

# WORK AND AUTOMATION

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ME!

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THE  
WORKPLACE  
OF THE  
FUTURE



# THE END OF WORK?

....the potential for simultaneous and rapid disruption, coupled with the breadth of human functions that AI might replicate, may have profound implications for labour markets. We conclude that economists should seriously consider the possibility that millions of people may be at risk of unemployment, should these technologies be widely adopted.

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## Should economists be more concerned about Artificial Intelligence?

*Mauricio Armellini and Tim Pike.*

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FETCH



## DESCRIPTIVE QUESTIONS

- What will jobs be like in the future?
- Will advances in robotics lead to more or less job creation?

## NORMATIVE QUESTIONS

- Why is work good for people?
- What should governments and the private sector do in response to widespread job loss?

## BIG QUESTIONS FOR TODAY

- How can we change work to make it an activity where people can realize important values?
- Are employers required to do so?

## LEARNING GOALS FOR TODAY

- Articulate the values of work and connect them with technological interventions.
- Learn the basics of a philosophical framework for thinking about obligations and rights around work.

# SECTION I: ROBOTICS AND WORK IN THE UNITED STATES



# WORK

There are  
many  
dangerous  
and/or  
deadening jobs.



### Chart 3. Civilian occupations with high fatal work injury rates, 2017



From a 2018 National Bureau of Labor Statistics Report: <https://www.bls.gov/news.release/pdf/cfoi.pdf>



## DISRUPTIVE ROBOTICS

Robotics is rapidly changing the nature of work in agriculture, manufacturing, etc.

SPYCE

<https://www.spyce.com/>

HOW??

Using the example of Spyce:

- Given the current state of robotics, what jobs can be automated away?
- What skills do those jobs require?

## TYPES OF TASKS THAT ARE HARD TO AUTOMATE AWAY

Those requiring:

- social intelligence
- cognitive intelligence
- perception
- manipulation

## AUTOMATION IN THE NEAR TERM

A 2017 OECD report states that 32% of jobs have a 50-70% risk of automation significantly changing the way they are carried out, within significant cross-country variation.

<http://dx.doi.org/10.1787/2e2f4eea-en>



ON TO THE  
NORMATIVE!

That was some background  
about how work *is*  
changing. But how *should* it?

## THE BIG QUESTIONS, REPEATED

To answer that, we need to answer at least the following two questions:

- Why is work valuable for people?
- Are employers obligated to provide people with opportunities for meaningful work?

## SECTION 2: THE VALUE OF WORK



## PURPOSE AND WORK

“Today I want to talk about three ways to create a world where everyone has a sense of purpose: by taking on big meaningful projects together, by redefining equality so everyone has the freedom to pursue purpose, and by building community across the world.” (Mark Zuckerberg, Harvard commencement speech)

WHAT SHOULD WORKPLACES BE LIKE?

Why is work good or bad for people?

## WHY THIS QUESTION IS IMPORTANT

- Most people have to spend a significant portion of their lives engaged in paid work.
- Public institutions regulate the benefits and burdens from paid work.

## BADS OF WORK

- Health risks
- Lack of discretionary time and time flexibility
- Oppressive hierarchies in the workplace
- Inadequate pay and lack of benefits
- Deadening

## DEADENING JOBS

Because some jobs are extremely dull and repetitive, they exhibit a:

- Lack of opportunity to develop any skills.
- Social isolation.

## GOODS OF WORK

- Income
- Attaining various types of excellence
- Making a social contribution
- Experiencing community
- Realizing one's many sided potential

## EXCELLENCE

- Includes the development of one's skills and the accomplishments that result.
  - Example: Making a beautiful table.
- Because acquiring excellence takes a good deal of time, work is the primary domain where most people can acquire it.

## SOCIAL CONTRIBUTION

- People want to make people's lives better through their work.
- Problem: many socially necessary jobs are not well paid (or paid at all) nor well regarded.



## COMMUNITY

- People want to do things with people “with whom they stand in relatively free and equal relationships.”
- Working together involves collective agency.

## REALIZING ONE'S MANY SIDED POTENTIAL

“In communist society, where nobody has one exclusive sphere of activity but each can become accomplished in any branch he wishes, society regulates the general production and thus makes it possible for me to do one thing today and another tomorrow, to hunt in the morning, fish in the afternoon, rear cattle in the evening, criticise after dinner, just as I have a mind, without ever becoming hunter, fisherman, herdsman or critic.” (Marx, *The Communist Manifesto*)

## 2.1: ACTIVITY

## CHANGING WORK

How can we change work in order to promote the values we discussed?

# SPYCE

241 WASHINGTON ST — BOSTON, MA



## CASE STUDY: SPYCE

## SECTION 3: WHAT TO DO?

## WHAT TO DO?

- Are employers obligated to offer work that meets some minimum value threshold?
- What do employees have a right to?

## THEORY OF JUSTICE

Theories of justice give the principles that determine individual obligations and rights.



## ONE FRAMEWORK

We will examine two frameworks for answering this question: Nozick's libertarianism, and Rawls' political liberalism.

## 3.1: NOZICK'S LIBERTARIANISM

## MOTIVATING IDEA

- Individuals have **natural rights** to enter contracts.
- Natural rights = rights that individuals have apart from any institutional framework.
- To have a right means that there are certain things that no one can do to you.

## NATURAL RIGHTS AND JUSTICES

- Procedures are just when they do not interfere with anyone's rights.
- Outcomes are just when they issue from just procedures.

## PARADIGM JUST AND UNJUST PROCEDURES

- Paradigm just procedure: Individuals freely contract with each other in the transfer of property.
- Paradigm unjust procedure: The state taxes someone's justly acquired income without their consent.

## NOZICK AND SPYCE

Would Nozick say that the differences in the value of work at Spyce for different types of employees are just?

## 3.2: RAWLS' LIBERALISM

# JUSTICE

- Different theories of justice are theories of what good societal institutions are like.
- They provide principles that help to answer questions about what people are obligated to do or are owed.



## WHAT TO DO?

A theory of justice helps to answer our two questions:

- Are employers obligated to offer work that meets some minimum value threshold?
- What do employees have a right to?

## RAWLS

To answer these questions, we will look at Rawls' theory of justice, especially:

- What social goods people are owed,
- and by what principle those should be distributed.

# RAWLS' PICTURE OF SOCIETY

## LIBERAL PICTURE OF SOCIETY

To understand Rawls' view of social goods and his principle of justice, it will help to first understand his picture of what society is like, such that it gives rise to social goods and the need for principles of justice.

## LIBERAL PICTURE OF SOCIETY

Society is a “cooperative endeavor for mutual advantage.”

(Rawls, *A Theory of Justice*)

## COOPERATIVE ENDEAVOR

- We need to work together to produce material goods, infrastructure, etc.
- An idea of social life based on *reciprocity* and an identity of interests.

## BENEFITS AND BURDENS

In order to satisfy their collective interests, society produces stuff (benefits) by the collective action of people with different responsibilities and tasks (burdens).

## CONFLICT OF INTERESTS

- However, people have their own (rational) life plans!
- i.e., citizens are not indifferent to how the benefits and burdens of social cooperation are distributed.



## HOW CAN WE RESOLVE THIS CONFLICT?

A set of principles that we all agree upon for the *fair* division of these burdens and benefits, so that we as a society produce enough stuff, and people all have the means to pursue their individual life plans.

SOCIAL GOODS

## WHAT ARE “SOCIAL GOODS”?

The things that are constitutive of or important means to pursue one's life plan.

- Money.
- Living among people who share your values.
- Freedom of occupation.

## BRAINSTORM

What are some other examples?

# PRINCIPLE OF JUSTICE

## PRINCIPLES OF JUSTICE

The principles that govern the distribution of the benefits and burdens of social cooperation, respecting all individuals as free and equal.

## RAWLS' PRINCIPLE

All basic social goods should be distributed equally, unless an unequal distribution will help those who are worst off.

# RAWLS AND ROBOTS



## THE LABOR MARKET

The labor market distributes certain benefits (income) and burdens (providing socially necessary services). How should those be distributed?

## FAILURE OF JUSTICE

An economic system or job is unjust if it prevents people from obtaining the social goods they are owed.

ACTIVITY

A LABOR MARKET FULL OF SPYCE

See your handout!

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