Undervoidable

The price of exploration.

After the undervoid ship *Human Hope* arrived in orbit around the nearest truly habitable exoworld, 485 light years from Earth, its voyagers, surveying from on high, spotted waterfront towns as well as the remains of abandoned inland cities.

Mini-drones descended, to dust spyflies over six indigenous towns so as to acquire understanding. Two drones dusted the sites of cities long overgrown.

"Culturally," said Chrissy Jones at an assessment meeting of the 60 voyagers, "the Lizards seem to be late medieval *cum* early modern level in our terms, yet without any squalor. Just a few hundred years behind us tech-wise."

Upright lizards, nipple-high to the average person, was how the indigenes looked. Dressing in an almost capricious range of decorative woven garments accessorized with metal or gem necklaces. Some wearing spectacles. Many, bone-handled knives on bright leathery belts. Their diet: fishy things and fruities, cultivated leaves and boiled roots; they also raised food-beasts resembling dappled dwarf zebras and stripy crocodiles. Their sailing boats were junks.

Sven Andersen said: "Some big buildings near those abandoned cities could have been power stations. Avalanche rubble may be from collapsed dams."

And yet the Lizards lit their adobe homes with oil lamps or bright candles.

"So their civilization went downhill?" suggested Peter Donnell. "Over-pop? Ran out of resources? Yet there's no evidence of war."

"We haven't seen any conflict more serious than a brawl."

"Resulting in a knife fatality."

"Well, nobody's perfect."

One spyfly recorded spooning intercourse, another, the laying of a large single soft egg. Parents caring affectionately for Lizardkids. Schooling: zigzag script chalked upon black slate. Apprenticeship to trades. Dances to pipes, fiddles, drums. Public oratory, perhaps.

All the contextual

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samples of hissy language were routed to *Human Hope's* weak AI. We seem to have four separate

languages so far. Prioritizing Sample Town Five. A provisional lexicon and grammar began to emerge.

A subtropical island the size of Madagascar, isolated in the middle of a Pacific-size ocean, was uninhabited by Lizards. Jungly plateau, tree-clad hills. Presently shuttles descended to a landing site christened MerryBe.

Colonization began: the unpacking. Prefab habs, frozen embryos human and animal, labs.

"Companionable colonization," boasted Peter. "Not callous or careless, like the old kinds on Earth. Way enough space for our expansion without intruding."

Sol system's telescopes had imaged tens of thousands of exoplanets before one seemed perfect for inhabitants. *Human Hope* would stay in orbit, its AI scanning onward and outward while human pop and tech rose. In two or three centuries: a further undervoid voyage of colonization, with luck only 200 or 300 lights this time.

"And we'll take Lizards with us too, as partners," enthused Chrissy. "No more all-your-eggs-in-one-basket for them now, any more than for us. We can probably reveal ourselves in — what, 20 years? — and start partnering. Intelligences should stick together."

But contact happened within a few days ...

In Sample Town Five, a Lizard wearing spectacles trapped a couple of spyflies, dissected one with tiny tools till the fly's sight and telemetry failed. Presently the Lizard began to hiss at the other fly, then chalked on a slate a globe with an oversized drone in orbit.

The AI on *Human Hope* ramped up lingo analysis. A mini-drone with voice flew through the Lizard's open door, and settled.

"We come in peace," et cetera, hissy-hiss. The AI had prepared an introductory explanation suitable for late-medieval early-modern Lizards. "Little lights in sky are all Brights, like your Big Bright. But very far, so they seem dots. Many Grounds, like your Ground, curve around Brights. But you and us cannot live on those Grounds. No air, no drink, no eat. Too young, too old, too hot, too cold, badly inclined. Until we meet you, we seemed alone in Vast Empty ..."

Quite soon the bespectacled Lizard interrupted: "A Know-All steered you through Empty-beneath-Emptiness. But

Void of Univerze is only metaztable, not ztable! Can dezcend to lower energy level."

("Surely," said Sven, away in pseudo-Madagascar, "it can't be talking about the True Vacuum — beneath the False Vacuum our cosmos floats upon — across which our *Human Hope* skated superfast?")

"We fear that the Empty collapzes into Under-Empty behind you at Zpeed of Light. You mizuzed the metastable meniscus! Your Ground unexitzt already. You zay you from 485 Lights away, therefore 485 yearz ahead our Ground and our Bright will unexitz! Zilch and oblivion, zwifter than any being can know!"

("What, *Human Hope* entering the True Vacuum collapsed the False Vacuum? And True Vacuum can't sustain reality ... so the Solar System and humanity are all gone, apart from us? In 485 years the wavefront of collapse will reach here? AI, what do you say?")

("The equations assigned 0.01% probability to this outcome. Maybe the equations were defective.")

("How can the Lizard deduce so much by dissecting a spyfly?")

"Undervoid travel iz the only fazt way to the starz we ever could find. We dizmantled our zivilization zo none could never uze undervoid. We downzized deliberately. Why," demanded the Lizard, "were you zo foolizh?"

475 years later, *Human Hope* departed with 30 Lizardz aboard and 30 Humanz, carrying frozen embryos of henz and cowz az well az ztripy crocodilez et zetera.

Departure would immediately collapze ze falze vacuum, erazing Lizardhome, but if *Hope* voyaged 5,000 lightz they could eztablizh a zivilization zat might yet dizcover a lezz destrukive method of FTL.

Failing which, an undervoid zhip might reach Andromeda galaxy 2.5 million lightz away, abandoning the Milky Way to its fate. 2.5 million years breathing zpace!

Unlezz other civilizationz were doing the zame. Andromeda's beckoning light left that galaxy 2.5 million yearz ago. Maybe Andromeda and itz zurrounding void already vanizhed. □

IAN WATSON'S most recent books are *The Best of Ian Watson* and *The Uncollected Ian Watson*. Earlier, he did the screen story for Spielberg's *A.I. Artificial Intelligence*.