

Never the twain

In 1931, two unlikely characters shared the same stage on the opening night of Charlie Chaplin's film *City Lights*. One was Chaplin himself, the other Albert Einstein. An artist and a scientist, both of world renown. At the event, Chaplin is said to have remarked to Einstein: "They cheer me because they all understand me, and they cheer you because no one understands you."

I came across this anecdote in a wonderful collection of essays, *Cultural Amnesia*, by the British novelist, poet and essayist Clive James. The book's subtitle is *Notes in the Margin of My Time*, reflecting how each essay was inspired by notes James scribbled into the margins of various books over many decades. The book is a literary demonstration of the modern scientific principle of emergence — how a larger meaning and coherence can emerge on its own out of a variety of parts in complex interaction.

James notes that Chaplin's remark to Einstein, while amusing, was also untrue. Most physicists by 1931 at least understood the principles of special relativity, the work that garnered Einstein his lasting public fame. The theory was by then a key part of modern physics, having been integrated, for example, into quantum mechanics by Klein, Dirac and others. Processes involving the transformation of mass into energy, and *vice versa*, were forming the new foundations of nuclear physics and astrophysics. Yet Chaplin's remark did capture a deep truth too — that the stuff of Einstein, and of science in general, stands apart from the arts and the humanities, from pictures and stories and films about people.

This was, of course, the same point that Charles Percy (C. P.) Snow made in his famous 1959 Rede Lecture at the University of Cambridge, later published under the title *The Two Cultures and the Scientific Revolution*. Snow argued that a yawning gulf separates the two cultures of science and the humanities, making communication between the two all but impossible. At the time, Snow's thoughts hit a cultural nerve, and kicked off a long running argument that — as James notes in a penetrating commentary — Snow had little chance of winning. After all, the battle played out in terms of the written word, its ebb and flow driven by the literary devices of style, emotion and rhetoric; the battle



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took place on the home playing field of the arts and humanities, not of science (which was Snow's own culture, having been trained in physics).

Fifty years later, it seems to me, this cultural divide persists, and has perhaps been made wider by several decades of post-modernism. Yet it seems natural even that the divide should persist, for it can be traced all the way back to the Copernican revolution, which displaced humanity from its special place at the centre of the Universe. If Copernicus pushed humanity from its perch, he also split the universe of human intellectual activity into two parts, two cultures, one embedded firmly within human experience in all its manifest complexity, and the other struggling to find a point of view apart from all that is grounded in human experience (and, as it happened, finding it could do so most effectively with its own language of abstract mathematics).

To an anthropologist, culture describes all those things such as language, habits of thought, prevailing social norms and so on that we inherit from our environment, especially our social environment, by learning and imitation. The word applies to the people of different nations, but equally to different branches of human activity. There's a good reason for common cultures with unique distinguishing features, for the commonality of habits, beliefs and practices both bind them together and distinguish them from other groups. Common ways of thinking and perceiving also help a culture coordinate the exchanges between people by virtue of familiarity.

This is true of culture in general. What distinguishes the two cultures of science and the humanities is what they coordinate around. The humanities responded to the Copernican revolution by asking what it meant for mankind, for the search for meaning in an alien world, and have sought to lend meaning to that world through poetic expression: "...in a universe

suddenly divested of illusion and lights," the French philosopher Albert Camus wrote in his essay *The Myth of Sisyphus*, "man feels an alien, a stranger. His exile is without remedy, since he is deprived of the memory of a lost home or the hope of a promised land." The humanities are literally the 'human-ities'; immersed in the lives of people within human cultures, celebrating individual human perspective and experience, and necessarily resisting any universal or objective perspective. In contrast, science always seeks the universal and objective. Inspired rather than alarmed by the Copernican revolution, it aims to determine the Universe (as far as possible) from a non-human perspective, undistorted by emotion and desire.

One of the things this implies, as James points out, is a crucially different perspective on history in the humanities and in science. Science can for many purposes forget history and focus on the present, for scientific advance and the technology it creates can alter our world beyond recognition in less than a generation. In contrast, and apart from the rapid and ceaseless alteration of superficial style, the core matter of the humanities changes only as fast as the deep nature of people and human life changes, which isn't fast at all. As James notes:

"If Homer could be beamed up from the past, taught English and introduced to Braille editions of the novels of Jane Austen, he would be able to tell that they were stories about men, women and conflict, and more like his own stories than not. Much of the background would be strange to him, but not the foreground. A couple of millenia have not done much more to make the present unrecognizable to the past than they have done to make the past unrecognizable to the present."

These differences are so set in the subject matter of the two cultures — one exploring everything human, and the other aiming for what is outside the merely human — that it is difficult to imagine the two cultures ever coming together. Even so, scientists remain human, and artists live in a world described by laws of inspiring beauty. There will always be innumerable points of contact. □

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