

# The new techno-economic paradigm, labour processes and the organization of labour

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## A Blade Runner scenario?

- A blossoming debate on the effects of robotization upon both employment and inequality is now spurring among scholars in the economic discipline.
- Should we expect an age of medieval techno-feudalism governed by a plutocracy which owns machines and robots, which will enjoy high standard of living, together with the most part of the population deprived of the benefits of technology?

## Matching or mismatching between three subsystems

- 1 The system of technologies
- 2 The economic machine
- 3 The system of social relations and institutions

## The consistency conditions among:

- 1 The nature of the fundamental technological paradigms
- 2 The modes of production and labour processes associated with them
- 3 The patterns of interaction between the major social groups
- 4 The baskets of consumption, which are a function of income levels, income distribution, and given the latter, of the ways societies organize the use of non-working time, the provision of services, etc.

## The main question

### The emergence of a new techno-economic paradigm?

The massive introduction of robotized work certainly characterizes the industrial sectors, with robotic arms able to substitute for repetitive and routinized activities.

But, artificial intelligence, algorithms and software developments become increasingly relevant also in the service sectors, which nowadays employs the largest labour share.

As a direct consequence, robotization and AI do not represent a threat only for blue-collars workers, but for the white-collars as well.

## Coexistence of Old Taylorism and Digital Taylorism but without Fordism!

Two archetypes of labour relations:

- Old Taylorism: clear control and subordinate working activity, vertical industrial relation
- Digital Taylorism: soft-power, fictitious independence, myth of creativity and self-organization

## Old Taylorism in the ICT era

The Foxconn archetype: Source: Pun Ngai, “Nella fabbrica globale”, 2015  
Among the biggest worldwide employers and the first Chinese exporter.

- Massive migration from agricultural areas of young workers (born after 1980s)
- Factory-cum-dormitory: *Dormitory Labour Regime*
- Every factory building and dormitory has security checkpoints with guards standing by 24 hours a day
- All employees, whether they are going to the toilet or going to eat, must be checked
- Physical and verbal violence is systemic in Foxconn system. Workers are harassed and beaten up without serious cause

## Old Taylorism

### The iPad case

#### The global value chain

- International brand-name corporations (Apple) who squeeze their suppliers
  - To secure contracts, Foxconn minimizes costs, and transfers the pressure of low profit margins to frontline workers.
  - Average wage quite close to the province minimum wage
  - Massive reliance upon overtime hours
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- price of the iPad : \$ – 499
  - manufacturing costs: 9\$ equivalent to 1.8%  $\Rightarrow$  *Foxconn*
  - costs of components: 250\$ equivalent to 50%

Source: Pun Ngai, “Nella fabbrica globale”, 2015



## More on workers conditions

In 2010, 18 workers committed a suicide

[A worker blog \(after the 12 suicide at Foxconn\)](#)

To die is the only way to testify that we ever lived.

Perhaps for the Foxconn employees and employees like us – we who are called nongmingong, rural migrant workers, in China – the use of death is simply to testify that we were ever alive at all, and that while we lived, we had only despair. Source: Pun Ngai, “Nella fabbrica globale”, 2015

## Digital Taylorism - The Uber-Foodora-Deliveroo archetype

- Based on cheap, generally educated workers
- Without a workplace
- Being “your own boss”
- Transfer of the entrepreneurial risk from firms to workers
- Managed not by people but by an algorithm that communicates with workers via smartphones
- Disappearance of both collective and even individual labour contracts

## When your boss is an algorithm? Source FT

### How the App changes the salary - UberEats

- Started paying £20 an hour
- Then it moved to £3.30 a delivery plus £1 a mile, minus a 25 per cent “Uber service fee”, plus a £5 “trip reward”
- Then the “trip reward” had been cut to £4 for weekday lunch and weekend dinner times, and to £3 for weekday dinner and weekend lunch times.

## When your boss is an algorithm? Source FT

### Algorithmic management - Control

How to instruct, track and evaluate a crowd of casual workers you do not employ, so they deliver a responsive, seamless, standardised service.

- monitoring of the workers
- sending productivity evaluation messages (time to accept orders, time to deliver, travel time to restaurant, travel to customers, late orders)
- but... drivers can't be deemed employees because they have no obligation at all to log on to the app (Uber).

## The challenges for labour organizations

- The treat of mass robotization and AI to both Uber and Foxconn workers
- Massive increase in labour shedding in both manufacturing and for the first time in services

## The challenges for labour organizations

- Which union organization for digital taylorised workers?
- Rethinking the IWW experience of migrant unionism?
- Bargaining and resistance over the web