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Is the Fourth Industrial Revolution any Revolution for us?

The Fourth Industrial Revolution (Fourth IR) is a term coined by the World Economic Forum (WEF). According to the World Economic Forum, "The Fourth Industrial Revolution can be described as the advent of "cyberphysical systems" involving entirely new capabilities for people and machines. While these capabilities are reliant on the technologies and infrastructure of the Third Industrial Revolution, the Fourth Industrial Revolution represents entirely new ways in which technology becomes embedded within societies and even our human bodies. Examples include genome editing, new forms of machine intelligence, breakthrough materials and approaches to governance that rely on cryptographic methods such as the blockchain". Prime Minister Narendra Modi went on record to stress on this Revolution in his address to the BRICS nations at Johannesburg at the recently concluded BRICS Summit.

We need to be aware that technology cannot be divorced from its location in society. What about the socio-economic political structural base in which this Fourth IR is located? We are painfully aware that the powers-that-be reconfigure themselves. This has been the history as the world transitioned from the First to the Second to the Third Industrial Revolution. We have also seen how here in Goa in our own land, feudalism has gone hand in hand with capitalism where big landowners have collaborated with global capital to oust people, from the lands that they have occupied for generations, the Tiracol Golf Resort Project being a stark example. The First Industrial Revolution may have freed people to a certain extent from the yoke of landlords, but only to be trapped in the yoke of a business bourgeoisie. There was still big power dominating and exercising power *over*, exploiting workers, making them work over-long hours for measly wages. This is again

what happened with the Second and the Third Industrial Revolution, where people have been trapped in the type to of multipation and any becomes whos? are controlling the means of production albeit in different ways.

While those singing hosannas to the Fourth IR drool about robotic process automation, artificial intelligence, nanotechnology, big data analytics, virtual reality, internet of things, they fail to interrogate how these technologies are shaped, who controls these technologies, and at whose cost. Because we think internet is so accessible, we miss the point that there are cyberlords (be they software owners or hardware owners controlling the cyber spaces), which is why the stealing of data by the service engine providers, and social media providers, is such an issue.

Will robotics ever be harnessed to enable free/reasonably priced, adequate accessible public transport? Or will we only have loss of jobs and loss of land utility due to robotic automation? Is artificial intelligence through the biometric information-based Aadhaar card or electronic voting machines not just another stone in the obstacle race for the ordinary citizen? Can artificial intelligence in agriculture at all be for the good of divyangs (specially abled persons), underprivileged citizens and farmers, as the Prime Minister Modi said he aspires it to be in his monthly address Man Ki Baat?

Who are the people who control the BJP's Atal Innovation Mission's Atal Tinkering Labs, Atal Incubation Centers, Scale-up support to Established Incubators, several programmes and associations with industry leaders such as SAP and Google? The Prime Minister has himself in his speech in January 2018, at the World Economic Forum, acknowledged that "data is a real wealth and it is being said that whoever acquires and controls the data will have hegemony in the future".

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That is precisely it. Hegemony is about dominance by one state or social group over others. If that be so, then the Fourth Industrial Revolution should be shorn of its title as a revolution. It is not. It continues the hegemonic model of development. Once a hegemonic model of development is accepted, it is a slippery slope to hegemony at all levels, between countries, between peoples, between men and women, on the basis of caste, class, gender, different ability, age, sexual orientation.

So we are not against agriculture, or industry, or digital technology, or mobiles. The million dollar/yuan question is: who is harnessing that technology, to what ends, for whom, how and at whose cost?

One may as well raise the same questions that the Prime Minister raised in his Mann Ki Baat address in February 2018, "Can we make better predictions of natural disasters using AI? Can we use it to provide assistance to farmers on crop yield? Can AI be used as tool to simplify the outreach of health services and modernise medical treatment?" But a Prime Minister cannot stop at raising questions; he has to move towards getting the answers for them. And the answer to his questions will be an emphatic no, if we look at how the artificial intelligence is structured and how the real estate lobby is effectively destroying agricultural land. In fact, one needs to counterpose the questions the Prime Minister has not raised: Can we easily continue to profile communities that we consider inferior to us, and dub them as criminals, terrorists, so that every time there is a crime, we just have to pick out one person from this predetermined data base, as is being done, with the data base of poor working class migrants in Goa, for instance, whenever any theft takes place? Can we easily continue to indulge in racist profiling that builds on indicators of merit that are in themselves flawed?

Yes, of course, because the artificial intelligence and new technologies are at the disposal and under the control of the dominant wowers any Revolution for us?

In recent times we have heard of how big data analytics were used by the FBI, the Department of Homeland Security, and the US Oregon Justice Department USOJD, to conduct a digital surveillance of Black people. For instance, the USOJD are reported to have profiled people solely on the base of their use of the hash tag #BlackLivesMatter on the premise that this movement was a potential threat to police. This is where big data analytics has the potential for racist outcomes.

Such uses of technology can by no means be said to be part of a revolution. They are actually the reverse.

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