The fundamental skills approach to deskilling

One central aim of automation has been to develop machines that can perform task previously carried out by humans. While there seems to be nothing wrong with using a robot vacuum cleaner or a pocket calculator, there seems to be something wrong with relying on a large language model when choosing which candidate to date or when writing an academic essay for the first time. In this paper, we present a theory that explains where the difference lies – when we should avoid deskilling, that is, the loss of skills by outsourcing tasks to artificial intelligence. We draw from a concurrent discussion on the aims of education in philosophy of education arguing that deskilling should be avoided in what we call fundamental skills; those tasks, skills, and capacities that construct individual or collective human autonomy. In our view, they are (1) general capacities for making informed decisions over the course of a person's life, (2) skills and capacities for reaching and maintaining democratic decision making in human communities, and (3) skills and capacities that cannot be simulated by artificial intelligence in the first place – such as the capacity for moral cognition and the capacity for value-based decision making. We present four arguments for this view: an argument from unhealthy dependence, the case of an electromagnetic pulse, an argument from the human value of autonomy, and an argument from the right to open future. Then we answer three objections. The upshot of our approach is that it helps us identify choices in which people should refrain from consulting large language models and determine those educational settings in which the use of artificial intelligence should be discouraged.