

BUSINESS & FINANCE

Through the philosophical glass

Fr PHILIP LARREY speaks to Kristina Cassar Dowling about how technological advances – including AI – can be seen in a philosophical way.

The human mind is a strange universe. It's a machine that requires complex methods of understanding to fully grasp the logical and rational approaches the human race adopts to survive. We are inclined to act on a whim, to react to our surroundings – but there's a certain element in life that we've come to call 'intelligence'. And although it may seem that some members of our species disregard this factor in life, hopefully, the greater part of our conscious decisions are intelligently examined before they take shape to form actions.

There have been countless studies on thought in general, varying from scientific to philosophical. St Augustine of Hippo, an active philosopher in the late fourth century, discusses free will in *The Confessions* and attributes the existence of sin to be directly connected with the choice afforded by free will. This is directly linked to the choices and consequences we experience in our lives, but Thomas Aquinas describes 'freedom' in another way. In natural science, reason is the necessary tool; in mathematics discipline is adopted and in divine science we use intellect to fully understand our freedoms in life. These principles are what lead us to human excellence, human happiness and the fulfillment of human destiny.

The major question of concern here is whether the philosophical intelligence of humans can be applied to that of artificial intelligence (AI), while keeping the philosophy of the mind in constant focus.

Fr Philip Larrey, chairman of Humanity 2.0 and of logic and epistemology at the Pontifical Lateran University in the Vatican, is an author of two books that deal with AI in connection to philosophical study. In his newly launched book, *Artificial Intelligence. An Essay on the Philosophy of Artificial Intelligence*, he discusses the speculations that circle



around AI and its possibility to revolutionise the world as we know it.

The intense content connected to thinking-technology is a hot topic in modern culture. We, as users, are fixated on the improvements modern technology can bring about and are consumed in the methods of making our life simpler to manage, run and enjoy. From the simple Apple creations that turn up on the market every quarter or so, to the smart home devices we install in every room of our houses, we've become dependent on the innovations that come to market.

Fr Larrey is concerned about the impacts such creations have onto our social behaviour and

questions the ability of robots mustering up conscious thoughts to produce human-like actions or results.

"I do think that machines are able to simulate what we think of as conscious behaviour," he said, while speculating on whether AI take-over will ever in fact take place. There's an ocean-wide gap here, one that, although potentially possible, will need years of research and testing to fully execute.

"Everyday jobs that we, as humans, hold, won't be fully replaced by robots in our lifetime. Take Fiumicino Airport as an example. Even though a number of clerical jobs at check-in counters have been traded in for automated robot scanning, none of the indi-

viduals previously holding such jobs were removed from the work line – they were simply transferred to another department."

Much like industrialisation and computerisation, machines, devices and tools were upgraded for more efficient and effective creations that may in fact have done away with the need for human intervention – but the world did go on, in a far simpler way granted, but the consequences are questionable.

Fr Larrey gave some current examples that have infiltrated the news, such as an AI programme that can generate accurate text by means of OpenAI – an AI system that can create text that passes off as 'editor-approved', as though it

were written by a native human writer. Creators Elon Musk and Sam Altman have created a journalistic ventriloquist that has the capacity to swarm the internet with heaps of fake news. Other groundbreaking developments in AI include Google's Deep Mind, a AI that can help to solve some of the areas where human kind fall short – scientific breakthroughs and climate change issues come to mind.

"Questions the ability of robots mustering up conscious thoughts to produce human-like actions or results"

Artificial Humanity. An Essay on the Philosophy of Artificial Intelligence is a read that can inspire the modern mind to view such technological advances in a philosophical way. In a world where thought, more often than not, fails to precede action, Fr Larrey reintroduces the structure of the mind and compares it to the structure of a machine, which are two different things – highlighting the hype we notice in popular media while drawing from the richness of Catholic tradition and its inherent philosophy, which can address in an incisive way the issues surrounding AI in contemporary society.

A public book launch will take place on October 4 at the Chamber of Commerce. During the launch, Fr Philip Larrey will discuss the importance of Artificial Humanity in modern society. For more information visit <https://www.eventbrite.co.uk/e/book-launch-of-artificial-humanity-an-essay-on-the-philosophy-of-ai-tickets-72799081011>.

Money market report for week ending September 27

ECB monetary operations

On September 23, the European Central Bank (ECB) announced its weekly main refinancing operations (MRO). The operation was conducted on September 24 and attracted bids from euro area eligible counterparties of €2.80 billion, €0.78 billion more than the bid amount of the previous week. The amount was allotted in full at a fixed rate equivalent to the prevailing MRO rate of 0.00 per cent, in accordance with current ECB policy.

On September 25, the ECB conducted a three-month, longer-term refinancing operation to be settled as a fixed rate tender procedure with full allotment, with the rate fixed at the average rate of the MROs over the life of the operation. The operation attracted bids of €0.85 billion from euro area eligible counterparties. The amount was allotted in full in accordance with current ECB policy.

Also on September 25, the ECB conducted a seven-day US dollar funding operation through collateralised lending in conjunction with the US Federal Reserve. This operation attracted bids of \$0.97 billion, which was allotted in full at a fixed rate of 2.41 per cent.

Domestic Treasury Bill market

In the domestic primary market for Treasury bills, the Treasury invited tenders for 92-day and 364-day bills for settlement value September 26, maturing on December 27 and September 24, 2020, respectively.

Bids of €50 million were submitted for the 92-day bills, with the Treasury accepting €20 million, while bids of €50 million were also submitted for the 364-day bills, with the Treasury accepting €3 million. Since

€30 million worth of bills matured during the week, the outstanding balance of Treasury bills decreased by €7 million, at €279.30 million.

The yield from the 92-day bill auction was -0.401 per cent, a decrease of 0.5 basis point from bids with a similar tenor issued on September 19, representing a bid price of €100.1026 per €100 nominal. The yield from the 364-day bill auction was -0.315 per cent, an increase of 1.4 basis points from bids with a similar tenor issued on July 25, representing a bid price of €100.3195 per €100 nominal.

During the week under review, there was no trading on the Malta Stock Exchange.

Today the Treasury will invite tenders for 28-day and 91-day bills maturing on October 31, 2019 and January 2, 2020, respectively.