

The fast pace of technological development suggests the imperative of instantiating conceptual governance models as technology is being developed not after the fact. These kinds of principles could help to proactively address governance, legal, and ethical concerns, and have as their aim social values such as justice, equity, and access. A contemporary area of interest and development is cognitive enhancement where innovations in the longer-term could include cognitive nanorobots. Cognitive nanorobots are the analog to medical nanorobots, nanorobots deployed to facilitate and improve the processes of cognition like perception and memory, a sort of neuroprosthetics.

As technology developments make mind and machine increasingly inseparable, a host of legal rights and policy issues present themselves in the area of cognitive enhancement. An ethics of perception in nanocognition contemplates the consequences of having brain-based nanorobots to aid with cognitive activities like perception, and explores what kinds of ethics modules, or moral principles, might be appropriate for guiding perception. These are previously unconsidered topics in governance, law, social science, philosophy, and nanotechnology because the idea of cognitive nanorobots has not yet been considered, nor that of an ethics of perception. This is partly because having only one unalterable means of perception has meant a failure to notice much less question the ethics of the existing perceptual paradigm.

The ethics of perception is concretized in machine ethics interfaces. A core upcoming realization could be the notion that ethics and perception become explicitly a matter of choice. An ethics interface is envisioned as a module with selectable parameters, a user interface, just like any other dropdown menu for technological feature selection. An ethics buffer or a perceptual interface could be selected in the same way that brightness, font, or other parameters are set now in our technology gadgetry.

An obvious issue that arises with ethics is the trade-off between individual freedom and group cohesion. In the futurist ethics of society, familiar Rawlsian group ethics models like personal freedoms that don't harm others, and 'doing unto others as we would ourselves' could evolve into more complex configurations that have to do with negotiation and disclosure, rights and responsibility, and access over ownership. Privacy is also a concept that needs to be re-thought. Machine ethics models could be included in automated and anonymous ways in cognitive nanorobots as they facilitate and mediate interactions with the outside world and sociality. Technology progresses and so do social and juridical models, therefore a futurist ethics should be one of immanence that takes into account possible progression in ethics paradigms moving from the limiting ethics 1.0 of judging behavior against principles to the ethics 2.0 of creating a life that is affirmatory and expansive, and perhaps eventually embraces access to objective reality as a basic right for all future persons.