



Paul 97 lives in a colony with one hundred and thirty-nine other octopi.

In the wild, back on Earth, his species is one of the more social of his kind. This means little more than that good living space is limited and they tolerate each other's presence, with plenty of fighting and evictions and dominance displays. Some might say that human societies often reach the same level, but in truth the octopi on Earth have no familial contacts and their offspring drift away on the tide. The inhabitants of any given octopus "city" are in constant turnover. And yet amongst such solitary creatures, it's a start. If you hate your neighbours then you need a brain that can know just which ones you hate most, which are stronger, which are weaker. Paul's species has lived with the concepts of individuals and boundaries and even a kind of diplomacy for a long time. They just haven't enjoyed it much.

The Rus-Califi nanovirus, applied with a discerningly light hand by Disra Senkovi, has been working chiefly with these parts of the brain. Paul has no offspring yet, but others of his colony have, and the juveniles hang close where before they would ride off on the currents to some other place (or be devoured by their parents' generation). They live longer, too. At the moment an individual might manage half a century, though very few do. The most prominent cause of death so far is curiosity. There are areas of the sea still not properly oxygenated, areas that are toxic for other reasons. Sometimes the machinery they interact with is the culprit. However, multiple generations live in each colony, grudgingly tolerating each others' presence. Where before they might dwell in rockpiles or great sloughs of mussel shells (their appetite inadvertently leading to their architecture), now they live in crates and pipes and outlets around the terraforming machines, where they can communicate with Senkovi and the *Aegean*.

Paul 97's understanding of the world is ephemeral, inhuman. He hangs in the water column between the angel and the ammonite. His Crown is a whirl of instinct and emotion that nonetheless encompasses the complex social arrangements he must make daily to accommodate the other inhabitants of the colony. He has concepts for the wider world, for the *Aegean* (the tanks of which he dimly remembers), for certain prominent citizens of his metropolis, and equally for cer-

tain sub-systems of the terraforming machinery. His world is not rigidly quantified. He does not measure nor calculate it, but simply *knows*, and *feels* in response to that knowledge. His Guise, that shifting tapestry of skin and shape, resonates to those feelings to a far more exacting extent than that of his ancestors, or else he takes a more direct hand in it, so that, if the mood takes him, he might drift over the colony and dance out his frustrations or his wonderment for the others. To be open to his emotions is to communicate them to his peers and impinge upon their own Crowns with his thoughts. It is a language of grand gestures and infinitely exacting emotional scales. He is an artist. They all are. Their conscious mode of interaction conveys far more subtext and abstract expression than it ever does hard information.

Beneath this conscious whirl lie the sub-minds of his arms, that dispose of what he proposes. The separation of will from the machinery that puts that will into motion has grown as the nanovirus leached into the species' wider nervous systems. Paul solves problems like a wizard: a thought, a desire, and his Reach extends to fulfil it. Sometimes this means a fight, where intimate contact between his arms and another's imposes dominance and simultaneously passes information from Reach to Reach, a whole black market of calculating power that Paul and his peers don't even know they have. In this partnership, each entity a committee, they get things done. Senkovi has given them the tools and the perspective. Although they never quite see the big picture, in a very real sense they grasp it. Senkovi has not noticed, for example, that the geothermal vents are becoming misaligned and inefficient, and that parts of the sea floor are becoming uncomfortably cool. For him, up on the Aegean, it is all within tolerance; the problem would not be flagged up by his systems for years. For Paul and his kin it is uncomfortable, and they have wrestled and fought and performed complex poems of dance and colour for each other until an unacknowledged consensus was reached. Then they went and adjusted the machinery, or instructed other machines to fix those machines following the great plan Senkovi gave them, of how one thing becomes another and how it all adds up to become home. Senkovi will come across their tampering later, and scratch his head to work out what they were trying to achieve. The experiment is long out of his control, but, though Paul 97 and the other individual octopi might seem petty, self-interested and antisocial, they have the wisdom of multitudes.

Other colonies communicate with them, one facility to the next. Some individuals travel, seeking less abrasive neighbours, avoiding genetic stagnation. Others insert dummy orders of crates and piping into the *Aegean's* task queue and create instant new towns awaiting inhabitants. As before, they are prying into every con-

nected space they can access, physical and virtual. Unlike the catastrophe that shut down the *Aegean* (and saved it), they understand enough not to break anything too essential.

Paul 97 and some others have a concept that is *Senkovi*. It is a complicated thing, but (despite his own thoughts on the matter) it does not approach traditional divinity. Human concepts of God are familial, after all, all too often paternal, and Paul does not understand the concept of family much, nor would he have affection for it if he did. But they like Senkovi, as they conceive of him. He represents benevolence and home and knowledge in a way that does not compete with them as they all compete with each other. Some few of them wonder if he is an individual like them, but the idea of another individual not constantly getting on their nerves and into their space is more alien to them even than the human cognition of Disra Senkovi.