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1917–2008: A Space Optimist

Arthur C. Clarke's technological prescience deserves to be honoured; his endless optimism needs to be cherished.

It took an unusual mind for a Londoner living in 1944 to see the V2 rockets bombarding the city as a cause for hope. But the intellectual milieu of the time, enriched as it was by the cosmic visions of the likes of Desmond Bernal, J. B. S. Haldane and Olaf Stapledon, produced a few such optimists. Freeman Dyson, a brilliant young mathematician then working on the more traditional bombardments crossing the North Sea in the other direction, saw his hope in the opportunity costs: enemy resources spent on inefficient rockets could not be spent on more effective fighter aircraft. Arthur C. Clarke, then a young radar engineer and soon to be a budding science-fiction author, saw his hope in the fact that, en route from mainland Europe to England, the rockets were passing through outer space, and the technology required for travel to other planets was thus at hand. Legend has it that when Clarke and his friends from the British Interplanetary Society heard a V2 while drinking in a pub, they stood and cheered the space age that was about to begin.

Such optimism comes from an ability to look beyond the obvious, an ability that served Clarke, who died on 19 March, as both a writer and a prognosticator. Clarke, who founded his writing in rigorous science, foresaw not just the technology of the geostationary communications satellite, but also the effect that such distance-denying technologies would have in drawing the world together. As he said with typical optimism to the dignitaries signing the agreements in 1964 that created the Intelsat system: "You have just signed the first draft of the Articles of Federation of the United States of Earth." But he did not just see upsides: in 1960, he published in *Playboy* a wry little piece on decadence and satellite-delivered porn called "I Remember Babylon".

Wryness was a frequent tool. But Clarke's aim in his writing was mostly to inspire wonder, specifically the wonder of transcendence — the wonder in gazing into a featureless artefact and reporting back, stunned, "My God, it's full of stars!". In that moment from *2001: A Space Odyssey*, as in many other instances, Clarke showed his readers the wonder of the scientific threshold about to be crossed, the cosmos about to be joined. Yet he did so with a humanity that insisted that his readers were not insignificant in the face of such immensity — or rather, that their insignificance did not diminish them, perched as they were for ever on the shores of what was to come.

The book's technological vision of lunar cities and men bound for Jupiter, magnificently realized in film by Stanley Kubrick, was flanked by just such shores — the dawn of human consciousness in the ape–man Moonwatcher, the space-age Odysseus's return through the pit of stars to a home about to be utterly changed. Moonwatcher or moon-walker, Clarke was saying, we are always on the brink of the beginning, always in some way pre-historical. Seeing the whole dazzling day to come in the first thin cord of the Sun was his great delight.

In the 1970s, Dyson, by then a luminary of mathematical physics, explored the possibilities of life running off into the furthest reaches of the future. It was an idea to stir Clarke's soul. As he wrote in response:

> "[Not for] billions of years, will the real history of the universe begin.
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> It will be a history illuminated only by the reds and infrareds of dully glowing stars that would be almost invisible to our eyes; yet the sombre hues of that all-but-eternal universe may be full of color and beauty to whatever strange beings have adapted to it. They will know that before them lie ... years to be counted literally in trillions.
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> They will have time enough, in those endless aeons, to attempt all things, and to gather all knowledge. They will be like gods, because no gods imagined by our minds have ever possessed the powers they will command. But for all that, they may envy us, basking in the bright afterglow of Creation; for we knew the universe when it was young."

It is a rare gift — although one potentially shared by any scientist — to find satisfied joy in being poised before the transcendent, filled with hope by the wonders that the intellect, rather than blind faith, promises to those who explore it. Clarke devoted himself to passing on that gift, and we should cherish it. ■

Critical journalism

Science coverage is on the wane when public scrutiny of science is more important than ever.

Watch five hours of US cable news, and on average you will see around 35 minutes on election campaigns, another 36 minutes on US foreign policy, and 26 minutes on crime — but only about one minute on science and technology, slightly more on the environment, and only a little over 3 minutes on medicine and health care. This is not just an issue with cable: science fares little better in other forms of television, radio, or print news, according to the Pew Research Center's *The State of the News Media 2008* report, released on 17 March.

It would be a mistake to get too alarmed about this analysis. Science news in the United States has indeed been squeezed to around 2% of the total since the events of 11 September 2001. But it was never that high, hovering around 4–6% from the mid-1970s until 2001. And the drop does not reflect a falling public interest in science, as much as the media's increased emphasis on foreign policy, war and the homeland: the diversity of US news coverage has decreased across the board since 9/11.

The Pew Center's numbers offer another reason not to be gloomy: