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Fascinating Algorithms

Colliding Worlds: How Cutting-Edge Science is Redefining Contemporary Art By Arthur I Miller

(W W Norton 424pp £22)

This book may be the only extant publication in which the word 'electrifying' and the name C P Snow appear in the same sentence. 'Tweedy' maybe, 'donnish' certainly, but 'electrifying' never.

In fairness, Arthur I Miller, a physicist and historian of science, is not referring to Snow the man but to his 1959 lecture 'The Two Cultures'. Again, however, electrifying is hardly the word for a rather liverish complaint about how people in the humanities know nothing about science (and, sort of, vice versa). This became for a while 'an issue' and Snow's analysis is still occasionally evoked to describe what is seen as a lamentable intellectual failing.

It wasn't and it isn't. For at least 250 years the impact of science on the humanities has been immense and fundamental, though often negative, and, in the last twenty-five or so years (since the publication of Stephen Hawking's A Brief History of Time), a wave of popular science publishing has ensured that we can all, fairly painlessly, keep up with scientific thinking. Inevitably, this has led to scientific imagery appearing in the visual arts. Colliding Worlds argues that this latest development signals the start of a new movement – Miller calls it 'artsci' – and, indeed, the onset of a new 'third culture' in which art and science will, somehow, embrace. To make this point, Miller has produced what is, in effect, a directory in the form of dozens of interviews - of science-influenced artists and musicians.

Colliding Worlds is, I am afraid, not well written, all too often succumbing to a hurried, breathless adjectivitis – so, in one sentence, we are told of Picasso's 'flamboyant and flirtatious mistress' and of Einstein's 'sultry and moody wife'. This, combined with Miller's desperate need to convince us that something very new and exciting is happening, left this reader feeling he was being subjected to an unduly hard sell.

Miller also has an alarming habit of issuing unargued Olympian judgements that simply leave you gasping. After Newton, 'science was to be considered the serious pursuit of truth, while art was seen as merely decorative'. Really? Elsewhere the period which enjoyed arguably the greatest concentration of creative genius in this country's history is dismissed as 'a decade of [Edwardian] decadence'.

Perhaps the problem is that the very idea of some kind of art-science union is incoherent. Art and science are not separated by misunderstandings or ignorance, but by definition. Art engages with the complexity of human experience, more precisely with what it feels like to be human; science explores the material world in a manner that necessarily ignores all such considerations. In Colliding Worlds the problem with this discontinuity is repeatedly made apparent by scientists who know perfectly well that art cannot impinge in any way on what they do, however enthusiastic certain artists may be. A deal between the two – Miller's third culture – is, therefore, likely to be more of an annexation than a partnership.

The one exception to this might be said to be neuroscience. This now claims to have access to the physical substrate of our minds, feelings, impulses and so on. And, indeed, Miller does mention Semir Zeki, the genial and entertaining UCL professor who observes the reaction of our brains to works of art. Thanks to Zeki and others, 'neuroesthetics' is a distinct discipline. But what does any of that mean? Would Titian have been a better painter if he had seen the results from an MRI machine? Or, in biology, there are those fatuous evolutionary explanations of art as some kind of adaptive mechanism. Maybe, but so what? You're not going to get very far with Les Demoiselles d'Avignon if you persist in seeing it as nothing more than an attempt to propagate Picasso's genes. The point about art is that it is precisely about those things that science cannot address, those things that make us more than the sum of our (no doubt) adaptive parts.

Nevertheless, there is some interest in the efforts of visual artists and musicians to use science as a source of material. This is not new. Miller, for example, is very keen on the links between Cubism and Einstein's physics, which, I suppose, is fair enough. But what about the great paintings of Joseph Wright of Derby? They are more clearly influenced by science than anything in Picasso, but they are perhaps less acceptable because they point to an awkward unease with this new knowledge. Bringing in literature would have made the same point even more acutely - from Wordsworth's and Ruskin's distaste for industrialisation to Huxley's and Orwell's fears of technological tyranny, the dominant theme of art's relationship to science has been suspicion.

In contrast, the artists Miller lists seem to be very keen on science and technology, attempting to embody quantum theory, relativity, cosmology, biology and almost every other discipline in their work. I don't doubt that this frequently produces beautiful objects, but, judging by the illustrations, these don't seem to be engaging with science so much as deploying its imagery. Indeed, artists do tend to make this very point, perhaps because they cannot in any useful sense integrate what they do with science itself, nor, indeed, have any effect on the work of the scientist. Interviews with great artists - say, Anselm Kiefer, Gerhard Richter or David Hockney - on the subject of their own attitudes to science would have been much more illuminating.

In his conclusion, it becomes clear that what Miller really wants is an art entirely subservient to science. He talks of artificial intelligence turning 'the present, somewhat fuzzy notion of aesthetics in music into a more quantifiable one' and remarks that 'Relating aesthetics to algorithms further demystifies it.' Good luck with that, but it sounds to me as though the third culture will have no art at all, only algorithms and a few nice pictures to distract us.

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