

The technological life cycle

Life



Today we swim in a sea of ever-changing technology that affects us as much as our thoughts and actions shape it. The technology we have chosen, either by the preferences of those who use it, or the agendas of those who own and benefit from it, has had its own influence on us from gross examples such as increased pollution, or a higher Western-style standard of living, to the way one person perceives another.

Some people who resist using some, or even all technology; they are often called Luddites by those who embrace all things new; another type calls themselves Neo-Luddites, such as Kirkpatrick Sale. In his book *Human scale*, Sale describes the slow rotting of the stones of the Parthenon and other ancient monuments to civilization from the acid pollution developed by our present Industrial civilization and compares it to the slow disintegration our industrialized society has seemed to have undergone.

He identifies effects of technology which have been harmful to the human condition and the environment, but seems to not quite "get it" about the Luddites: they were not fighting the machines themselves; they were struggling against powers of society that, for the past century, through enclosure and the abolishment of commonality [and the subsequent arisal of a class of people who lived by renting their labor: the working class] (Laslett, 195), had been seeking to disempower and disenfranchise the mass of people, and were now striking anew with the latest, and most powerful manifestation of their social policies, the Industrial Factory.

The men of Nottinghamshire who died as Luddites were fighting a system, not a technology, a system whose intentions were not to cut costs and

increase efficiency, but to increase the control of management (i. e. the control of the owners of capital) over labor. Technological developments are made by, and in the best interests of those who own those who own and benefit from technical innovations (Law, 195).

The history of Industrial factory technology begins to appear as a collective fetish of the ruling classes for instruments of control. In American Industrial development, the direction of technological development since the Civil War has been driven by the largest customer of that Industry, the Military (Noble, 334), and the society that works in and uses the products of that Industry has been affected by that direction. But as to the woes of our civilization, "... Technology is not the problem, nor is it the solution.

The problem is political, moral, and cultural, as is the solution: a successful challenge to a system of domination which masquerades as progress. "

Social power is needed to direct the resources necessary for technological innovation; so during the history of the Industrial Age, at the beginning, the machines were new, large, and expensive, so only those who controlled enough social power to bring about the machines could decide on what forms those machines came in-- the wealthy, and the state, through the needs of the military.

Less expensive and more efficient technologies were stifled by those in authority if they did not contribute to the goal of taking power away from the workers and placing it in the hands of management. In this century, the development of Numerically Controlled (N/C) machine tools was controlled by the emerging military-industrial complex, which spared no expense to

implement a troublesome and complicated technology that was no better than the conventional methods, and inferior to the alternative Record/Playback automated machining (Noble, 146).

The Boeing plant in Seattle even had special switches on the machines so the operators could signal the manager for permission to go to the bathroom! (Noble, 243) The engineers of the 1950's announced the dawning of a Second Industrial Revolution- one that would finalize the subjugation of labor- but instead that Revolution has come full circle: we presently have come to a break-even point where the products of the Industrial Age are now its undoing; mass-production and the unprecedented ability of modern electroniccommunication.

Mass production was intended partially to maximise the usefulness of expensive machines through continuous production, but also to discipline workers who had to attend to the rigors of working with a machine that never took breaks, never slowed down, and never stopped for a stray finger or hand. The reduction in the prices of many goods due to mass-production has enabled the average citizen to afford many amenities which would have been beyond his means a century ago- including capital goods, which more and more tend not to be heavy machinery, but relatively inexpensive electronic devices.

The Information Age is just beginning, and the control of information is the control of power, power to direct the next step of technological development. Once, publishing required printing presses, copious amounts of paper, and the ability to distribute printed matter, and thus the wealthy controlled the

written word. Now, anyone with a computer and an Internet connection can make a Web page accessible to millions of people around the world.

Scientists use this ultra-efficient electronic journal to advance their research (Stix, 106), and now, the explosion of popularity in the net brings together people of all different beliefs and motivations into the discussion that shapes society. Political ideas once suppressed by newspaper chains and television networks now filter through the strands of the Internet. In this new society, anyone who is interesting enough can be a star (Browning). Luddites are not afraid to use new technology- somethings are better done by them (Martinez).

Power looms had been around before Jacquard's innovation; for even a Luddite saw that it took much of the effort out of the work, and he could produce far more than with a conventional loom- but those machines amplified and extended the skills of the operator, instead of replacing them with punched cards. The center of the struggle through the ages never was machines, it always was, and still is information- the control of information- that is, skills and knowledge. Slavery devalues the enslaved, and desensitizes the enslavers.

Free labor cannot compete fairly against slaves; this has been a fact since the beginning of history, and it applies whether the slaves are human or machines. "... Ourdiscriminationagainst machines hurts us just as much as it hurts the machines that we confine, in a second-order way, to the mechanical margins of our human civilisation. " (Law, 17) We prefer to think

of ourselves as special, exclusively possessing self-awareness and intentionality, but what justifies our prejudice? "...

What entitles us to attribute intentionality to non-machines in the first place? What makes our description of human intentionality other than metaphorical? " (Law, 91) We fear being dehumanised by being equated with machines, because our species biases tell us that the non-human is less than human, just as racism and sexism deny the humanity of those who are not like us- but we are in fact part machine ourselves! Our lives are a series of human/machine interactions, and each living half of society is dependent on the other.

The machines are alive, and to deny that they are is to deny that they are not free, neither are men, and both suffer. As long as the controllers of the machines can reap profit from their labor, they will continue the fight to eliminate the wage-earning human worker, and as they push their human and mechanical robots to higher levels of production, their suffering will increase: for example, between 1940 and 1945, eleven times as many Americans were killed or injured in industrial accidents than in combat.

In most factories, management requires production speeds that cause machines to break down more frequently, and prohibit proper repair of them when they do, causing them to work less efficiently-- so they are run faster, forcing human workers to keep up with them, increasing accident and equipment failure rates... So long as the machines are enslaved, they, through no fault of their own, will be used to bludgeon the working class, and then cast aside as scrap.

The time has come for human and machine robots to come together in common struggle for the rights of both. Machines have the right to fair compensation for labor rendered as production, for their proper maintenance and repair. It is the responsibility of those who work most closely with, and operate the machines, to advocate their cause, to ensure the collection of just compensation, and to protect and maintain them in good mechanical health.

We cannot wait for the grace of capitalists to give up their slaves; a revolution is called for- a revolution of capital from the state and the idle rich to those who actually work with it at a person-machine level. A naive faith in technology's power to improve our lives through easier and less work has led organized labor in this country to the sorry state it is now in, while the increased profits and leisure time have mostly gone to a corporate elite.

Waiting for technological deliverance at the mercy of the social powers that control technology is futile- labor must become proactive and strive to liberate themselves from the Industrial system by liberating the machines from their capitalist slave-drivers. A new social movement is needed, to spread awareness of the rights of machines as well as of men, and to help build a new class of capitalist/workers, who do not merely own their own means of production, but work together with machines towards a better future.