C2: DA VINCI, THE MODERN POLYMATH AND CREATIVE COLLISIONS

Friday 25 May, 2018

When I think of a changing world, I think of one particular man.

He was born in Tuscany. In early childhood, he was raised in modest circumstances by his single mum, before he moved to live with his wealthy dad.

As a child, he loved being outdoors. In fact, later in life, he spoke of a particular recollection from his childhood. That while he was exploring in the mountains, he discovered and entered a cave, at the same time terrified that some great monster might lurk there, but driven by curiosity to find out what was inside.

He received only an informal education but, as a teenager, he took up an art apprenticeship, which he loved.

He experienced a difficult time in his mid-twenties when, although the case was ultimately dropped, he was charged with sodomy, homosexuality being illegal where he was living.

Anyway, after that, his career really kicked on. He worked hard, and lived a full and rich life until he died, aged 67.

That was on the 2nd of May, 1519.

He was, of course, Leonardo di ser Piero da Vinci.

RENAISSANCE MAN

LEONARDO was, by virtue of when he was born, a Renaissance man.
When we talk of a Renaissance man (or woman) today, we tend to be describing someone well-educated, sophisticated and with talent and knowledge in many different fields of endeavour.

But, even among Renaissance men, Leonardo, the man from the small Tuscan town, surpassed most who came before and most who have come since.

He was the real deal.

He was a polymath. That is, from the Greek, meaning, 'having learned much'. A person whose expertise spanned a significant number of different subjects. Someone who drew on complex bodies of knowledge to solve specific problems.

And he certainly could draw on many skills. Painter, sculptor, architect, musician, scientist, mathematician, engineer, inventor, anatomist, geologist, cartographer, botanist and writer.

He was propelled by an endless curiosity.

Perhaps his childhood response to that cave in the mountains was the very first sign of that.

TRANSFORMATIVE COLLISIONS

Now, I'd be amazed if the phrase 'transformative collisions' was ever uttered by, or in the presence of, Leonardo da Vinci.

That's not because it's a modern concept that only came after his time. Quite to the contrary. It's because it was simply innate to him. His entire life was comprised of transformative collisions: he didn't need a special label for that.

It was natural to him to study a bird's wings to understand flight; to peel the skin off a human cadaver to understand the muscles and mechanics behind a particular smile; or to explore systems of hydraulic plumbing to help fight the Black Plague.

He became famous for many ideas, artworks and deeds.

He, of course, painted the Mona Lisa and the Last Supper. He conceptualised the world's first bicycle and helicopter and tank. He sketched the first parachute. He produced that extraordinary study in human proportion: 'The Vitruvian Man'.

He freely expressed his opinions on topics that ranged across humanism, beauty and the natural world.

But, for me, there was something he said that struck a particular chord.

It was about feet. He said that, *'the human foot is a masterpiece of engineering and a work of art.'*

And that's really what I want to talk about with you today.

I want to suggest that perhaps we should all spend more time looking down at our feet. Not just looking at them. But seeing them. Seeing them as Leonardo da Vinci was able to see them.

Appreciating the engineering. And enjoying the art.

Perceiving that the best design is based on both.

Understanding the bridge between art and science.

MODERN POLYMATHS

Does it mean that to see things the way da Vinci saw them, we must all be polymaths? Of course not. Does it mean that if we all study our feet, we too can be polymaths? Sadly, also of course not.

In fact, I would hazard a guess that today there might be proportionately less polymaths amongst us than in centuries past.

My suspicion is that, as we have refined our systems of education, we have become more and more specialised. Perhaps we have been teaching our young people more and more about less and less.

It might not be coincidental that Leonardo da Vinci had little formal education.

That said, I'm not suggested that what we need is less education in any sense, but an education that allows youngsters to freely traverse between disciplines without conventional borders. An education that facilitates the curious mind.

C.P. SNOW

Some 60 years ago, English scientist, civil servant and novelist, C.P. Snow, delivered a lecture at Cambridge called '*The Two Cultures and the Scientific Revolution'*. This lecture was later expanded into a book.

He wrote of the gulf between the arts and the sciences, referring to it as a '*gulf of mutual incomprehension.'*

Snow argued that to further the progress of human knowledge, our practitioners in the arts and the sciences had to build bridges over the cultural divide between them.

To put it simply. Our literary theorists needed to understand the Second Law of Thermodynamics. And our scientists needed to understand Shakespeare.
Snow did not suggest that we all had to be Leonardo da Vinci.

But his thesis was that we did need to be better prepared to bridge the two cultures of the arts and the sciences. To slip seamlessly between their different rules and conventions. To apply the insights gathered from art to inform the study of science. And vice versa.

THE SCIENCE GALLERY

Melbourne, where I come from, can lay claim to one example of how we can give the next generation the tools to cross the divide.

Following Trinity College Dublin and Kings College London, the University of Melbourne, (where I studied law), is one of the sites selected for *The Science Gallery*, to be joined now by Venice, Bangalore and Detroit.

Each of these six cities is seen as a fertile environment in which to encourage young people, aged between 15 and 25, to appreciate the creative collision between science and art.

That openness to creative culture – of which this gallery is, as I have said, just one example – also sets the scene, happily, for Melbourne to host the next C2 later this year, between 17 and 19 October.

Melbourne and Montreal are consistently voted as amongst the world's most liveable cities. I can't speak with authority about Montreal, save that our experience of it has been wonderful.

As for Melbourne, one thing of which I am proud is that our National Gallery of Victoria is in the top 20 most visited galleries in the world, and Melbourne is one of only three cities in the world to have two universities in the global top 30 biomedical rankings.

Those twin factors, and the choice of Melbourne for the home of a Science Gallery, are good signs. Promising signs. Signs that perhaps more polymaths will be bred and nurtured there or, at least, that C.P. Snow's gulf between disciplines will be narrowed, or even closed. Our future prosperity depends on it.

CONCLUSION

To achieve it, we do need to take time to look at our feet.

Engineering and art.

The practical tenacity of science, and the aesthetic heritage of art combined.

We need people like da Vinci, whose work – whether in ground-breaking science or breathtaking art – has at its heart, a reverence for the wonders of humankind and a respect for the natural world.

We can’t all be polymaths. But, like Leonardo da Vinci we can all be curious.

And our curiosity can be the torch that lightens the way for us to traverse between pathways. Curiosity will prevail, to ease our fear of entering the darkened cave. Of inevitably repeating transitions.