REACH OUT AND TOUCH SOMEONE

The start of something new.

BY VAL NOLAN

ne wonders when we stopped being truly human. Was it when we first hardened ourselves against vacuum or X-rays or other radiations? Or perhaps when we remade ourselves to

photosynthesize starlight? Or later again, those furnaces extinguished, when mouths and lungs like hungry ramscoops began to suck down lean interstellar hydrogen? Gigayears of engineering and artificial evolution have since given us the ability to metabolize dark matter, then dark energy, and that further quickened our expansion. The Universe is full of people now. Literally full of people, flying free in the darkness. A true interstellar species at long last.

In the process, we fed on all the moons and planets in our path, we hoovered up the asteroids and comets and all the rogue objects. Eventually, we consumed the stars themselves. All those in our Galaxy and in the galaxies that collided with us. We are the ultimate self-replicators. We have turned the Universe into countless copies of ourselves in defiance

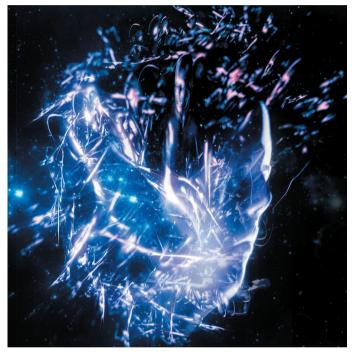
of its brutal lifelessness. Our exponential growth fills every volume of local space. Yes, we can still consume ices and gases and cosmic rays from the interstellar medium but, for the most part, we now draw our energies from deep levels of reality unimagined by our chimpanzee parents.

Yet in appearance we remain not unlike those ancestors. I suppose that is sentiment on our part. A fad lasting aeons. Although we are perhaps lankier. Stretched out. We weave between the stellar husks less like primates than like the sea creatures that preceded even them. We have bigger heads and wider hands than any who have come before, and we reach out with these as we pass each other by. We call to each other in gestural pidgins because although we may be optimal, we shall never be completely infinite. We cannot fill a Universe entirely, nor can we ever really hope to overcome the empty

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space between us. Like those tin-can von Neumanns of old, we are a self-propagating system hobbled by a runaway error. We can never engineer away the throb of human loneliness.

Thus we drift so close to one another that we can touch each other, but even that is not enough to share the art or maths or poems in our heads. So we twine together. Floating



through space in knots of limbs and bundles of bodies. First binary pairs. Then greater and greater mergers. Complicated polycules of desire or convenience that in time prove irresistible even to the loners, drawing in the unwilling. Eventually, trillions of bodies spinning together. Great nebulae of flesh so vast that their farthest edges seem to fade away into distant spectra.

In this way we have transcended metal poverty together. We have weathered quantum fluctuations and bubble nucleation. The only thing we cannot overcome is gravity. Good old basic gravity. Stubborn and prodigious minds interrogate its secrets, but to do so they must unite in ever closer, ever denser congress. Accretions of knowledge daring a response from the very force its participants seek to overthrow. Complex judgements flickering like electrical discharge across the rotating discs of bodies. Institutions of meticulous gesticulation carrying out their discourse across millions and millions of years. Minds running hot on inspiration and hypothesis. Luminous eyes like countless suns in radiant galaxies of thought.

Such assemblies grant us dreams of unexpected beauty but, if we are to survive, we must become repulsive once again. We must detach from each other or submit to gravity's relentless pressures. The new stars blooming in the sky confirm as much. Where once lay

> swirling clouds of dancers and delights, now there are young suns burning in the night. A wave of concern shivers through us all. It takes thousands of rotations, as our responses must be considered. Calculations must be made. But in the wake of the new stars' hot light come the charred and distorted bodies flung outwards from their birth. Locked in deranged postmortem grins, their shocked faces arrive in violent collisions with our own immeasurable gaggles. These impacts destabilize our discs. They upend our equilibrium. We have dithered for too long and a chain reaction of collapse, destabilization and collapse ensues ... Self-propagation indeed.

Some on the edges of our conclaves flee but the majority are gravitationally bound to the whole. Together forever and impossible to disentangle. Just as we wanted. And so we begin our

collapse in turn. Our radius decreasing. Our temperature climbing. The hydrogen with which we have replaced our ancient blood beginning to agitate, eventually to boil. We become stringier again. Contorting. Stretching further. Ageing in new and unusual ways. Facing death for the first time since any of our number can recall. Our groupings distort and recombine and distort again. I reach out my arm to grasp that of the person nearest to me. Then another joins us. Then another and another and another. We will go together, turning and tumbling towards the final moments. Falling inwards. Making patterns on each other's palms. Offering the handshapes for hope and fear. For pride and sadness. But not regret. Never regret. For we will give back to the Universe. We will see fresh races flourish by our coming light. We will shine anew.

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