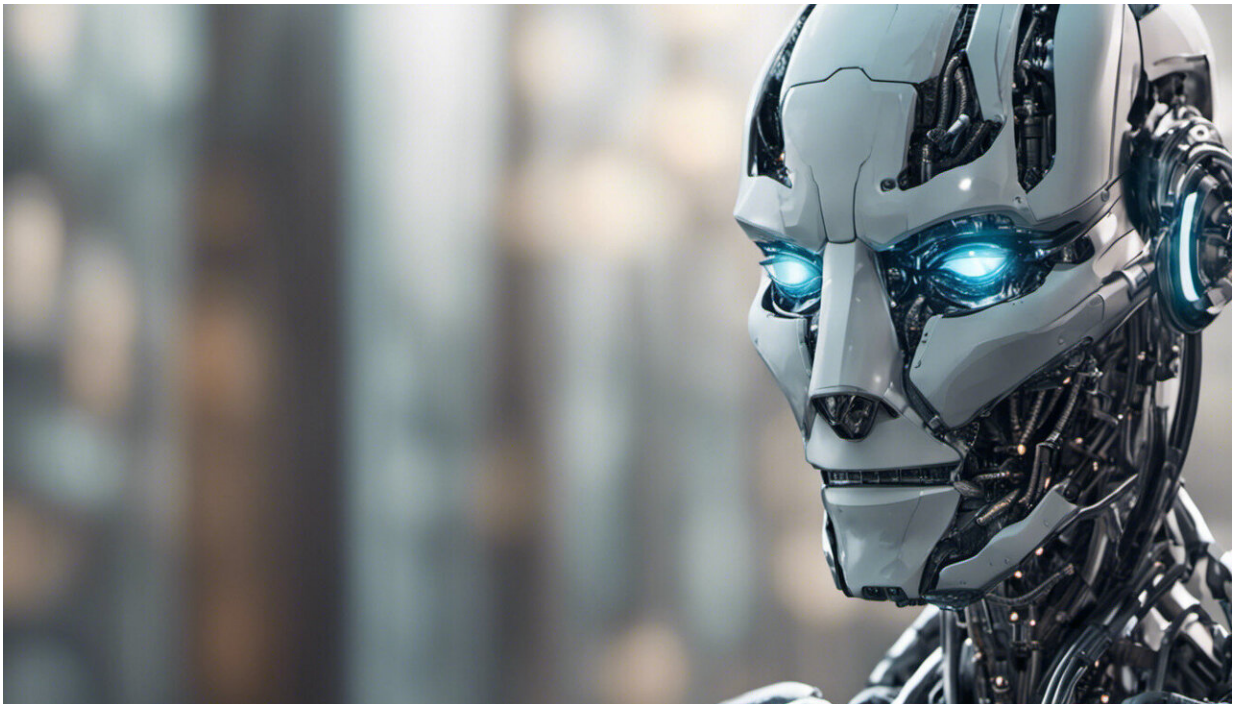


# Are we ready for Robotopia, when robots replace the human workforce?

September 1 2016, by Sean Welsh

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Credit: AI-generated image ([disclaimer](#))

Automation has disrupted work for centuries. Two hundred years ago in Britain, the [Luddites](#) rose in rebellion, smashing the machines that made their weaving skills obsolete.

Today it's high status cognitive jobs that are under threat. Earlier this

year [ROSS](#), a legal version of IBM's [Watson](#), was launched and hailed as the [first artificially intelligent lawyer](#). Future iterations may put lawyers out of work.

An artificial intelligence (AI) [outperformed an air force colonel](#) in a combat simulation, and a robot [outperformed human surgeons](#) in stitching up a pig.

Manual jobs continue to disappear. Truckers, bus drivers and [taxi drivers](#) are threatened by [self-driving vehicles](#). The [Baxter](#) robot threatens warehouse and labouring jobs while [Hadrian X](#) threatens bricklaying.

Payback time on robots is shorter than ever, with 47% of US jobs, 69% of Indian jobs and 77% of Chinese jobs [vulnerable to automation](#).

Historically, capitalism has succeeded in generating new jobs to replace the old but past performance is not necessarily a guide to future performance.

While some argue new jobs will be created to replace the jobs lost to automata, many fear economies will be disrupted as never before. Sober professors of computer science and [business analysts](#) now routinely predict massive job losses.

If we grant, for the sake of argument, the premise that massive technological unemployment is plausible, how will society cope?

## **The future is workless**

In his newly released book, [Why the Future is Workless](#), author Tim Dunlop accepts the demise of jobs as inevitable. Thus, he says, we must rethink our [jobs](#)-based economy.

Not only that, we have to rethink job-centric human values. Currently our purpose and status in society derive mostly from our paid work. In a world where robots work better, how will humans cope?

It is easy to imagine a dystopian future of increasing wealth inequality, where those with robots live in gated communities and those without live in low-tech badlands. A revolt of colonels leading bot-breaking bricklayers is not unimaginable.

How will society migrate from an economy based on human labour to one based on robot labour, without riots and revolts?

## **Money for nothing**

Dunlop, like many from the [left](#), the [right](#) and the [tech elite](#), thinks a universal basic income (UBI) policy is required to handle the transition.

UBI is a no-strings-attached, non-means-tested social dividend. All citizens get one to compensate for being shut out of the means of privatised production.

The political philosopher and writer [Thomas Paine](#) defended UBI as a [moral quid pro quo](#) for private property.

Table 3: Estimates of expenses by function

	Estimates			Projections	
	2015-16 \$m	2016-17 \$m	2017-18 \$m	2018-19 \$m	2019-20 \$m
General public services	23,967	22,659	21,790	22,345	23,537
Defence	25,986	27,155	27,937	29,384	31,525
Public order and safety	4,958	4,915	4,766	4,719	4,675
Education	32,515	33,669	33,815	34,494	35,804
Health	69,172	71,413	73,425	76,239	79,260
Social security and welfare	152,838	<u>158,612</u>	166,518	184,260	191,828
Housing and community amenities	4,865	5,282	5,051	4,455	4,412
Recreation and culture	3,512	3,401	3,337	3,249	3,301
Fuel and energy	6,528	6,687	6,782	7,028	7,301
Agriculture, forestry and fishing	2,768	3,122	3,084	2,626	2,269
Mining, manufacturing and construction	3,650	3,545	3,792	3,999	4,277
Transport and communication	8,647	11,131	10,606	6,599	5,400
Other economic affairs	9,626	9,832	8,620	8,600	8,531
Other purposes	82,437	89,129	95,291	101,326	109,483
<b>Total expenses</b>	<b>431,470</b>	<b>450,553</b>	<b>464,812</b>	<b>489,324</b>	<b>511,604</b>

Australian Budget Expenses. Credit: Australian Treasury

In the state of nature, humans can forage for their food from the Earth. In a privatised world this natural right is thwarted thus an inalienable rent is due by property owners to society sufficient to cover people's basic needs.

UBI could be funded by a land or property tax, a sovereign wealth fund, a tax on automata or a mix of measures. Such fiscal revolution would be a steep political challenge.

No major party supported UBI in this June's referendum in Switzerland. Even so, the Yes vote got [23% support](#). [Supporting No](#), the Swiss government pointed to the moral hazard of making work optional. They also pointed to cost.

Paying UBI at [Australia's Newstart Allowance levels](#) (about A\$13,000 p.a.) to all [24 million](#) Australians with no age conditions would cost A\$312 billion. Current Federal [tax receipts](#) are A\$383 billion of which A\$158 billion is spent on [social security and welfare](#).

Even assuming UBI replaces all other welfare and social security payments, it requires doubling the social security budget. Eliminating the [administrative overhead](#) of means-testing by cutting the 30,000 staff and related expenses in Human and Social Services could only save A\$5 billion.

Making UBI less universal by restricting it to [Australians of working age](#) would save A\$106 billion, bringing the cost of UBI down to \$A206 billion: still a huge challenge in a climate of "budget repair".

## **More research is needed**

While fiscally daunting, UBI could have positive effects. UBI might encourage more innovation and entrepreneurial activity from people freed from wage dependence. It could reduce stress and improve mental health.

If everyone got UBI it would be free of the stigma of the dole. UBI would recognise the value of unpaid work such as volunteering and stay at home parenting.

Some say UBI would be a "bad utopia" preserving capitalism but it might actualise Marx's [1845 vision](#) of a society where one might "hunt in the morning, fish in the afternoon, rear cattle in the evening, criticise after dinner" as one liked. People could live much like slaveholders of the antebellum South but with robots instead of enslaved humans doing the work.

Certainly, we need to continue the conversation about the threats and opportunities of mass technological unemployment and do more research into UBI. If Robotopia is likely, how we will live our lives and find meaning in a workless world?

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