Alterity Technologies: From Tools and Resources to Companions and Allies

1. Welcome in this video we shall be explore the evolution of alterity technologies where the interface between user and device becomes increasingly social.

2. As we have seen, post-phenomenology differentiates four classes of technologies:

    a. Embodied technologies, in which we relate to the world *through* the technology such that the technology itself withdraws from our awareness and we are focused on the world it extends our agency into (for example glasses or prosthetic limbs)

    b. Hermeneutical technologies in which we relate to the world by being informed about it through a screen or some other kind of readout. Here the technology does not withdraw from our awareness but is itself the immediate focus of our awareness. They are called hermeneutical technologies because we need to read or interpret the information on the screen or device to interact with the world. (for example, a thermometer or an oscilloscope)

    c. Alterity technologies in which we relate to the world by relating to the technology itself less as an object than as an other, a quasi-subject whose assistance we enlist to act in the world. (For example, "personal assistants" such as Siri or robots that are designed to interact with people)

    d. Background technologies that usually operate outside of our awareness but that enables and entangles our activities. Infrastructure networks, such as power grids or sewer systems are paradigmatic cases of this. Consider an electric light bulb in contrast to a lit candle. Our attention may be drawn to a candle's flickering flame, but we rarely look at a lit light bulb. Rather our attention is on what the bulb lights up.

3. In this lecture we shall focus on alterity technologies. In relating to a technology as if it were an "other," not simply a tool but a virtual companion, not a resource but an ally cooperating with us, alterity technologies further blur the boundaries between what is actual and what is virtual. Examples can extend from cases where we are conscious of anthropomorphizing our tools, such as getting mad at a printer as if it were deliberately intending to thwart us, to cases where the difference between human and machine begins to recede from awareness.

4. For example, ambient personal assistants are "awoken" or "summoned" with an opening salutation: "Hi Alexa!." Or "Hey Siri!" "Hello Google" We then ask questions which are processed as commands to be executed. Or we simply issue commands as one would to another person.

5. A tech reporter recently warned parents that if they want their children to say "please" and "thank you" they had better model that behavior in interacting with Alexa. Sure, even little children know Alexa is not a "real" person, but they also do not quite know that Alexa is not. Rather it (she?) occupies a liminal borderland between subject and object: a quasi-subject/quasi-object—Latour's very definition of an actant.

6. "Social robotics" is a new field where robotic AI's are designed with a social interface either to make the technology more user-friendly, or (1) precisely to teach its users social skills (2) such as to teach autistic (3) children to recognize (4) emotional facial (5)expressions.

7. Companionbots are social robots designed to provide virtual companionship. Mabu for example is a personal assistant that reminds elderly patients living alone to take their pills, asks them health questions to collect data and track symptoms and mood, (1) provides mental stimulation through random conversation. "Don't' be surprised if grow attached to Mabu" the promotional video adds. (2) To interact socially with a social robot is not to *project* subjectivity onto it, but to recognize the subjectivity *in* the programming. Its not to mistake or misuse the technology but to use it properly, as designed.

8. Indeed what is the difference between projecting anthropomorphic qualities onto a pet and (1) anthropomorphizing a companion-bot designed to simulate a pet, other than that the companion bot is programmed to perfectly obey and never complain or make a mess. The virtual pet is arguably designed to be even better than a real pet.

9. Or what is the difference between (1) hiring a prostitute to simulate loving affection and a purchasing a (2) smart sex doll designed to simulate loving devotion as well as physical sex? Indeed (3) pornography itself only really took off with the verisimilitude possible with photos and film. As virtual porn continues to improve, concerns arise that virtual sex may become not just indistinguishable from actual sex, but even better, without consequences the morning after--not human but transhuman sex, not real but hyperreal.

10. But is this not just pretending? An exercise in the willing suspension of disbelief? Treating a tool "as if" it were an other with intentions, even feelings? (1) But what ultimately does it mean to treat another being as a subject rather than an object? We can certainly choose to treat other human subjects as "mere" tools. (2) Aristotle defined a slave in just such terms, as a "living tool." (3) But in modernity to use another another as a mere tool is to "abuse" them. (3) In modern morality others deserve our respect.

   a. (4)But we *do* also talk about people "abusing" or "respecting" their tools. So (5) what does it mean to "respect" a tool? What are we criticizing when we fault someone for "abusing" their instruments?

11. Abusing a tool cannot just be a matter of using a tool for a purpose for which it was not designed. SCOT is based on the assumption that users create new uses for their devices all the time. (1) Exploring what a tool can do, playing with it to see how else it can be used beyond the intended use for which it was designed, is not necessarily to abuse it. (though manufacturers may want to claim that such unintended or even unforeseen novel uses voids the tool's warranty). What *does* constitute abuse is when a usage "breaks" the device. (2) That is, when a tool is used in such a way that it can no longer be used again in its originally intended way, or worse yet, that it can no longer be used again at all. In such a case I am treating a tool as if its present moment of use exhausts its usefulness. I use it in such a way that I do not care if it can ever be used again.

12. In this case one can say that I am not recognizing a tool's ongoing value beyond its current usefulness. One might say that I am not recognizing my tool's full value, treating the tool as having a value transcending its current use. By contrast, to "respect" a tool is (1) to "care" for it, that is to use it in a way that it is ready to be used again. Indeed caring for a tool extends to (2) investing in its ongoing maintenance. This is Ian Hodding's original point in arguing that a technology entangles as well as enables. A technology entangles its users in its ongoing maintenance and repair. To not maintain my car, for example to neglect to regularly change its oil, is to abuse my car. Thus the full cost of a car extends beyond its purchase price to the cost of its ongoing maintenance. By contrast to regularly wash my car, perhaps even occasionally polish it, is to "care" for it.

13. "Respect" (1) "abuse" (2) "care--" this is (3) the language of alterity, terms that literally apply to how we treat subjects. Indeed Kant grounds his entire ethical theory on a

categorical obligation to "respect" others. If obligations of respect extend to our technologies, are we not effectively engaged to some degree in an alterity relationship with them? Do we not treat our tools to some degree as virtual subjects? (4) This would fit with Latour's network theory. For Latour seeks to break down the modern dichotomy between free subjects and determined objects by treating all nodes in a network as actants, which he defines specifically as "quasi-subjects" as well as "quasi-objects". Caring for a tool as an actant in one's network would mean to accord it (5) value transcending its utility in the moment.

14. Returning to the four classes of technologies, one place the four on a continuum from (1) greater assimilation (2) and transparency to its user to (3) increasing otherness and (4) opacity from the user. (5) Embodied technologies are fully incorporated within the users' "body schema" and so can become transparent to consciousness. (6) Hermeneutical technology on the other hand extends beyond the user's body altogether so that the user can read it and gain new information. (7) With alterity technologies a user addresses a device whose response may not be fully predictable ahead of time. Finally (8) with background technologies, it is the technology that encompasses the user, usually outside of the user's own awareness. Posting on social media with my smart phone, for example, my wifi network operates to transmit my post unobtrusively, without my needing to attend to it at all..

15. As artificial intelligence continues to evolve, (1) and learning programs becomes increasingly opaque to their inventors, such that (2) users can no longer track, let alone predict, how a computer identifies patterns in big data or calculates its results, it becomes ever more "realistic" to (3) treat such smart devices as having "a mind of their own." That is, they are treated more as assistants or companions than "mere" objects. But, again, if (4) working with a technology as an assistant or a companion is the proper way to use it, the way it is designed to be used, (5) is it still useful to call such use "pretending" or dismiss such use as anthropomorphic projection rather than simply to recognize our employing another form of interface, a social interface.

16. Now what counts as subject rather than "object" for Kant's morality is autonomy-- self-determination. Only free rational subjects have moral standing. With Latour autonomy

and agency is distributed across a network of quasi-subject/quasi-object actants. Ought not moral standing also be so distributed?

17. Take for example an autonomous smart vehicle encountering a real life trolley problem: does it slam into a massive concrete block that has just fallen off the bed of the truck ahead risking the life of its passenger or does it swerve into oncoming traffic risking a head on collision with a van full of elderly passengers? Who or what is morally responsible for the consequences? (1) The trucker? (2) The construction people who loaded the block onto the truckbed and secured it? (3) The oncoming driver who does not react quick enough to avoid a collision? (4) The programmer of the smart car? (5) The regulatory agency whose rules permitted such an automated program for this kind of car? (6) The one with the least responsibility seems to be the passenger, whose driving has been offloaded onto the autonomous vehicle in the first place. And what if the car executes a suboptimal solution? (7) Does that make it a "bad" car? For Latour agency is to be attributed to the entire network. (8) But then so too moral responsibility is distributed, extending even to the car itself as one of the contributing actants.

18. Especially with smart alterity technologies, do we really want to say that how we use or treat them is not a moral question, other than how our use might affect us and other human beings? We may not be able to empathize with or imagine ourselves in the position of our tool to check whether we would agree to our being treated in the same way, but can there still be a morality of respect for tools that does not just reduce to a morality of utility for humans?

19. Now there is a growing movement to treat animals, even objects such as rivers and forests as having a value beyond their value for humanity. Utilitarianism extended Kant's moral concern beyond humanity to all sentient life. Any organism that can suffer should be a matter of moral concern. Should our circle of concern extend to caring for our technologies as well? They *are* our creations. Does that mean (1) we can do with them as we please? Or does (2) our being their creator give us a responsibility towards them?

20. Religion asks analogous questions about God. (1) As God's creation we have responsibilities to God. But as our creator, (2) does God have any responsibility towards us? Do we have any moral claim on God? Or to approach it from another angle: (3) does a being, simply as a being, have moral standing? Plotinus' ontology extended value down

through the entire hierarchy of being. (4) His metric for how **much** value or goodness to attribute to any given object was the degree of its participation in the other transcendentals: unity, intelligence, life, beauty, and existence itself. Tools exist. They may not be alive or sentient, but ought they not be respected and cared for just for that unity, intelligence, beauty and ongoing existence they do have. And what of artificial intelligence? Is it (5) merely metaphorical intelligence? If it is not a poetic metaphor but a form of intelligence, in its own right, ought it not, for this reason alone, be accorded inherent value in its own right?

21. And what when artificial intelligence transcends human intelligence altogether, not just in one given domain or other but in every domain of intelligence? This eventuality is what transhumanists look forward to as "the Singularity." Will the emergence of such a "superintelligence," usher in a final technological utopia? Or would transcending human intelligence mean that homo sapiens will now follow in the footsteps of its Neanderthal and homo erectus ancestors into extinction?

    a. (1) The answer to such a question will depend on the degree to which we can "trust" such superintelligence to recognize the ongoing value of us humans. If we want to "keep them friendly" we may need to model friendly behavior towards them. If we do not want to be eliminated as a sub-optimal means for the achievement of their goals, perhaps we ought to interact with them as more than simply means to ours. We may need to program not only computers with enhanced calculative intelligence and alterity technologies with enhanced social intelligence but as we draw near to superintelligence, we may want our smart technologies to evolve moral intelligence as well.

Mabu: https://www.youtube.com/watch?v=mj-3bot3D34

https://robots.ieee.org/robots/mabu/?gallery=video3