**Friday Podcasts**

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**Episode Title:** “John Danaher on Our Coming Automated Utopia” **Podcast:** *Mindscape* **Date:** May 18, 2020

(See Outline of Episode below before taking notes.)

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| **Section 3:**  **Starts at:**  7:20/8:09-  [this section is about 9.5 min.] | **Notes**  The tasks humans used to do are now being done entirely by machines or are being helped by technology in some way.  Even if a task isn’t fully automated, it is automated in some way where that the human aspect of the task is limited.  Jon Danaher says society is heading towards “human obsolescence.”  Ex: there is a sharp decline in the number of human workers in agriculture since the 1800s/1900s.  The stereotypical image of a production line shows the encroachment of automation into previously human jobs.  Automation is used in many fields/professions, such as medicine, law, and science.  Automation has even reached the point where robots can run their own experiments.  We are seeing a rapid trend toward automation in many fields/professions.  Ex: The trading floor of the New York Stock Exchange has essentially disappeared (most trading activity is now digital, with most trades being done by algorithms).  Technology and regulation changes impact how different professions are run now then they were in the past.  In the past, whenever some jobs were lost to automation (such as agricultural or industrial jobs), other jobs were created in other fields. John Danaher is arguing that society is entering a point where more and more jobs will become automated and new jobs won’t be created, leading to a decline in the total number of jobs being done by humans.  John Danaher defines work as “The performance of skills in return for some kind of economic reward” (a condition under which humans perform tasks).  He defines a job as “a socially or economically defined role that is made up of a bunch of tasks, things that you do in which you receive some kind of economic reward in return for doing those tasks”.  What technology does is it changes the tasks that make up jobs and work.  Even if 40% of tasks are automated, there are other tasks that humans can do (most likely in areas where humans have a comparative advantage compared to machines).  Automation does not necessarily displace jobs (we can redefine our roles on work on different tasks).  Though technology has had a disruptive impact on a lot of jobs, it hasn’t led to wide-scale unemployment (people move in other kinds of jobs that have different tasks). This is why we haven’t seen a trend towards structural unemployment.  Economists refer to this the complementarity effect of technology.  Society usually focuses on the substitution effect of technology (where machines substitute human workers). | **2 Research Questions based on this section:**  If historically automation has created jobs in new fields, why is there now concern about a reduction in human jobs due to automation?  Are there industries that see more of the substitution effect of automation rather than its complementary effect or vice versa? |
| **Section 4:**  **Starts at:**  16:53/17:53-  [this section is about 10 min.] | **Notes**  Whether automation creates new jobs or reduces the need for human work depends to a large extent on how society responds to automation.  There are choices we make individually, societally, and institutionally that will impact whether we will always find new jobs.  John Danaher is skeptical about the potential for people to always find new complementary tasks to perform alongside automation to stave off mass unemployment.  When employers turn to robots or automation, it doesn’t increase the overall level of work or have a neutral effect on work. It tends to reduce the number of human workers needed.  Daron Acemoglu and Pascual Restrepo suggested that for every robot a company uses, it tends to displace between 3 to 6 human workers.  By using automation, companies tend to increase their productivity dramatically and reduce the number of human workers they employ.  This suggests that the use of automation leads to a net loss in terms of human employment.  John Danaher is arguing that we are at a point where it might be a good thing that jobs are going away, where we might be moving toward a future where we are not sad that there are fewer jobs for humans.  Acemoglu and Restrepo didn’t not find a net gain in jobs created in other industries due to automation.  Though there are jobs where it would be harder for automation to take over, we are starting to see just that.  Ex: fruit picking.  Even in jobs that are more human based (such as government), we may start seeing roots doing what humans currently do.  Hans Moravec formulated Moravec’s Paradox in the 1980s, where he argued that high-level cognitive jobs may be the easiest tasks to automate since they tend to be very easy to formulate into an algorithm. Physical/manual labor may be harder to automate since it relies on unpredictable/less easily controlled variables.  Most people nowadays would say that routine work is the easiest to automate and that non-routine tasks are more difficult to automate (though AI is getting better at automating these tasks).  Even if there are limits to the current systems of AI that we use, there is room for different uses of technology that we haven’t tried yet.  John Danaher finds it plausible that artistic jobs or entertainment industry jogs are probably not going to be subjected to wide-scale automation (though there are holographic pop stars).  He believes that even though technology could technically replicate art, there is something in art that we like the human origin and the human story behind it (which society values more than just the product). We care about the origin of artwork/music.  He believes that there are other kinds of jobs that might be more resilient to automation, though they are not safe either as they are usually jobs that few humans want to perform.  Ex: Care work for the elderly.  John Danaher argues that there are some industries where robots would clearly do a better job than humans (industries based on speed and precision).  Even if robots are not as good as humans in performing a task, there might not be a large supply of human labor willing to do those tasks. | **2 Research Questions based on this section:**  How does societies response to automation influence whether it creates new jobs or reduces the need for human work?  Why does society care about the “human value” in some industries more than others? For example, why does society consider art to be a human industry compared to automotives? |

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| **Section 5:**  **Starts at:**  26:29/28:03-  [this section is about 6 min.] | **Notes**  John Danaher’s desirability question: “Do we want for humans to keep working and remain competitive with machines or to find other jobs for them that complement machines?”  He believes that society probably shouldn’t want that. He has arguments for thinking that work is a bad thing and that it’s something that’s being made worse by technology.  He believes that work is a bad thing, and we should encourage automation because work tends to undermine the freedom of choice (it exerts a kind of dominating influence over our lives).  He believes that technology is making work worse for a lot of people, leading to the fissuring of the workplace, more outsourcing, more short-term contract work, and more precarious/gig work. There seems to be an increasing amount of technologically brokered marketplaces, such as Uber and Deliveroo.  There is a significant amount of inequality in work nowadays, both in terms of income disparity and in terms of the quality or meaningfulness of work.  The increase in income disparity seems to be correlated with increased automation in middle income and middle skill jobs in the US.  David Autor, an MIT-based economist, argues about the polarization effect on the labor market because of technology (people are pushed into either low skill, low-income work, or high skill, high income work).  Low skill, low-income work tends to be more difficult and require more physical work (which could lead to long-term effects in people).  John Danaher believes that work is increasingly colonizing our lives (work is more precarious due to technology). We are spending more time thinking about/caring about work and trying to make ourselves more skilled/employable.  There is some evidence that people tend to be dissatisfied with work (they don’t feel fully engaged by it). John Danaher believes that this is partly due to the highly competitive/precarious nature of the workplace (people think that they could be doing better, or they are worried about the security of their jobs). | **2 Research Questions based on this section:**  How does automation undermine the freedom of choice people have regarding their jobs/lives. How does it exert a dominating influence over people?  If automation has a complementary effect, why does it push people into either low or high income/skills jobs, making the workplace more precarious? |
| **Section 6:**  **Starts at:**  32:16/33:50-  [this section is about 9 min.]  **Ends at:**  41:26/43:03 | **Notes**  In the middle part of the 20th century, there was a trend towards very large corporate organizations.  Since the 1970s, there has been a shift from the notion of a big corporation hiring everyone to companies now focusing on their core competency and outsourcing other forms of work.  Ex: part-time contractors  This tends to be a better way of arranging a corporation from the perspective of shareholders and consumers (increases returns for shareholders and decreases costs for consumers)  Workers tend to get the worst deal due to this arrangement.  You normally wouldn’t outsource workers as you couldn’t easily monitor them. But increased surveillance has enabled grader consistency and enforcement of corporate standards (ex: monitoring truck drivers). This increase in surveillance has started to appear in other industries as well.  Having short-term contracts allow you to increase production on a tight or cut budget.  There is a change in how work is organized in our society that makes it less rewarding, less stable, and less psychologically helpful. This leads to a transition from a “everybody works” society to a “people don’t necessarily work” society.  John Danaher doesn’t not believe that work is intrinsically bad but that the conditions under which we perform work tend to be getting worse for most workers (though some people are gaining from the current system, most people are losing).  Counterargument: Work ethic is a good thing to have. People get a sense of identity/meaningfulness from their jobs. Thus, we need to reorganize the economy to make jobs more secure and rewarding.  There is a discussion that meaningful work is what we should care about, and that work is often an important part of someone’s identity and sense of meaning/purpose.  People get (besides money) a sense of mastery over some skills set, alliances and friendships with other people (a sense of community), an opportunity to contribute to society, and a sense of social recognition and status from work.  John Danaher questions if work is the only way in which we could get these benefits (he believes that there are other ways to get these non-income related goods of work).  He argues that hunter gatherers were the original leisure society because they spent very little time each day working (they spent a few hours collecting food and had the rest of their day for leisure). He believes that they seemed to derive a lot of meaning/satisfaction from that.  John Danaher argues that the level of attachment and nostalgia you have for work is most likely related to the kind of work that you do (if you have more autonomy over your work, you may feel that it is intrinsic to your identity. If you don’t have a lot of autonomy, you may get most of your satisfaction/sense of purpose from non-work-related activities). | **2 Research Questions based on this section:**  What are some other ways people can get the non-income related goods of work without working if society is moving in a direction where human work is decreasing/becoming obsolete.  How does automation make work in society less rewarding, less stable, and less psychologically helpful? What are the effects of this? |

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| **Take notes** | **Time** | **Topics** |
| N | 0- | Introduction to episode |
| N | 3:00- | Introduction to John Danaher and his argument |
| Y | 7:20/8:09- | How work has changed over the years due to automation  Defining “work” vs. “job”  Substitution effect and complimentary effect of technology |
| Y | 16:53/17:53- | When automation takes over tasks, will this create new tasks for humans or reduce the need for work?  Which jobs are easier and harder for automation to take over? |
| Y | 26:29/28:03- | How might we respond to automation taking over work?  Why is work a bad thing and why would ceding work to machines be a good thing? |
| Y | 32:16/33:50- | Nature of corporations today and how that has affected the nature of work  The value of meaningful work. |
| N | 41:26/43:03- | You can stop listening when Sean Carroll says, “…scenarios for how we could cope with this transition into a world where work was not taken for granted as something that everyone has to do, and you argue that this is a good thing.”  The transition away from jobs:   * The potential downsides of automation/technology, and * How to avoid those negative futures. They cyborg solution vs. the virtual solution |
| N | 55:05/56:40- | The transition away from jobs:   * The value of a “virtual” future * The socially constructed nature of our world and the role of “games” |
| N | 1:04:27/1:05:58- | Finding meaning in a life without jobs  (assuming people’s needs are satisfied without needing to work)   * A life organized around “games”; The risk of boredom; (In)equality in a virtual utopia; Universal Basic Income (UBI) |
| N | 1:19:13/1:20:44- | Conclusion:  Extending this question beyond work to personal and social lives. Final thoughts. |

Outline of Episode

What you need to listen to and take notes on:

1. Listen to the intro. 2) Take notes of the sections that run from about **7:20 – 43:03**. 3) After that, you can stop listening, or you can listen to as much more as you like.

NOTE: Because of ads, the times that sections start might vary. When listening on my computer I got one start time for each section; when listening on my phone I got a different start time. I’ve listed both. The sections will likely start at one of those two times, but it could also be slightly different for you.

Take a Position

* In this conversation, Carroll and Danaher are exploring what the future might look like if robots/computers/technology were able to perform all of our tasks so that we were essentially free to find other things to do with our time and our lives. Make an argument as to whether this would be a good thing or a bad thing. Would you welcome the freedom to do whatever you wanted with your time and life, or do you think this would be a bad situation for humans? Would it be a utopia or a dystopia? Your response must be at least 300 words.

I feel that the freedom to do whatever you wanted with your time and life would initially have a positive impact on society. The ability to have robots/software perform all our tasks would open the possibility for people to spend time doing other, more personal activities, such as spending time with friends and family, travelling, and exploring new hobbies, sports, and activities. This would allow people to gain an unprecedented number of experiences/moments that could really impact their lives. For example, the ability for someone to spend their time however they wish could allow them to gain satisfaction/fulfillment in a variety of ways while spending time doing things that they consider meaningful. Contrast this with today’s present situation where many people would consider themselves “trapped” in their work, unable to spend their time doing activities that they consider to be more fulfilling/satisfying to their being. There is a definite possibility of a work free society being a utopia of sorts. Over time however, familiarity and complacency may lead to a reduction in the perceived benefits of a work-free world. Given enough time, people may start to feel nostalgic about their old jobs. Even with the satisfaction and fulfillment they gain from doing other activities of their choosing, they may end up wanting to go back to work (at least for a little bit) as a break from the familiarity of their lives. You could compare this to how people nowadays may want to escape the familiarity of work and do other activities of their choosing. I feel that this feeling of nostalgia could be individually based, with some people feeling a stronger urge to break the complacency of their lives by going to work than others. Overall, I feel that if society was free to find other things to do with their time/lives, it would overall lead to a sense of freedom that people currently do not have with their work, enabling them to find other ways of achieving satisfaction/fulfillment. Over time however, this feeling of freedom could relapse into a sense of being “trapped”, leading to some people wishing to return to work (if only for a little bit).