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Are Technologies Innocent?

Part Five: The "Free Will" Argument

The Story So Far…

*I*n Part One of the series it was suggested that technologies are not innocent, and should be held to moral account. In most interpretations of Western moral philosophy, moral judgement does not extend to non-humans, and for non-humans to be included, a number of objections need to be overcome. The objections include: the arguments that morality is the exclusivity domain of humans (considered in Part Two), the argument that non-humans don't really act (considered in Part Three), the argument that technologies are just dumb instruments (considered in Part Four), the free will argument (to be taken up here in Part Five), and the dilution of responsibility argument (forthcoming in Part Six).

The Free Will Argument

The fifth objection to the inclusion of technologies in the domain of moral or ethical assessment is that unlike humans, technologies have no will, and are not free to determine their actions. Closely tied to the free will requirement is the objection that technologies have no capacity to foresee the outcomes of their actions, and without this knowledge cannot be held responsible for these outcomes. To be morally accountable, an actor must

choose to act in circumstances in which they might have chosen otherwise, and they have chosen to act in this way in knowledge of the likely consequences, or where it might be reasonably expected that the actor might anticipate these consequences. It can be seen that this requirement for free will and foreknowledge of outcomes is an extension of the "dumb instrument" argument dealt with in the previous edition, and is a particular expression of the broader requirement for rationality and self-consciousness.

Now it may be argued that some applications of artificial intelligence have demonstrated goal-setting and semi-autonomous learning capacities that might be regarded as akin to the possession of free will and knowledge of consequences. For example, a self-driving car will confront the well-known "Trolley Problem," requiring it to determine a particular course of action where other actions are open to it, and to take that action in the knowledge of the consequences. For example, the car's decision-making system may

be faced with a situation where a collision is unavoidable: it can decide to do nothing and run into the back of the truck, almost certainly killing its passenger and owner, or swerve to the left, saving its owner but almost certainly killing pedestrians. In this circumstance the car's autonomous, interactive, adaptive decision-making system would no doubt held to moral account for its actions, but what of technologies that do not have these exotic decision-making capacities?

The requirement that moral actors exercise free will, and the requirement that free will be exercised in knowledge of the likely consequences, has been long been regarded as a prerequisite for moral accountability. Consider the difference between say, a cracked skull resulting from one person choosing to hit another over the head with a stone axe, and say, a cracked skull resulting from a falling coconut. It is argued that the human with the axe had the choice of action, and might have acted differently. The coconut palm did not exercise a will to release

the coconut, and the coconut must obey gravity. Although the bad outcome is the same, the human exercised will, the coconut did not, the human is therefore morally accountable for the outcome and the coconut is not. Similarly, the ability to apprehend consequences has long been held to be a prerequisite, with the effect of excluding some from moral assessment – the coconut of course, but also infants, the mentally ill, and others "not of right mind."

But while it might be so that coconuts, infants, and those not of right mind are rightly excused on grounds of an absence of will and/or an absence of knowledge of consequences, the same cannot be said in the case of computer systems or stone axes. For unlike the coconut palms, infants and those not of right mind, the computer system and the axe are *technologies* and as such, are designed, manufactured, and operated in consort with human will, and with forethought of consequences. Technologies are in this sense wilful and consequential: they materialize a will to act and materialize imagined consequences of that action.

The stone axe or the computer system is of course without *free*-will (in the sense of autonomous will), and is without certain knowledge of consequences, but they are not formed as they are, and do not act as they do, innocent of will, or separated from prescience of consequences. Technologies do not have a will of their own to exercise freely in foreknowledge of consequences, and nor do they act on their own, as autonomous beings – but nor do we. As has been argued in Parts Three and Four, the acts of humans and of technologies are not unilaterally exercised. Neither humans nor technologies are capable of magic. A will to act and the choice of action available to us is formed in relation to our capacity to act, which is mediat-

ed in conjunction with technologies and with the world. We are both in it together, Neanderthals and axes, doctors and computer systems.

Just as we act together, our will to act, our ability to act otherwise, and our prescience of means and ends, emerge in relation to one another – humans and technologies. A technology cannot be excused from the realm of will, simply because that will is not possessed independent of human design, manufacture, and operation. The edge of the axe materializes an "in order to" that stands independent of the origins of that ordering in its very materiality. The Doctor's computer system is not without purpose. The material ordering of an "in order to," of purposes, and functions, is the materialization of will, and there is nothing in any of this that might not have been other, given different human conditions and different material conditions. A stone may not have any shape whatsoever, but it may have many shapes, materializing many different relations and orderings, suggesting many strategies, foreseeing many different outcomes, depending upon the particular negotiations of human will and the materiality of the stone. A vast number of choices (but not free choices) are exercised in the design, manufacture, and use of technologies like a stone axe or computer system, and the choices that have been negotiated are material in this substance, in this place, doing this.

The doctor's system for example, may be other than it is and may act in ways other than it acts, and that it is as it is, is an act of will (but not free will), emergent as humans negotiate with non-human technologies in design, manufacture, and operation. When the anthropologists arrive from Andromeda and start looking for expressions of desire, of will, they will examine the "in order to"

of constructions like stone axes and computer systems and the choices that have been made as we have negotiated means and ends with the world. Our will is not free to express as we might wish, it is constrained and it is opened out by an obdurate world that provides the resources and sets the rules for ordering. But the will we are able to express, however much compromised, is present in our technologies. In this sense, technologies do "have" will, and the choices that have been made in negotiating an "in order to" with an obdurate world are made through a process of negotiating both the means and the likely ends with the world of non-humans.

So far in this series it has been argued that moral accountability is not in principle restricted to humans (Part Two), that non-humans do act in the world (Part Three), that they are not just tools or "dumb instruments (Part Four), and that they materialize will and forethought of consequences (Part Five). Next it will be argued that "dilution of responsibility" poses no barrier to the moral accountability of technologies.

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Reference

[1] M. Arnold and C. Pearce, "Is technology innocent? Holding technologies to moral account," *IEEE Technology and Society Mag*, vol. 27, pp. 44–50, 2008.