1. Can AI Be Human?

"The debate" around AI, wrote Toby Payne, "is desperate for a perceptive Christian contribution" [Good News for the University]. Responding to this, in a blog in March 2023, Richard Gunton discussed "How might the fact of our being made in the image of God contribute to the debate over artificial intelligence and what is at risk when it is lost or ignored?"

Often this becomes a debate about innate properties that God and humans share - things like intelligence, consciousness or freedom - and argue whether computers can ever have these properties. However, any attempt to ascribe any such property X to computers is countered by "But that is not real X!" End of discussion! Discussion became sterile.

Richard took a more fruitful approach: If being made in the image of God means that humans are to do what God wants doing, then AI is made in the image of humanity: "The majority of AI systems do something that humans can do, in a machine-like way, ... [sometimes] faster or more efficiently, or both, without a human needing to be present." Then Richard emphasised the need for humility.

I will take Richard's approach further by addressing actual questions that are being asked about AI, from a perspective of having been involved in AI since the early 1980s. Since Richard's article appeared, the worldwide debate over AI has widened beyond the traditional question, "Could computers ever become like humans?" (Q1), and, "Will AI take over the world, making humans extinct?" (Q2), to "Will AI write essays for students so that they can cheat?" (Q3). Q1 and Q2 concern what is called general AI; Q3 concerns specific tasks, such as Large Language Models like the now-famous ChatGPT. Alongside these debates are questions like "Will automatic cars will kill cyclists who are pushing their cycles?" (Q4; one did), "Surely AI is better at detecting cancers in x-rays / finding new chemicals / etc." (Q5) and "Will AI recognise my face and put me at risk?" (Q6) Q3 to Q6 are more prosaic questions about what AI can and cannot do, and its benefits and dangers.

There being too many questions above for one blog, I will discuss only Q1 here, leaving the others for later.

Q1, 'The AI Question': Could computers ever become like humans?

This is a philosophical question that has been debated for 70 years but it remains unresolved. Why? Because the ways the question has been posed are determined by what is presupposed most deeply meaningful in reality. These are "ground-motives", which propel a society's thinking and beliefs over centuries. Four have driven Western thought for 2500 years, of which three are dualistic, in which two poles, X and Y, are absolutely opposed. The fourth, the Biblical ground-motive, is non-dualistic (in fact pluralistic). They yield different versions of the AI question (their proponents in brackets):

(a) The Greek ground-motive of Mind-matter: "Computers are matter, humans are partly mind; can matter generate mind? e.g. Could a dump of my mind into Cyberspace be the real me? Could I live forever that way? [John Perry Barlow]

(b) The Scholastic ground-motive of Nature-supernature: "Computers are natural; humans are partly supernatural; can computers gain such supernatural characteristics?" e.g. Is the biological causality by which humans operate a kind of spark that computers can never have? [John Searle]

(c) The Humanistic ground-motive of Nature-freedom: "Computers are machines, determined; humans are partly free; can freedom arise from determined

causality?″ e.g. Could Emergence Theory explain it [Allen Newell, Systems theory] Or Quantum mechanics?

Posing the AI question in any of the dualistic ways is ultimately fruitless because each presupposes the very dualism that it is trying to overcome. The philosopher Dooyeweerd argued that the three dualistic ground-motives have misled philosophy and science into many dead-ends, just as is happening with the AI question.

(d) The Biblical ground-motive of Creation-Fall-Redemption recognises, and encourages us to explore, multiple ways in which the Creation - involving human, animals, plants and inanimate things (including machines such as computers) - is Meaningful and Good and works well.

The Christian philosophers Dirk Vollenhoven and Herman Dooyeweerd identified fifteen such ways in which things exist and operate meaningfully - physical for inanimate things, biotic for plants, psychical for animals, and various other ways for humans, such as language, art, morals and faith. They are not things but rather aspects of reality. The following table gives the aspects and their ″kernel meanings″ in columns 1, 2.

Aspect	Kernel	(With humans) computers can ...	(Without humans) computers can ...
Quantitative	Amount	calculate	have amount of memory
Spatial	Extension	(find cancers in) x-ray plates	take up space
Kinematic	Movement	(find) routes; (play) Chess	work dynamically
Physical	Energy	(design) new chemicals	consume energy; be heavy
Biotic/Organic	Life	self-repair; (diagnose) illness	
Psychic/Sensitive	Feeling	sense and respond	
Analytic	Distinction	think and analyse	
Formative	Shaping	plan; manufacture	
Lingual	Signification	converse	
Social	'We'	bring people together	
Economic	Frugality	save money	
Aesthetic	Harmony	create music, paintings	
Juridical	Due	help find legal loopholes	
Ethical	Self-giving	help care for someone	
Pistic	Faith	assume something	
(Brackets indicate an additional aspect, e.g. analyse.)			

We can now rephrase the AI question as ″Is it meaningful to say that computers, like humans, function in aspect X?″ When we do this, we find two ways of answering the question, which are contained in columns 3 and 4 respectively in the table:

(a) an ′everyday′ way in which computers and humans operate together as part of Creation (the humans including designers, fabricators, programmers and users), and

(b) a narrower, theoretical way, in which we take humans completely out of the picture. We treat the computer as a mass of silicon, various doping elements, copper, plastic, etc., all arranged in certain spatial arrangements and subjected to certain electromagnetic forces. (The reason why they are arranged this way is, in this view, irrelevant.)

[Footnote: In philosophical terminology used by Dooyeweerd, (b) is subject-functioning and (a) is any meaningful functioning whether as subject and/or object.]

In the first four aspects, answers to both (a) and (b) are "Yes" for both computers and humans. For example computers and humans consume energy (and thus emit greenhouse gases), occupy space, and so on. In these four aspects, computers are like humans.

In subsequent aspects, however, the answer is "Yes" if we take humans into account (version (a)), and "No" if we do not (version (b)).

The answer is "Yes" in (a) because we assign meaning from later aspects to the physical operation of the computer: the way the electromagnetic fields vary and to their spatial arrangements. It is the fabricators' intention to build a computer that is the reason why the various chemical elements are arranged spatially they way they are. It is the designers' and programmers' intention to produce an application, such as ChatGPT, that is the reason for the initial arrangements of electromagnetic forces (in what fabricators would call the computer memory). It is the users entering text into ChatGPT that is are the reason for how those forces vary through time.

The answer is "No" in (b) because, in that view, the aspects that make intention to build a computer, write ChatGPT and seeking answers, meaningful are irrelevant.

Thus the Biblical ground-motive enables us to answer the AI Question in richer ways than the three dualistic ones do. The debate becomes more fruitful.

In the next blog we will show how this view allows good answers to questions Q2 to A6.