Futures

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Early warning

The power of publication. **By John Gilbey**

My sub-orbital flight was late getting into Denver and I missed the first shuttle to the conference – losing my seat for the keynote talk by the rock-star astrophysicist I'd crossed the Atlantic to interview. Not a great start, but if I'd been on time I'd have missed the announcement of the end of the world. This came during a parallel session, in a small seminar room just down the hall, given by a group of worried postgrads from Wyoming. They'd travelled down overnight in a borrowed FlightSled and risked arrest by sleeping in the parking lot, but despite being young, nervous and reassuringly scruffy, their talk made the scattered audience sit up sharply.

'Evidence for approaching perturbations in solar activity' was a desk review covering historical solar output, flare and CME data mashed up using some innovative software tools drawn from other disciplines. The best advert ever for open data, it showed what other studies had lacked the breadth and sensitivity to draw out – subtle trends, ripples upon ripples, all leading to a prediction of a shocking increase in the scale of solar events over the coming decades. Traumatized, I sketched some rough numbers in my head; if they were right, then Earth would be cooked through by a massive event maybe 30 years hence, leaving it crisped and sterile.

In the scrum afterwards, I asked them where they were publishing – and suggested *Nature*. They looked surprised, almost amused. "Really …?" Yes, I told them, we need to get the word out quickly. With clumsy fingers, I thumped out a rapid e-mail and started the draft of my now infamous News piece.

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Move on two decades and I was ensconced in the towers of Crinan Street, home to *Nature* for much of its 300 years, looking across the surviving rooftops of St Pancras as I waited for the editor. So much change, so many partings. The bloody panic that had followed the appearance of that fateful paper, published the day after submission, was tempered only when the Big Four tech giants announced their not-quite-altruistic action plan.

Their century of investment in asteroid mining had already established a self-replicating army of autonomous factories in the cold reaches beyond Mars. These would be extended and repurposed to build a fleet of starships with the capacity to carry a sleeping global population to safety, heading out into the void on centuries-long voyages to purported Earth analogues across the galactic neighbourhood. It was obviously a crazy long shot, but bizarrely it gave just enough hope to slow the slaughter.

The One Percent left first, of course, in a flotilla of boutique ships allegedly modelled on the elite cruise liners of history. In their absence, the management skill of the artificial intelligence controlling the project improved constantly. Safely arrayed at three of the Earth–Moon Lagrange points, this

triplicated consciousness tracked every component, body and course as the programme escalated. Vast, gaunt, nameless starships — each bigger than the last — appeared in Earth orbit with startling frequency, to be hurriedly stacked with the unconscious, processed bodies of those who matched the slightly dubious initial selection criteria. I just hope they'd read the contracts they'd signed …

Eventually, the scale of construction reached the point at which anyone who wanted to leave Earth could do so. But I had long since decided, like many of my friends, that I was a Shrugger — one of the group who'd rather live out their time on a quietening Earth than face the unknown future of the fleets. Aside from my fear of the process — I'd seen inside a Sleeper Preparation Facility and still wake up screaming — with most manufacturing and well over half the human population off-planet, nature was slowly, oh, so slowly, starting to recover some of the ground it had lost.

Coffee and the editor arrived simultaneously. As I poured, she outlined the reason for the mystery summons that had brought me from my fastness in the Welsh hills. The AI, she said with something approaching a wry smile, had requested an interview with *Nature* and would I be interested in the job — having broken the story in the first place?

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So here I am, sitting on the fifth-floor balcony newly enjoying the sunshine, having just filed the second blockbuster story of my career. The AI, using beautifully modulated global English, had set out its position clearly — but it took me a while to realize where it was heading. With only a trickle of candidates now wanting to head starwards, the massive manufacturing constructs of the outer system were becoming idle. How should they be used to fulfil the AI's overriding mission requirement to protect humanity? With its former masters now out of contact, the AI wanted a worldwide discussion to take place — but it did have a modest suggestion.

"Earth doesn't have to die," it said with only a hint of drama. "Building the starships has used just a minute proportion of the system's raw materials. Within five years, with the capacity we now have, I can create a dynamic shield capable of protecting the whole planet from excess solar radiation. Later, we can extend this to provide an additional environment for the passengers of any starships that return …"

It is our decision, of course, but I can't foresee much opposition from the remaining people of Earth. Naturally, the AI itself would also be protected by this shield — which somehow reassures me about its motives. So in a moment, I'm going to wander down to my favourite remaining pub and enjoy a celebratory pint of beer. And, yes, I will be charging it to my expenses.

John Gilbey writes from the academic seclusion of the fictional University of Rural England. He worries a lot about this sort of thing, but remains cautiously optimistic. He tweets as @John_Gilbey