

THE SOCIAL SCIENCE PERSPECTIVE

Volume 1, Issue 1, 2021

# What the Reader Thinks - Hegemony of the Fourth Industrial Revolution

**Beware of the Bot: A Critical Perspective on the 4th Industrial  
Revolution Centre for Integrated Post-School Education**

**Nelson Mandela  
University Port  
Elizabeth 2020**

The Fourth Industrial Revolution (4IR) is gaining national and global attention as the 'new phase' of development that will address a wide range of social and economic issues in societies. Like its predecessors, the 4IR is portrayed as the new era that offers opportunities to improve human lives, lead the world out of crises and toward a better future for humankind. The 4IR is associated with disruptive technologies including robotics, the internet, nanotechnologies, genomics, artificial intelligence, virtual reality and many other technologies. Collectively, these technologies will combine as a transformative force that addresses a wide range of socio-economic problems. This is the thundering and dominant message about the 4IR that is echoed by those with power, global economic institutions, as well as the political leadership.

The ideological dominance of the 4IR is evident. We know very well that when a particular model of social policy becomes hegemonic, it tends to negate any rival alternative that might imply a threat to its conceptual dominance. In the case of the 4IR, its implementation implies a particular vision of the world which rules out differing, viable and efficient alternatives. At present, the 4IR is presented as the new development that operates like a force of Nature. We cannot argue with it any more than we can argue with the inexorable laws of gravity. We are made to believe that we must accept it and adapt to it.

***4IR is portrayed as the new era that offers opportunities to improve human lives***

The hegemony of the 4IR is also beginning to shape new educational frameworks from schooling through vocational training to higher education. In the case of schooling, large

scale interventions are already underway to alter the curricula in ways that respond to the needs of the 4IR. Children in kindergarten and primary schools in the West are already users of a variety of robots including pet, humanoid and social robots, whilst older children are encouraged to learn coding as part of new Science, Technology, Engineering, and

Mathematics (STEM) curricula.

The new terminology in education associated with the 4IR now includes 'Learning Management Systems' (LMS); 'Technology Enhanced Learning' (TEL); 'Intelligent Learning Environments' (ILE); 'Tactical Training Systems' (TTS); 'Intelligent Tutoring Systems' (ITS); and the more well-known Massive Open Online Courses (MOOCs) and Small Private Open Courses (SPOCs). These concepts are also strongly associated with educational reforms geared towards job-preparation, upskilling and reskilling of workers for Working World 4.0. This 4IR-driven skills formation is described as essential to redirect 65 per cent of our children into the 4IR.

Many activists, scholars and critics have raised critical questions about the promises of the 4IR. Is the 4IR simply the next phase of capitalist production or an epochal shift? Can it address the triadic problems of inequality, unemployment and poverty? How can it deal with the issues of race, class and gender? How will it address Climate Change and the ecological crisis? These are some of the key questions raised. According to Ivor Baatjes, Director, Centre for Integrated Post-School Education and Training, Nelson Mandela University, this booklet has been written to encourage debate amongst students and communities and to inspire much greater public debate about the 4IR, its meaning and value in contributing to a better society.

The booklet is divided into three parts. Part One is about the Fourth Industrial Revolution (4IR); Part Two is about workers and precarious work; and Part Three is about technology and its purpose/s.

Part One, Section A looks at the 4IR and all it entails. According to Klaus Schwab, Founder and Executive Chairperson of the World Economic Forum, it is the fusing of boundaries between the physical, digital and biological worlds which is changing the way people live, work and relate to one another. The dominant discourse view is critiqued and the reader challenged to think critically about the 4IR. Section B describes the four Industrial Revolutions and asks whether this 'revolution' will continue to serve the interests of those who hold political and economic power (as the first three 'revolutions' did) or whether the technologies will instead serve a socially-useful purpose in the interests of the 'social majority'. Section C continues with a critique of the 4IR.

Part Two is made up of stories as told by three workers. The role of precarious workers and their future in an increasing digital age are dealt with in Sections A and B of Part Two.

Part Three looks at technology, including socially-useful technology. Who owns and controls it and for what purpose/s, and how is it being used and why?

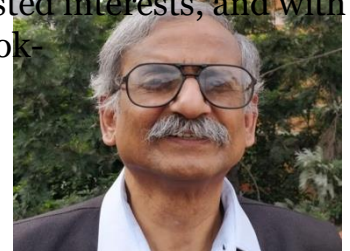
This booklet, written during the COVID-19 pandemic, has fast-tracked a so-called 'new' world. The booklet examines whether the pandemic has been a convenient excuse for capitalists to do just what they always intended - shift us to an online, remote, touchless, 'Zoom' society. And while so doing, continuing to have little to no regard for the majority of people who remain 'on the margins', despite which 'Industrial Revolution' we find ourselves in.

The booklet also serves as a warning to not uncritically embrace the 4IR, as if not embracing it will render us 'backward'. The 4IR should be examined, scrutinised and analysed with as much scepticism as one should apply to terms like 'development', 'progress' and 'modernization', all of which proved to be Trojan Horses, with vested interests, and with neither social nor ecological conscience. A thought-provoking booklet, indeed.

***Prof. D. Jeevan Kumar***

***Hon. Professor,***

***Karnataka State Rural Development and Panchayati Raj  
University, Gadag Karnataka.***



*(This book review was first published in the Southern Economist, Vol. 59, No.20, 15th February 2021)*

