doorway a little ways down the bar. An eruption of laughter from one of the tables behind her jolted her as she sipped from her glass, and she swung around slowly on her stool, surveying the room. A handful of laborers sat at a booth by the diamond window, including one of the men who had restrained her the previous night. Sitting in a corner, alone, she recognized the pale, smiling Wallis, who had a glass of something green in front of him but whose attention seemed focused on the ocular he wore over his left eye. The large, round table where the laughter had come from was occupied by the four journalists, three men and the dark-haired woman from the bar the night before, who had attended the Uncles' ceremonial meeting with the representatives of the Board of Trade. Each of them had a more or less full glass in front of them, and there was a substantial accumulation of



empties in the middle of the table. Mercifully, the white-haired Doe, who both Cluvel and the High Mother had spoken of, and who she'd assaulted last night, wasn't present. Less mercifully, one of the journos, tall and slight and sallow with a shock of unnaturally scarlet hair, saw her looking at them, shushed his colleagues and raised his glass somewhat unsteadily.

“Here's to lookin', beautiful! Welcome to Mnemosyne Station!”

The other men at the table turned to look at her, and Amele felt her face flush again. She nodded uncertainly, opened her mouth and then closed it again, and swung her stool back around even as she heard the scrape of a chair being pushed back. She clenched her fingers around her water glass, and took a sip, wishing she hadn't come.

A moment later, the redhead was sliding onto the stool beside her.

“I mean it,” he said, too loudly. “Welcome, welcome. You're a lot better to look at than Cluvel, let me tell you.”

Amele looked into her glass. “I'm sorry. I don't remember your name.”

He laughed, and tapped a rapid tattoo with his fist on the bar. “That's all right. Mack Kevlin, from Seven Systems Network. Call me Mack. I thought you ladies didn't ever come off your House Rock or whatever, right. It's nice to meet one of you.”

“Home Rock,” Amele said quietly, correcting him. Her face felt like it was burning.

“What? Oh, right. Sorry. What are you drinking?”

“Water. I'm waiting for some food.”

“Well, let me buy you something stronger. I know Jettero's a skinflint, but don't worry about the tab.” He laughed again, louder. “I've got an expense account. And a

nice flop, topside, in case you'd do me the honor of a private interview. I've even got a couch up there, folds out into a bed. Fantastic view."

Amele looked for Walton, but he was still in the back. In the mirror, she could see the other journos watching with interest. Finally, she forced herself to make eye contact with Kevlin.

"Please. Leave me alone. I don't want to talk to you. Don't be offended."

Kevlin laughed, and she winced as she caught the smell of his alcoholic breath.

"We don't have to talk, you know. I've heard that you all on the House Rock don't have boyfriends, right? Or girlfriends. And it gets lonely on station."

Amele thought of her stun baton, and wondered if this sort of interaction was typical of how people interacted in other places. The High Mother, she thought, was more right than she herself had realized, when she'd spoken of the value of staying close to their traditions. She suddenly and intensely missed her Matron's chamber, and her contract law databases, and even the nephews and uncles who would show up at her room from time to time, to do their duty and protect the Home Rock's genetic diversity. She thought of Cluvel, in the Home Rock's medical bay, recovering she hoped from who knew what injuries, both physical and psychological, he'd suffered in this place.

"Please," she said. "I'm spoken for."

"Spoken for? You women get passed around there like, like..." he frowned, and took a swallow of beer. "Like bottles at a party. Crèche birth, no pair-bonds, right? Come on."

Walton emerged from the back room with a ceramic bowl and a spoon, just as the woman journalist approached the bar and Amele's hand, as if of its own volition, released

the glass and impacted against Kevlin's jaw with a resounding slap.

"Burn you, what was that for?" Kevlin shouted, pushing back.

"What's all this, then," Walton said, setting the bowl down in front of Amele, and crossing his arms as he stared at her.

"He had it coming, Walton," said the olive-complexioned woman. She looked at Kevlin. "You did, Kev. You're being a drunken ass."

"Come on, Bela. You know what everyone says about those Uncles—"

"Shut up. You're lucky she didn't use her baton on you. I don't know about that guy last night, but you? You deserve it right now. I'd zap you myself, if I had one of those."

Walton sighed, and took Kevlin's glass, and emptied the contents into the sink behind the bar.

"I'm sorry about this," he said to Amele, rubbing a thick-fingered hand over his chin. "You're done, Kevlin. Get out of here."

"No way—"

"Get out," Walton repeated, his voice suddenly steely. "This is the only place worth drinking in on this station, and I can cut you off for good if you give me a reason. It's up to you."

Kevlin swayed faintly on his stool, while Walton's threat sunk in, before finally leaning his elbows on the bar and bowing his head. Walton nodded.

"Harry, Black." He pointed to the two men still seated at the journalists' table. "Mack's flop is nearby yours, right? Get him home and put him to bed. You all have had way too much tonight anyway."

It took them several minutes to get Kevlin arranged and to cart him away in the direction of the up-level droptubes. When Amele finally felt free to eat the protein paste Walton had brought, she found her hand was shaking enough that it was hard to hold the spoon.

“That’s probably gotten cold,” Walton said, as he watched her manage to bring the first spoonful to her lips. “I can heat it up for you again.”

“No,” said Amele, feeling her eyes well up. “It’s fine. I’m fine.”

Bela had sat down beside her on the stool that Kevlin had vacated, and she watched the unsteady progress of the spoon back to the bowl.

“No, you’re not,” she said, and turned to Walton. “No, she’s not. Bring her a shot of something, something good. And another for me, so I can keep her company. She’s not used to this sort of thing, and she shouldn’t have to be.”

Walton nodded, and poured two small glasses from a bottle on the top shelf. Bela picked hers up, and gently prodded Amele’s arm until she did the same.

“I’m really sorry about that,” Bela said. “Not all of us are like Kev. Hardly any of us, really. Drink up.”

\* \* \*

Bela and Amele talked for a long time that night.

“I know what it’s like, coming out of a small place into a much bigger place, and

the shit that you can encounter,” Bela said. “I don’t know a lot about the Home Rock—I’ve been pursuing the Precursor stuff lately, though your negotiations with the Traders are certainly news, or could be—but I think maybe it’s not so different for you as it was for me, when I finally left home.”

Amele, who was feeling better after some food and some drink and the departure of Kevlin and the others, looked at the other woman. Bela was short, with a heavy, muscular frame beneath a dun spacer’s coverall that bore the rays-and-planets insignia of the Independent Media Syndicate on the breast. Her hair was cut short, in spacer fashion, but the heavy, planed cheekbones and the thick, flat nose bespoke a childhood spent at the bottom of a gravity well.

“How is that? You grew up on an actual planet, didn’t you? There are more people on planets.”

Bela smiled. “Yes, I did. I suppose you can tell. Heavy gravity, though, and domed settlements, and when we went outside—it was an agricultural world—we did so in EVA suits. Back in the day, they hadn’t done the terraforming right—the atmosphere was mostly nitrogen and methane. The cyanobacteria only took at the poles, and while you could breathe atmosphere there without a suit, it was so cold that the air would freeze your lungs if you were out for more than a minute. So small domes, small settlements, each with their own crazy social systems that had developed over generations, each of those systems completely incompatible with exoplanetary culture.”

Amele thought about that.

“What color was the sky?”

“A hazy midnight blue, mostly. Green at sunrise, purple at sunset. The clouds,

methane vapor and trace elements, turn gold if there's enough dust in the atmosphere. It can be beautiful." She studied Amele. "You've never seen a sky, have you?"

Amele fiddled with her glass, which held another draft from Walton's top shelf, which she wasn't drinking. The two she'd already had had gone to her head a little, and she felt warm and not sad, and wanted it to stay that way.

"No, I haven't. What planet, if I can ask? I've looked at a lot of the Core planets, via the data streams."

Bela looked down, pursed her lips.

"I was born in Sargon," she said at last.

"Which planet? It much have been far out, to have been so cold."

Bela lifted her own glass, drank, closed her eyes. Finally, she opened them again, looked at Amele. "It was Twelve. You were probably beginning to guess that already."

Amele thought of all the reports hanging on the wall in Cluvel's flop.

"I'm so sorry. For your loss."

Bela shook her head, and smiled a humorless smile. "Don't be. The planet was a shithole. There's reasons why I left. A very bad thing happened, but it isn't my loss."

"But still. Thirteen million—"

Bela lifted her glass and drained it. "Yeah."

There was a long, awkward silence, which Bela finally broke, forcing a smile and changing the subject.

"So was that just nonsense, what you said to Kev about being spoken for? I gather you're not used to drunks trying to pick you up in bars, but that answer was a good, reliable standby. It's a line I've used myself, though Kev was so drunk it wasn't

going to work on him. He'll feel bad about it in the morning, though. And you don't need to worry about Black and Harran—they're always better behaved, and while I've seen them take a run at a woman in here, mainly they seem to be content with each other right now."

Amele glanced at the mirror—they were the only ones in Gentry's at this point—and then down the bar, where Walton was polishing glasses at the other end.

"I...it wasn't nonsense," she said. "It's not allowed, or encouraged, at home, but sometimes it happens."

Bela laughed, not unkindly. "So you're in love, then?" Amele ducked her head, shifted on her stool.

"Yes," she said quietly, finally. "I am."

"Well, good for you. So in fact you aren't only 'beautiful,'" Bela said, mimicking her colleague's earlier drunken inflection. "You're beautiful, and virtuous too."

Amele said nothing, but raised her glass, and sipped from it. They sat for awhile in companionable silence, until outside on the concourse, the light panels of the Marketplatz brightened a notch, signaling that Mnesomyne's day cycle was coming back around.

"Crap," said Bela. "The real business with the Board starts tomorrow. Today. I need to be there, and so do you. We need to get out of here. In the meeting, by the way, push back against Kirch. She'll come on strong, try to roll over you, especially because you're new and she likes to intimidate if she can. I've seen her do it, but if you don't let her, she'll be reasonable."

"Thank you. I'll keep that in mind."

“And Jettero’s weak on contract law, and Kirch knows that. So she’ll probably come at you that way.”

Amele smiled. “Contract law’s where I’m strongest. That’s good to know, though.”

“Good. Very good.” Bela stood up from her stool. “So where are you flopping?”

Amele blinked, and set down her glass.

“Um, off the Marketplatz on the other side, down a couple of levels. Cluvel’s old room.”

Bela nodded slowly.

“Okay. Mine is right by there, I think. I’ll walk you.”

\* \* \*

Doe was waiting at the intersection of the corridor that led to the droptubes and the one that led to Cluvel’s flop. He stepped out of the shadow of a projecting wallscreen as they approached, pale hands raised.

“Please don’t stun me again,” he said evenly, his eyes taking Bela in before focusing on Amele and her hands. “I wanted to warn you, there’s someone in your room.”

“Cluvel’s room,” Amele said, reaching for the pocket where she kept her stun baton.



“Yes,” Doe replied. “As you like.”

“I sealed the hatch.”

Doe smiled faintly, his blue eyes glinting in the dim light of the corridor. “Spool seals are easy to unspool.”

“There was a man, in the...in Gentry’s—”

“I don’t think so,” said Doe. His eyes lost focus for a moment, and he touched the wallscreen’s control surface, his fingers moving in rapid patterns across it. “I sent a camera to observe. Look.”

The wallscreen he’d been lurking behind flickered to life, the image on it displaying a view of the room, and a figure in silhouette in the dimness, tossing the bedroll, upending the crate Cluvel had used as a nightstand. The smartpaper on the walls was crumpled on the floor, crunching under the intruder’s bootheels. A foot came down on one of the empty bottles that had fallen, and from down the corridor they heard the sound of glass breaking.

“That’s enough of this,” Bela said, reaching into her tunic and pulling out a tool of some sort. “Stay here,” she said to Amele, and jogged off down the corridor in the direction of the flop.

“What was that?” she said to Doe, pulling out her baton.

Doe squinted after Bela.

“Laser cutter, standard maintenance tool, with an amplified power pack. A very common improvised weapon. You should maybe get one yourself.”

Amele stared at him, gripping the baton tighter.

“How do you know that?”

Doe just shook his head. On the screen they watched as Bela entered the room. There was a flash of bright green light that whited out the feed from the camera; they heard the crackle of an energy discharge, and the scream of a male voice, and when the display stream normalized several seconds later, the lights were on in the room, and the intruder was gone. Bela stood in the room's center, her laser cutter trained on the door, toeing what looked to be a severed human hand that sat in the middle of the floor. Amele started down the hall.

“Do you trust her?” Doe called after.

“Of course I do,” Amele replied, not looking back.

\* \* \*

Amele spent the night two levels down and one corridor over, in a room adjoining Bela's, which wasn't so close to Cluvel's after all. In the morning they found a datachip in the corridor outside that contained the video feed from Doe's camera. They made their way together back to the Marketplatz, where they parted ways. Bela found Kev and Black and Harran at Gentry's, while Amele joined Jettero at the top of the Escalier. Jettero had his ocular in, and was reviewing the same contractual language that Amele had looked over upon waking; he nodded vaguely to her, and they started down the stairs together.

There was only one guard on the door this morning, Amele noted as they

presented their credentials to the remaining sentry.

“Where’s your friend?” she asked the guard. The Uncle shot Amele a surprised look, which she ignored.

“He’s sick,” came a flat voice from beneath the visored helmet. “Life on a station doesn’t agree with everyone. Go on in.”

“Right,” Amele said acidly. “Thank you.”

\* \* \*

“The first order of business,” Director Kirch said warmly, once Jettero and Amele had been seated on one side of the long hardwood table in the conference area, and her assistant Wallis had taken his chair on the other side, “is the matter of the Chartered refinery that you have taken as your own.”

“We have done so by right,” Jettero replied, placing his hands flat on the table and leaning forward. “With the collapse of Chartered Galactic, and with the absence of other interests in this system that might take over their ownership—”

“Not to interrupt,” Wallis interjected, a broad, bland smile creasing his pale lips, “but Chartered Galactic was incorporated in the Core, and is subject, as are all its former holdings, to the contractual obligations pursuant to the legal consequences of that entity’s dissolution in the wake of the Sargon tragedy.”

Jettero frowned, and Amele glanced toward the journalists on the other side of the

shimmering privacy screen—any of the parties at the table could white out the screen, if a point of discussion trended into a confidential area. Amele found Bela, who smiled faintly, and raised her eyebrows. She looked back at Wallis, and cleared her throat.

“The question of Chartered’s corporate structure and its dissolution, and the jurisdictional issues surrounding that dissolution, are not immediately pertinent here. There are more immediate concerns to address.” Wallis looked surprised, as did Kirch, and Jettero for that matter. The Uncle shot her a look, which she met, even as she tapped Doe’s datachip on the table. After a moment, he nodded to her to continue. She set down the chip, removed her ocular from her breast pocket, and fit it over her left eye. Director Kirch opened her mouth, as if to object, but Amele resumed speaking.

“As transcripts of previous negotiations with your Board indicate, you yourselves affirm that in this part of space there is no law but contract law.” With a wave of her hand, she sent the relevant portions of the transcripts from the lens to the wallscreen at the far end of the room. “The primary purpose of the refinery, as noted in Chartered’s own documents, was to process the ore we contracted to supply them, so that it could be shipped most efficiently into Core space for the use of the commercial and planetary entities that your Board represents. Will you grant this?”

More text flashed up on the wallscreen, and Kirch and her assistant reviewed it silently for some minutes. Finally, the director turned her silver eyes back to Amele and, her lips set in a tight line, nodded.

“Good. Furthermore, while your grounds for summarily dissolving Chartered Galactic derive from Cadmus systemwide law, their conduct in deploying mining technology of their own in this system not only contravenes your civic law, which as your

representatives have repeatedly acknowledged does not apply here. It also is in direct violation of the contractual agreement that we made with Chartered. I refer you specifically to paragraph seven, clause three...”

Jettero was staring at her now, a small smile beginning to tug up the corners of his thick, pale lips. Cluvel had told Amele that Jettero was useless with contract law, though he was getting better. It was good if he was impressed. He damn well should be, she knew.

“Your reading of the contract with Chartered Galactic seems sound,” Kirch said evenly after Amele had finished with her point. “We fail to see, however, how this is relevant to the matter of present ownership of the refinery facility, now that Chartered is no longer a legally recognized concern.”

Again, Jettero nodded, and unable to entirely hide her smile, Amele pressed on.

“The relevance, Director, lies in the clauses of your own commercial code relating to proximity and redress. The refinery has had no other claimants, having no contractual relevance to any other commercial entity in Core space. Your own articles note that, in terms of such facilities as are purposed to service local concerns and inputs, local contractors shall have precedence.”

“But claims have been made, on all of Chartered’s former holdings, physical as well as fiduciary.”

“In Core space, perhaps, but they by definition fail the proximity test. Our claim comes first.” Amele waited. Kirch and Wallis exchanged glances, but made no further response. She nodded, and continued. “There is also the matter of redress. The criminal offense committed by Chartered that led directly to its dissolution overlaps the

contractual breach they committed by deploying the technology, in our local space, that led to the destruction of Sargon XII. Again, our claim takes precedence, as Core criminal enforcement has no jurisdiction here, as your representatives have noted repeatedly. Chartered's breach of contract in deploying banned technology does not impact any of their other contractual interests directly, as the contractual breach concerned our local space and our arrangement to provide factory inputs. While we are signatories to the Board's commercial code, we are not signatories to your criminal statutes. Given this, there are no other grounds on which to argue the matter."

Amele removed her ocular, placed it on the table beside the data chip, looked at Jettero, and smiled. He nodded, frowned, and addressed Director Kirch.

"It seems that the matter of the refinery is settled. Unless you have more to say?"

Again, the director looked to her assistant, who was no longer smiling.

"Good," said the Uncle. "On to the next item, then. You need ore, we can supply it, at a guaranteed rate of production and a guaranteed price, if we can arrive at terms that are agreeable and beneficial to both parties."

Kirch frowned. "Yes. Let us move on."

Amele looked at the data chip, and after a moment, ran it over the reader embedded in her seat at the table.

"Before we get to that, Director, we should bring to your attention the invasion of my quarters on station, the quarters recently occupied by delegate Cluvel, that took place late last night, in the hours leading up to this meeting."

"Invasion?" Jettero said, his voice rising. "What—?"

Amele tabbed the control to run the video stream, cutting the Uncle off. Wallis

tapped a control of his own, that caused the privacy screen shielding them from the journalists to go activate. The four watched the stream in silence.

“That’s terrible,” Wallis said, leaning over the table with a frown of concern.

“Are you all right? This station is a lawless place. I hope you weren’t harmed.”

“I’m fine,” Amele replied, looking steadily back at him and raising both arms, wagging her fingers. “It’s not my hand lying on the deck at the end of the stream. The figure who drove off the intruder is in fact one of the journalists on the other side of the privacy screen, and she has a copy of this video as well. I did notice, however, that one of your door guards was absent this morning when we arrived for this meeting. I hope that the guard is well?”

Kirch stared at Wallis, and Jettero glared at them both, before turning his gaze to Amele. She met his gaze for a moment then looked down, retrieving the chip and blanking the wallscreen.

“I was unaware,” Director Kirch said after a long, awkward moment, her face expressionless, “that there was such irregular goings-on surrounding this negotiation, and I was unaware of Sergeant Marva’s distemper this morning. I thank you for bringing this to our attention, young lady, and I assure you we will investigate these matters. I hope one of our own did not fall victim to the same foul play you nearly did.”

Amele nodded, and Jettero smiled sourly, leaning back in his chair until it creaked. At a gesture from the director, Wallis stabbed the button that lowered the privacy screen, and the director mustered a smile, and clapped her hands together. “Shall we resume?”

\* \* \*

Eventually, Jettero and Amele got the contract they wanted.

“You were very good today,” he said as they climbed the Escalier back to the Marketplatz. “Your grasp of contract law is remarkable. The High Mother was right to send you.”

“Thank you, Uncle.” She stopped on the top stair, and looked out over the vista before them. The crystals below were glowing blue and purple, their illumination creeping up the walls and fading, up above them, into black. That, perhaps, was part of what the sunset that Bela had described looked like. She hoped so. “I’m no longer dizzy. No more vertigo.”

“Good,” Jettero said, patting her awkwardly on the shoulder. “Good.”

“Answer a question for me, Uncle,” she said, as they looked out over the glowing columns. “What happened to Cluvel?”

He was silent for a long time. Eventually, he shook his head.

“I don’t know. He was with me during the last negotiations with Chartered, when we began to realize that they were breaking their contract. Soon after, the High Mother assigned him a to permanent post on station, as a reward I suppose. She never explained her reasoning to me. The journalists upset him, though, and the reports about the planet that was lost. I don’t know.”

Amele fingered the torn image she’d found in the ruins of Cluvel’s room, the still



of her that he had taken.

“A question for you as well, niece. Where did you get the datachip? That put Kirch and her minion off their game.”

Amelie considered. After a moment, she withdrew it from her pocket, and handed it to him. “It came from Doe,” she said. “The white-haired man, the scary one. Cluvel knew him, didn’t he? He’s important somehow. What did he tell Cluvel?”

Jettero took the chip, turned it over in his fingers.

“I don’t know, again. The High Mother wanted Cluvel to seek him out, during the negotiations with Chartered. You shouldn’t trust him, I don’t think.”

“I don’t think so either. Whatever happened to Clu, it’s Doe’s fault.”

Jettero looked at her, smiling faintly and disapprovingly at the affectionate nickname. It wasn’t like he didn’t know, though—she and Cluvel were, like all emerging pair-bonds on the Home Rock, a badly-kept secret that nobody talked about. After a moment, he clasped her shoulder, and nodded.

“Get some rest. We did good work today.”

\* \* \*

Amele had a plate of food at the Station Canteen, and then a glass of wine at Gentry’s. Her Uncle was right—they’d done good work. Presently, Bela wandered in, in a new coverall, this one dark green and unwrinkled.

“You destroyed them on the refinery points,” she said, waving to Walton to bring her a pint of beer. “So what happened when the privacy screen came up? It didn’t stay up for long, but what was going on there?”

Amele ran her finger around the rim of her wineglass.

“I made them watch the video from Doe’s chip.”

Bela thanked Walton when he brought her the beer.

“How did they take that?”

Amele chuckled. “Well, you saw how the negotiations went after that, didn’t you?”

“Yes. You won.”

“Well, that’s why. At least in part. Jettero seems to think so, anyway. He said we did good work.”

Bela laughed, and raised her glass, and Amele raised hers, and they clinked, and drank.

“So what’s the matter with Doe, anyway? Why did you zap him the other night?”

Amele shook her head. “He told Cluvel something, or got him to do something, that hurt him. I don’t know.”

“Do you know where he flops? I’d love to interview him, or at least look through his stuff, but I haven’t been able to find him except when he shows up here.”

Amele leaned back on her stool.

“Look through his stuff? Really? Like the guy in my—Clu’s—room last night?”

Bela frowned and spread her hands.

“No, not like that,” she said after a moment. “I was kidding. But there’s

something weird about him, isn't there? Something that doesn't add up."

"Yes. I think so.

Bela sipped her beer, and looked around before leaning close.

"Speaking of 'that guy,' I had a look at his hand. A closer look."

Amele tried to picture that—the hand, severed and still twitching, the stump of it cauterized by Bela's cutting laser. She shuddered.

"What did you find?"

Bela looked around again, as Wallis strolled in from the Marketplatz. He smiled at them, and sketched a little bow to Amele that made her look away.

"Not here," Bela whispered, tossing some credits on the bar. "Come on."

Amele took a last sip of her wine, and followed her friend out onto the concourse, down a corridor to one of the droptubes that led up Topside.

"Nobody's up there this time of night," Bela said. "Climb in here with me."

Amele pressed into the tube with her, awkwardly, raising her arms while Bela's hands fumbled around her waist. The gravity effect of the tube shot them upward, causing her stomach to drop, but moments later they were stepping out into the deserted expanse of Dome Six. Above them, the tendrils of the nebula swirled behind the foreground of asteroids that she and her people had mined for centuries. Amele looked up, feeling uneasy the way she had her first time at the top of the Grand Escalier, but stirred as well by the expanse of the vista above them.

"Here's one thing," Bela said, passing her a sheet of smartpaper. Amele glanced over it—it had fingerprints, correlated to Core personnel databases, and a provisional identification: Tavis Marva, of the Board of Trade paramilitary branch.

“So it was him,” Amele said.

“So it seems,” Bela replied with a smile. “It’ll be a hell of a story, if it checks out. The Board of Trade has far too much power.”

Amele lowered the paper.

“What happened to Cluvel?” Bela asked after a moment, catching Amele off guard. “What happened to the two of you?”

“The High Mother knew we were getting too attached—every time he came up for an allotment with the Matrons, he chose me. So she sent him here. And when he was shipped back to the Home Rock, she sent me to replace him.”

Bela nodded, watching her carefully.

“Now, ‘allotments with the Matrons’ means what I think it means, right? There’s a limited pool of genetic material in any small community, so your society on the Home Rock needs to spread it around as much as possible. You’re supposed to get pregnant.” Amele strolled over to one of the planters in the middle of the chamber, fingered the waxy leaves of the shrub that grew there.

“That’s right,” she said.

“Did you and Cluvel conceive a child, if you don’t mind me asking?”

Amele smiled, looking down at the growing plant in front of her. She nodded.

“She’s in the crèche now. Her name is Kila. But she is ours.” She blinked, then frowned, and looked at Bela, who had followed her to the center of the room. “Why?”

Bela smiled sadly, and shook her head. “We had the same issues of genetic diversity, on Sargon, but we handled them differently. I didn’t mean to pry. There’s something else. Besides the hand.”

She reached into one of the pockets of her coverall, removed a datapad, extended it to Amele. After a moment, Amele took it.

“What is this?” she asked, as she read, as she realized what she was reading. Bela Curvain, agent of the Independent Media Syndicate, also credentialed as an independent investigator for the Cadmus system Board of Trade. Her hand dropped to the pocket where her stun baton should have been, but it wasn’t there. She looked up, and it was in Bela’s hand.

“What are you doing?” Amele asked, her eyes on the baton, the blue electrostatic sparks flickering around the tip. “You have no jurisdiction here.”

Bela tapped the butt of the baton against her thigh, and took a step forward.

“Appendix three, paragraph twelve. If breach of contract provokes actions by the wronged party in violation of commercial or criminal code in either party’s home space jurisdiction, the Board is empowered by the signatories to appoint an investigator with the full powers to investigate and apprehend any material witness who might have evidence, or access to evidence, material to those violations.”

Amele thumbed the datapad’s display down to the relevant passage, read it, shut her eyes. After a moment she opened them again, and flung the datapad at Bela’s head. Bela ducked, and it went sailing past to lodge in the shrubbery behind her.

“I don’t have any evidence, though. And I thought you were my friend.”

Bela sighed. “I am your friend, and I know you don’t. But you do have access. Cluvel knows something and you’re the mother of his child. Doe knows something, and you’ve taken an interest in him and he’s taken an interest in you.”

She took another step forward, leaned in and brought her arm up in a motion so

fast it was a blur, and jabbed the end of the baton against Amele's ribcage, just beneath her right armpit.

"I'm sorry," she said, dropping the baton and catching Amele as she collapsed. "I have a job to do."

