"How inappropriate to call this planet Earth when it is quite clearly ocean." – Arthur C. Clarke

"If aliens visit us, the outcome would be much as when Columbus landed in America, which didn't turn out well for the Native Americans." – Stephen Hawking

Preface – Orrot

The humpback whale, Orrot, glided effortlessly just under the blue-green waves of the Southern Ocean. She was pleased as water drained from her baleen, leaving a tasty meal of krill behind. Her mass cruised forward with graceful rhythmic sweeps of her flukes. This was punctuated with breaths as her blowhole broke the surface with a rush of spray and vapor in the cold sea air. Larger than most of her kin at 53 feet, she was enjoying this brief time away from male humpbacks who were eager to breed now that summer had passed. The distant songs of her willing suitors wove a tapestry of sound around her, compelling her to return to them. The pull of her own kind was strong; there were so few of her species left. She was with the companion, though, and was content for now to continue the experience and thrill of their communication. The companion heightened the joy of feeding, swimming, and living. Interactions with the companion sharpened all of Orrot's senses, and feelings of well-being washed over her body. The sensation was intoxicating, and she always missed the interaction when the companion left. Their communications had become more frequent of late, much to the delight of Orrot. Although she did not fully understand the companion, she found the relationship as important to her as her own children and suspected that the companion enjoyed their interactions just as much, if not more. On the companion's suggestion, more of a feeling shared, Orrot raced

forward. The whale briefly dove and then leaped into the cold air and sunlight, bringing most of her massive body out of the water only to crash down in a calamity of erupting water and salt-laced spray – such joy!

Oh, the joy! BanuSa thought (whom Orrot knew as the companion) as she experienced the breach through the mind of Orrot, her most favored indigenous friend on Project 17 (the Sa term for Earth). Her body surface rippled in blue and yellow-hued color at the guilty pleasure of this excursion as she clung to the leviathan's back just behind the blowhole. TareySa, her lifemate, had cautioned against these forays to the southern biome and would question her incessantly when she returned home. He would likely be even more upset since BanuSa had brought their daughter KanSae along on this trip. KanSae was connected with another female humpback from Orrot's pod, considerably younger and smaller, swimming beside Orrot and BanuSa. KanSae, BanuSa, and TareySa's only child had been born during the passage, and Project 17 was the only planet she had ever known. BanuSa, though engrossed with her own experience with Orrot, reserved a small portion of her sensory assist organism to keep tabs on KanSae, who was enjoying the communion with her whale as much as BanuSa. The sensory assist organism (a living quantum computer) was a device built of living tissue that greatly expanded the range and fidelity of BanuSa's natural senses and was powered by her own bloodstream. Every Sa obtained a sensory assist organism early in their childhood. Most of the technology used by the alien Sa (Sa - "of the society") was genetically grown and consisted of living matter. KanSae had begged for this outing with her mother. Her thrill with experiencing the humpback echoed from her with shrill clicks and warbles that could be perceived across the narrow distance of the ocean separating the whales without the assistance of the sensory organism. KanSae's enjoyment only heightened the experience for BanuSa. She loved her child

and was pleased that KanSae was maturing in this world free of the bias and prejudices of the homeworlds.

With Project 17 nearing Terminus, BanuSa was concerned for TareySa, who was growing ever more cautious and withdrawn, now rarely leaving their home. She knew he feared for her when she went on what he considered frivolous and dangerous trips around this world's oceans. BanuSa imagined he was going to be positively livid when he learned about KanSae's participation. BanuSa missed the exciting days when they had first arrived in this new world. Their time was filled with exploring and cataloging the rich diversity of life on this all-too-rare life-supporting planet. She longed for those days when they were just explorers. The time before the attack on their home planets and before the terrestrial 'humans' began to overpopulate and slowly destroy the life-giving oceans of their home planet. The Sa considered the indifference of humans to this world's oceans and their continued abuse of the planet writ large to be criminally insane and eerily familiar. The alien Chaos Beings that were currently ravaging the Sa homeworld system planets were also land dwellers. What was it about living on the land and breathing air that drove sentient beings to irrational destruction? She understood TareySa's growing anxiety and sadness. Project 17 was no longer a mission of science and discovery; it was now one of the few planet options left to the Sa species for survival, a desperately needed refuge from the Chaos Beings. What Terminus meant for the primary species of this planet was too hard to contemplate, much less justify, but humans could not be allowed to destroy this oasis in an otherwise mostly barren section of the galaxy. The moral distaste for what the Sa was planning to do to life on this planet, specifically human life, hung heavy on all members of Project 17 Sa. TareySa and BanaSa had both been part of the original travelers and were joined as lifemates during the crossing. KanSae (Sae – "child of the society") had come soon after, but

she was too young to remember much of life in the confines of the planetoid ship in which they had traveled. KanSae was still far too innocent to comprehend what her parents were going to do on Project 17. The horror of Terminus was beyond TraySa and BanaSa's abilities to explain to their only child. It was a source of constant internal conflict between them. TareySa had dealt with the imminent execution of Terminus by withdrawing into himself. BanaSa did so by visiting her Project 17 ocean friends and losing herself in their exotic senses. Both deeply regretted what they were compelled to do to save this vital planet for the Sa, but this was about Sa survival.

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The Japanese factory whaling ship, MV Nisshin Maru（日新丸）, plowed slowly through the waves, traveling southwest. The ship was showing its age, with rust now outlining the hull seams and a general air of disrepair that hung like fog throughout the ship. Gone were the glory days when the whales were plentiful. Back then, the Nisshin Maru sailed with multiple harpoon ships, allowing the processing of many whales daily, providing a comfortable annual income for the Captain and crew for a few months of labor at sea. Now, only two harpoon ships were hunting in the Southern Ocean with the Nisshin Maru, and these vessels possessed similar levels of disrepair and neglect as they plied the ocean for whales that were increasingly more difficult to find. Gone were the environmentalists trying to stop their hunting efforts with stink bombs and red paint hurled at their ships. The Nisshin Maru's water cannons used to repel the small boats of the anti-whaling zealots were idle and rusting now. The anti-whaling environmental movement, once the stuff of reality television, seemed to have succumbed to a general fatalism concerning whale survival now that species numbers were so low. Like the whale populations, the world's oceans were dying, and this process seemed irreparable.

The Captain of the Nisshin Maru, Akihiko Kimura, sat in his chair on the bridge, holding his ever-present cigarette. The perpetual haze of smoke around his head and shoulders formed a halo, as seen in medieval paintings. Similar to his ship, the Captain was also in a state of disorder. Personal hygiene was never a priority, as was evidenced by greasy hair, facial stubble, and some scrambled egg on his collar from breakfast two days ago. His uniform hung from his gaunt frame like poorly hung drapes as he stared across the white horse-speckled sea from under the rim of his soiled Captain's cap, his eyes red-rimmed from too many cigarettes and too little sleep. Intellectually, Akihiko knew the world's whales were succumbing to the realities of an ocean ecosystem collapse as part of global warming. The pollution and acidification due to the increasing carbon dioxide uptake by the oceans were killing the ecosystem. He also understood his whaling efforts under the guise of 'research' as part of the Japanese Institute of Cetacean Research was a sad joke that nobody believed any longer, if they ever actually had. He knew he was contributing to the eventual extinction of the whales but rationalized this unsettling thought with the reality that the world's oceans were dying along with the whales anyway. His family and his crew's families needed to eat, and the value of actual whale meat and products had exploded exponentially with the whales' ever-greater rarity. They were exceedingly difficult to find, but this was offset by the fabulous wealth every butchered whale represented today. Besides, he was a whaler like his father and his grandfather, and this was the only living to which he felt suited. This justification never quite settled his reservations for the whale-killing activity he led as Captain of the Nisshin Maru, but it did get him to his next shameless cigarette, which he lit with the dying embers of his last. The cry from the Nisshin Maru's radioman shook Captain Kimura from his grim ruminations. The harpoon ship 10 miles to starboard had whales in sight, and there was money to make. He quickly gave the necessary instructions to the ship's

bridge to move the Nisshin Maru towards the harpoon ship and ready the crew for the potential harvest.

The sudden realization of the close proximity of the harpoon ship shocked BanaSa from her revelry; the alarm from her sensory assist organism now overwhelmed her. In a few seconds, she had a three-dimensional understanding in her mind of the relationship and distances between BanaSa and KanSae's host whales and the rapidly approaching ship. Why was KanSae not reacting? BanaSa's body flushed crimson as she screamed the warning both physically from her body through ultrasound and through the sensory assist organism. The warning signal shook KanSae like a body blow from her own ecstasy of experiencing the whale. At that same moment, the harpooner aimed the whale cannon at the strange discoloration just aft of the target whale's blowhole. He fired as the whale's breath broke the surface with the exhaled mist, creating a small rainbow in the sunlight. His aim was true, and the large steel harpoon fitted with a penthrite grenade penetrated just forward of the whale's blowhole, attaching the whale to the ship with a metal line that trailed behind the missile. The shock and agony of the dying whale briefly passed through the sensory assist organism to KanSae's mind, heightening her own sudden spasm of pain. She was distantly aware of her mother's scream as her consciousness faded to blackness.

Akihiko Kimura smiled and scratched at his greasy scalp as he adjusted his cap. His radioman had confirmed the harpoon ship kill shot, and he could see the whale carcass and blood-stained crimson sea just ahead. He gave the perfunctory orders needed to bring the whale onboard for processing, but his crew was already making the necessary preparations, motivated by their share of the money to be made. Akihiko announced he was going down to observe the whale being cabled and brought on board. He turned the ship's bridge over to his first officer as

he snuffed his cigarette by jamming it into an overflowing ashtray. This spilled a few more cigarette butts onto the floor where a pile was growing. The efficiency of the crew in transferring the whale from the harpoon ship to the Nisshin Maru's stern cable was impressive, Akihiko thought, and in stark contrast to their usual lackadaisical approach to shipboard tasks. Nothing motivated men like money. Akihiko moved towards the slipway at the ship's stern as the whale, now belly up, was slowly dragged towards the ship. As the carcass reached the slipway and rolled onto its left side, Akihiko observed a strange three meter grey mass clinging to the whale's back. He had never seen such a sight in all his years plying the ocean and was intrigued. As the cable dragged the whale up onto the deck, Akihiko cautiously moved to examine the mass closer. He wondered at the thing as he murmured, "Is this some sort of new parasite?" The deck crews had ceased work and were now gathering around the strange shape attached to the whale's back. Akihiko admonished them to step back as he moved forward.

The object had a large, smooth conical shape oriented towards the whale's head, approximately half a meter in diameter and one meter long. The shape reminded him of the head of a Great White shark without the teeth. At the base of this conical shape were six equally spaced octopus-like tentacles, three to each side of the whale, seemingly plastered to the whale's skin. One tentacle had a large, black oval shape, like an American football, near its distal end. Akihiko noted four slender finger-like projections surrounding the end of each appendage. Emanating below the head and surrounded by tentacles was another slightly smaller conical structure, about the size of the head, with multiple golfball-sized bumps and a large oval pore partially exposed against the whale's back. Finally, there was a tail or fluke that reminded Akihiko of the tails of manatee images he had seen in a sea mammal book. As he looked closer at the parasite, which was what Akihiko was assuming it was, he noted the previously grey

surface now had the faintest hint of color. Red, yellow, brown, green, and other colors seemed to swirl and flow across the surface of the object in patterns that had depth and dimension. Akihiko found the display fascinating as he lit another cigarette and stepped closer as the color effect on the parasite became more pronounced. This was when he noticed the gash on the underside of the parasite's head, presumably caused by the harpoon. A purple substance was oozing from the wound and down the side of the whale.

BanaSa was in complete panic as she raced down towards the seafloor to retrieve her propulsion organism (another piece of living Sa technology). In the moments following her warning to KanSae, immediately followed by the abrupt loss of sensory connection with her daughter, she had been overcome with fear and panic. In her confusion, she had detached from Orrot, sending the whale away from this danger. That was a mistake; her passage back to the propulsion vehicle organism resting on the ocean floor would have been much faster with Orrot's assistance. She frantically called for KanSae and scanned the local ocean with her sensory assist organism to no avail. She knew the range of her sensory assist was limited but would be significantly augmented once she connected with the propulsion organism. Her heart raced as she flew through the depths. A rage began to build within BanaSa, as she knew what the human whale hunting ships did. If they had taken KanSae's whale, then they may have her also. She would not allow them to take her daughter. BanaSa's skin glowed iridescent red as she arrived at her propulsion vehicle, connected to its mind, and began scanning the sea for KanSae as she sped the living vehicle of flesh and metal towards her tormentors.

KanSae was dazed, confused, and in pain from the injury to her carapace, which stabbed like fire throughout her body. Because she was out of the water, her sensory faculties were almost useless. Her sensory assist organism was providing some information about her

surroundings, but the living device was dazed and damaged also. She knew she was still attached to her whale; it was dead, and she perceived hard surfaces with right angles and living beings nearby. Panic pierced through her pain when the realization washed over her that she was surrounded by humans! Her father, TraySa, had never missed an opportunity to warn her concerning the viciousness and dangers of the land-dwelling human animals that inhabited this world. He even went so far as to compare the humans to the Chaos Beings that populated the nightmares of all Sa young. Panic turned to terror as she sensed one of the humans move closer to her.

Akihiko leaned in close to the parasite's head. His face was consumed in awe as the colors of the parasite's skin grew more intense and wild. The lit cigarette dangled from his half-opened mouth as he moved closer. He did not notice the cigarette falling from his mouth, glowing end first, towards the gash on the parasite's head.

KanSae's overwhelming terror translated into reflex when the stinging burn of the human's attack had impossibly increased the agony already emanating from her wound. With unimaginable speed, her left probe appendage formed a steel-hard spike with its four slender fingers, and she reflexively whipped the limb towards and through the center of the human form. Using her damaged sensory assist organism, she reached out with her mind, screaming for her mother.

BanaSa, just below the surface about 1000 meters from the stern of the human vessel, heard the cry of pain and dismay from her daughter. The humans had her daughter on the ship to be slaughtered like the whales, she thought in an irrational panic. She must get KanSae back into the ocean and bring the ship into her element. With a thought, she powered on the organic drilling system of the propulsion organism. The drilling system was a genetically engineered

device, usually used for boring through rock and other solids. It literally tasted the material it was designed to pass through and then electrochemically broke molecular bonds, turning the solid into its constituent atoms. Typically used to build their habitation structures in solid undersea rock, for the first time since their arrival, she was going to use the device as a weapon. BanuSa maneuvered her living vehicle near the ship's starboard hull just in front of the whirling propellers. She nudged the flesh of the vehicle against the hull and activated the device. It sliced effortlessly through the steel as she moved the vehicle forward along the ship, opening a half-meter-wide gash in the hull as she progressed. In less than a minute, she turned her vehicle away from the ship, having opened a furrow in the ship's side along its entire length. Already, the ship was listing and turning to starboard as the sea rushed into the bowels of the vessel, driven more forcefully by the ship's momentum.

Akihiko stared in shock at the smooth appendage emanating from the center of his chest. He was held a few inches above the deck, and he perceived his shoes just barely brushing the deck plate. As fast as the appendage in his chest had appeared, it was suddenly gone, and he crumpled to the steel deck before the whale carcass. He tasted blood in his mouth and felt warm liquid spreading across his chest and back. He glanced up at the parasite. It was no longer a storm of swirling color as before. Now, the skin surface was an iridescent red, and he noted a single appendage with the four fingers forming a spiked end, quivering in the air like a snake poised to strike a few inches from his head. He saw the blood dripping from the spike, and as he took his last breath, he thought, 'That must be my blood.'

The crew moved closer, staring in shocked silence at the form of their dead Captain lying beside the slain whale with the parasite's crimson appendage hovering over the body. Before full comprehension of what had just occurred could break the paralysis of the crew, the entire ship

violently shuddered and began listing to starboard. The tilting of the ship's deck was relentless, and the crew instinctively scrambled up the rising deck away from the whale, which had shifted to the starboard side. One young crewmember stumbled and began sliding back towards the railing with the whale and its horrifying parasite. The efforts of the crew moving away were re-doubled as they witnessed the spiked appendage whip towards the sliding figure with blurring speed. The spike struck their flailing shipmate through the back of the head, with the tip emerging through his mouth. The horror of this scene was short-lived as the ship continued to roll to starboard, and everything not attached to the deck, human or otherwise, began to plummet into the churning water. As the Nisshin Maru settled further onto its starboard side with sounds of straining metal echoing all around, the whale carcass with its attached monster slid from the rail and was reclaimed by the sea.