

copernican  
coining

arrive 1900  
on 13.04.2017  
43/11 sutherland crescent  
darling point

rainbow chungin chan \* eugene choi \* antoinette barbouttis \*  
axel powrie \* shota matsumura \* marcus whale \*  
hero images - byun lee w/ neil addison beedie \*  
a new performance by ivan cheng



**Kurzweil:** Well, if you talk to young people today, they're not working or planning to work in farms or factories. They are learning illustration with tools and creating apps for mobile devices and creating websites. And the reality is that the number of jobs is actually moving up, and there's also a lot of new types of economic activity that are not exactly jobs, where people make money with Airbnb or with selling things on eBay or doing work for websites and making money that doesn't register with the economic statistics, and still the statistics move in the right direction.

So the people didn't move from the farms to the factories. When the textile machines in 1800 in England which started the Industrial Revolution occurred, they started the Luddite movement because they felt their jobs would go away, which they did. Employment went up but not necessarily the same people. There were new industries created with whole different types of people and then education increased. That trend is continuing, even though we're now automating mental work.

**Bratton:** Look, I think the context in which these transformations we're talking about are happening are ones that in and of themselves AI can have an enormously positive role to play at an infrastructural level, not just the augmentation of an individual's intelligence, but the augmentation of systemic intelligence and the ability of infrastructural systems to automate what we call political decision or economic decision. And it's taking place in the context of an increasing accelerating, and what will clearly probably be an even more accelerating ecological precarity. The planetary substrate on top of which this emergent intelligence may in fact appear is one that's—its ongoing-ness is in particular question.

I happen to think that AI has a big role to play in understanding something like what forms of ecological governance may be necessary to sustain the kinds of systems that we want. I think what we saw yesterday was an example of the fact that AI and automation more generally—and I mean not just the automation of labor but the automation of the movement of matter through logistical systems, supply chain systems, and so forth has already destabilized to a certain extent the sense of what it means to be human in ways in which we need to think quite seriously about.

You know, the term anthropocene is one that we hear a lot, and it refers to this notion of a geologic era that is defined by the agency of humans, of a particular species. But it also can be understood—the anthropos of anthropocene can be understood as the agency of a notion of humanism, of the idea that the human experience of human experience is of paramount and central conceptual importance in how it is that we organize our industries and these systems as well. And I think it's something that humanity has a difficult time dealing with. But I think we need to be really—I really would want to see a shift in the discussion around AI precisely to the level of systemic intelligence that may allow for a kind of longer term durability in this way.

I happen to think AI will be what I call a Copernican trauma. Copernican traumas are these sort of moments in history where some sort of way in which we thought we were the central special case, species, whether it's the planet that was the center of the universe, or Darwinian biology was a Copernican trauma, neuroscience is a Copernican trauma of demystification of mind. Queer theory is a Copernican trauma. AI will prove to be a Copernican trauma.

We don't deal with Copernican traumas very well. There's enormous pushback. And I think the humanist pushback against AI, which will be—

**Kurzweil:** We survived them, though.

**Bratton:** We have, to date. I don't know whether this is a guarantee. I certainly hope that we do and we will. But you mentioned, quickly, just on the question of design—and it's true, my interest really around AI is what are the implications for design and design disciplines and design thinking in the ways in which we build intelligence into tools at a large scale shift what is designed and designated in this way. And I think it's an important conversation to have around the indirect effects of AI and automation. And driverless cars is an example. You know, if you go to an architecture school—and I have spent a lot of time in architecture schools—the way they deal with the question of driverless cars is not about how do we optimize the sensors on the cars or the decision making systems on the cars or the pathfinding algorithms on the cars. What are the implications for the rest of the city when you don't need to have 20% of your surface area of the urban core just paved asphalt for the storage of transportation units that you don't need to own anymore, or garages or the rest of this as well. Urban planners have been trying to get rid of parking lots as long as there's been parking lots because they're horrible. Turns out the way you do it is you put sensors and intelligence on the cars.

**Kurzweil:** There's some popular songs against parking lots.

**Bratton:** There's popular songs against parking lots, yes. And so I think there's ways in which we can think about this sort of systematically. And the other thing we don't talk about so much with driverless cars is how important they would be—coming from Los Angeles, where I spend a lot of time—is how important it would be to provide an access to the city for people for whom it's expensive. You live in certain parts of the city, you can make it to Santa Monica and still pick up your kids in the particular part of the day, but if you don't live near there, it's hopeless. And so one of the ways in which the automation of transportation will allow for an important kind of social shift is that it moves the responsibility for capital ownership from the individual user and putting it back into the system. Transportation becomes infrastructural, and it's the opposite of the cellphone that you talked about, where something that used to be essentially owned by the system then got pushed to the culture of the end user.

**Kurzweil:** It'll save two million lives a year, which will be useful.