

THE OLD DIVIDE

In the history of human thinking the most fruitful developments frequently take place at those points where two different lines of thought meet. These lines may have their roots in quite different parts of human culture, in different times or different cultural environments or different religious traditions.

Werner Heisenberg (1958)

The principle of science, the definition almost, is the following: The test of all knowledge is experiment. Experiment is the sole judge of scientific 'truth'.

Richard Feynman (1963)

Focus on ... crime ... took the American detective story off the path marked by Poe—for the time being at least.

Leroy Panek (2006)

There is a belief in a creator who existed before the Big Bang and set the universe in motion, which is something that cannot be proved or disproved by science.

Peter Raven (2008)

In the beginning, it was science vs. religion.

The Globe and Mail (2009)

Edgar Allan Poe was obsessed with the medieval theology of sin.

Aidan Johnson (2012)

By the second week I settle in. She isn't here. I realize this place is mine. The Office, she calls it. It's not much. Her choice of location is a bit bizarre. Mostly she spends like a drunken sailor; not on this. North Hollywood may sound upscale. If you're from some other town that is. Paradise Incorporated, sneers Chandler in an Age before the acronym. It's a short spit or two from Universal City. I think about that while the elevator grinds me up to three. At least there is an elevator. Two connecting rooms. North-facing view. Dirty windows overlook the freeway. I guess they need no blinds. White noise from the air-vent blends with freeway drone. At least the air is cool.

Mostly, I'm the only one who's here to notice. Her consulting cop, perhaps not knowing he's supposed to haunt the scene, stops by from time to time. He rarely sits for long at his desk; he gets up and paces or he parks on mine. I don't suppose he wants to chat about religion but there really is no choice. He's sup-

posedly consulting about things that were conceived in a religious context long before physics came along and took them on. How can I ease him into this? It is one wall of the world he's walking into. It is stuff he needs to know.

But in the end I tell him Brel—another Belgian—says it all in song: 'Les Flamandes dansent sans rien dire...'.¹

This poses a dilemma that he cannot duck. Simply: Anything worthwhile in any language doesn't truly translate to another. The genius of English builds upon this fact, embracing foreign words that come its way. I could tell him, Flemish women dance in silence ... except this would miss my point. Listen to Jacques Brel, I tell him, look him up on Wikio, use your own computer, look and listen and inhale his cadence, Brel is legendary, check him out.

He listens. I sit back and think. What am I doing? What I'm writing's not about a book that may not happen. Not about word games with her that she won't read. Right now, it seems he is my sole consumer. What can I offer him? I wonder, feeling phony. I don't know this stuff; I just know how to find it. It's like FitzRoy taking Darwin to the Galapagos willy-nilly on the *Beagle*—except he's no Darwin. Lewis following Sacagawea? Except he's no Lewis. But like Lewis all that he will get to see will be the views from paths I'm choosing and my choosing's idiosyncratic. Maybe my task like Sacagawea's or FitzRoy's is to pretend I know the way. A thought that haunts me is I'm likely to be wrong.

Now I've got religion. To me Brel is timeless. What will Brel turn out to be to him? Will he go below the surface? Will he see what can't be written with a heavy hand? Will he find religion's roots in human thinking? Will he take a true long view of time? Will he, far from city lights, see what his ancestors once saw on each clear night? Will he feel the awe with which they watched the roving planets and the stately panoply of stars, their fear of deviant events like comets and eclipses? The quest to understand the sky may be as old as humankind. Was this what Healy calls the first unspoken word? *The First Idea*? One can imagine how such sights might light a long candle of questions before there were words with which to ask them. Religion owned these questions long before the dawn of physics.

In the early 1600s there's the celebrated standoff when the church asserts control of science. Galileo Galilei and the Roman Inquisition is a benchmark confrontation. It adds fuel to the fiery co-evolution of science and religion. They come to be seen as opposed or at least unreconciled. Today, of course, their institutions have in practice largely made their peace. But most still see them as mutually exclusive if not hostile pillars of society. It wasn't always so.

In early times, religions underpin the study of the reasoned argument. They build foundations for it—philosophic, economic, social and academic—and so for its brain-child science. Thinkers of the Islamic Golden Age (say from 800 to 1200

CE) initiate developments in philosophical and scientific thought. Islamic philosopher and theologian Abu ibn al-Haytham can be seen as the first scientist. Around 1000 CE he invents experimental testing of ideas. He bases his novation on the Qur'an. A thousand or more years ago religion and science are practically indistinguishable.

It's little recognized these days that, like religion, science is a system of belief. Every such system has its definition of truth. The divide between religion and science can be traced to their definitions and to the objectives that underpin them. Religions seek power through doctrinal definitions of truths: Is it written? Science seeks knowledge through a pragmatic definition of truth: Does it work? So religions like species tend to be conservative and multiple and to diverge. Science by contrast tends to be avant-garde and unitary and to converge. Or so it should.

The last millennium saw power shifting from religions to kings and from kings to peoples. It was not given; it was taken. Science played its role in bloody struggles of which many tell the tale. Part of the sagas they depict is the deep schism that the struggles drove between the two.

Given this, it might seem that their discourse would have long since dwindled into silence. Not. They hold strained conversations. Isaac Newton bases his theories of mechanics and of time on his theology. Even now the dialog's alive, it's civil and it's keeping up to date, each side a source at least of provocation for the other. A careful listener might hear echoes of an old turf war. Civil, yes. But elbows are still up.

The line between science and religion is tightly defined. A proposition lies on the science side if it is disprovable—at least in principle. If not, then it's on the religion side. This distinction we inherit from al-Haytham. But the line is not as clear-cut as it sounds. A hundred years ago most of the tools now used to test such propositions were unimaginable—even in principle. Who knows what will be or seem to be disprovable to future generations?

He glazes over as I give him this. He doesn't see why he should know this border. I tell him it's as if he has to work near Shisidaogouzhen. He's in China; he's on 303 Provincial Road. He's admiring the meanders of the frozen river. I show it to him using Google Earth. He can see on-screen where Google says the border is but it's what locals say that matters. If some xenophobic North Korean sergeant thinks he's crossed the line he's looking at a long road home.

Of course this is hyperbolic. The penalties for trespass into physics are much less severe. But he needs must know and so should study physics' border. Like most borders it's a relic from a war. He has a philosophic passport with a metaphysics visa. Using the same language Jeans issues a friendly warning: 'In whatever ways we define science and philosophy, their territories are contiguous; wher-

ever science leaves off—and in many places its boundary is ill-defined—there philosophy begins.’

He disappoints me. Having not showed up till after lunch, he now leaves early. To do what, he doesn’t deign to say. She gets here from the airport twenty minutes later. Quick trip to Toronto, so she says. It’s news to me. Actually, Waterloo, she says and turns to other topics. Another disappointment. What, I wonder, is in Waterloo? I don’t ask her and she doesn’t tell, but Google does: What’s physics in Waterloo? scores five million hits. Top of the hit parade is the Perimeter Institute for Theoretical Physics, aka—a new coincidence—P.I. So as she likes to say I check it out. Interesting stuff: If I had infra-physics goggles I’d see P.I. as the hot spot on the globe. A meander through its website has me caught up in a lecture for an hour or more. Roger Penrose, a Brit physicist, gives me his ideas about the universe beginning. It’s a talk he gave at P.I. a few years ago. Another hit’s a headline: Hawking has a date with Waterloo. He stops by P.I. for a lengthy visit. Yes, the one who wrote *A Brief History of Time*. Better known for writing though he can’t write and for speaking which he can’t do too. Checking further I see that in Waterloo he may be best known for his studies of black holes. It seems Hawking is to black holes what Einstein is to relativity. He and Penrose wrote the book.

So is P.I. where she was? Where else would she be in Waterloo? Google says the second star attraction is the station. Then it says *that’s* in the London in the south of England. So I’m thinking that she *did* go to P.I. Why? I mean, if it’s about *our* business, as seems likely, why not say so? What’s afoot here and where is he when I need a *real* detective?