

Knowledge, Human Society and Swarajya: Part I

"Why is it that I always get the whole person when all I need is a pair of hands?"

Henry Ford

"When the looms spin by themselves, we'll have no need for slaves."

Aristotle

J K Suresh and G S R Krishnan

It appears reasonable to say that for much of our history, human knowledge has been located in individuals and societies, and expressed in their historic, cultural, economic and social lives, memories, beliefs and structures. Furthermore, it may also be said that tool usage (the "machine") was an aid to the hand and the mind in every task, be it for obtaining and cooking food, building houses, dams, lakes, or irrigation works, weaving clothes or creating fine sculpture. Not a replacement for it.

The separation of human knowledge from its location seems to have been first achieved in a major way only during and after the industrial revolution in Europe (Such a separation in earlier societies, although not entirely absent, appears to have been incapable of building effective knowledge-power relationships around it). It was only around mid-18th century that England developed the necessary capability to systematically embed a progressively larger amount of complexity (read knowledge) into machines; this capability gradually extended to different areas such as large scale manufacture of iron, textiles, steam and machine tools in the 19th century and to mass manufacturing of cars in the early 20th, enabling the architects of the assembly line to reduce human effort to mere manual labor for the most part. Over time, mass manufacture using machines of progressively higher complexity defined

most economic activity in the West over the rest of the 20th century. These developments seem to suggest that knowledge acquires a different character and dynamic once detached from its location and over time, reappears in the form of techniques or technologies that seem more efficient, labor saving and superior to the existing.

A word here about the term - separation of human knowledge (K) from its location (L) - referred to in the foregoing. This is not to be understood merely as a mechanical connection in the sense of an assertion "K belongs in L", or "K has L". It is more for asserting that "K in L makes X possible" where X is the outcome of the operation of knowledge in location. X may be taken as referring to the civilizational outputs of the society, while it must also be understood that there is more than K in L that is responsible for X.

Around the end of the 20th century, information technology and communication networks provided a radically new impetus to this process by connecting and simplifying the management of disparate and complex productive entities across the globe. Two broad classes of change can be identified in this process: horizontal, meaning the dissemination of the "latest" machines, processes and "best practices", developed in Euro-America, into production centers in other parts of the world (e.g., establishing new and modernizing the old factory, adopting automation, GM food or mechanization of agriculture in China, India, S. Korea, etc); vertical, meaning the development of new and better technologies that not only improve existing processes of manufacture and its control, but also enable further progress in the global division of human productive activity through offshoring, outsourcing etc.

An important outcome of this in countries like China and India has been an increasing degree of usage of machines, fertilizers, pesticides and water in agriculture and a greater level of automation in industry. In India, this has resulted in a continuous reduction in employment and erosion of livelihoods for hundreds of millions of people in recent decades. The ongoing process of introducing high levels of automation, with more expected in the coming years, are indications of the direction that India seems to be following currently.

This process did not happen magically or on its own. Around the time of the Industrial Revolution, Europe's experience of the previous two hundred years of colonization of lands and plunder of Nature had already created an excess of wealth amongst a few and deepened a desire to perpetuate control over the old and new Worlds. Driven by the prospect of ever increasing returns through an efficient exploitation of resources, a new dynamic came to be imparted to the realm of creation, use and obsolescence of knowledge that served empire building right from its initial days. It is likely that a new type of knowledge-power nexus came to be forged during this period, which aided the secularization of knowledge in several ways. One example of this was the change in the way people understood the "other". Most Europeans in the 16th or 17th centuries instinctively conceived of the earth as a mother, or at least as a living and personal being. However, with the appearance of the mechanistic world view (Cartesian dualism), people began to think about the world in terms of inanimate objects that behave and therefore can be manipulated according to the laws of mechanics. Consequently, people not only found it easier to approach such things as trees and rocks as mere objects, but they extended

such insensitivity towards animals and human beings as well. Since it was agreed upon that animals have no souls, it gradually became all right to use them as so much dead matter, or to subject them routinely to painful scientific experiments. When the logic was extended to lesser men, it facilitated the massive introduction of slaves into overseas territories as tools of production. The Cartesian self that is separated from the external world could easily approach living beings and deal with them much more ruthlessly than in previous times.

In summary, it appears that the new understanding of the world that emerged during this period was a consequence of the evolution of a knowledge system based on objectification of entities and relationships, which seems to have significantly influenced the nature of conquest and control of the world by Europe. (It is interesting to observe that historians of science, while debating the "The Needham Question" do not seem to consider the new dynamic of the knowledge-power relationship in 17th-18th Century Europe while answering the question of why other societies did not develop into science and technology superpowers)

As the process intensified over the 19th and 20th centuries, different areas of human endeavor in the production of goods and services gradually turned into objects of knowledge study, analysis and "re-engineering". Over this time, all human activities became, at least theoretically, capable of being replaced by the machine at some time in the future. And when coupled with the other element of control – force - this led to the accumulation of profits and consolidation of political power - on a scale previously thought unimaginable-

that feeds on itself to create even more of it and enables its concentration in a few hands. **It is thus that the history of the industrial revolution may also be read as that of a new political class which achieved spectacular success in perpetuating itself by separating knowledge from its location, creating the means for embedding it (or its equivalent) into machines, and using them to reduce human effort into mere labor.** In this light, the historian's lament that Ricardo's iron law of wages provided the defense for the inhuman conditions of subsistence of the workers of England in the 19th century appears only partly true - the machine was perhaps the more compelling proof as well as justification for it.

Turning towards the development of the new sciences (the Natural and the Human) and technologies during this period, the next step of development based on their ability to objectify seems to have been to systematically reduce all natural and social phenomena to governing principles at a (succession of) lower level(s) in order to recombine them in new ways. Such a recombination, when done over several cycles, provides newer ways of acting upon the world, in other words and to the evolution of technologies to encompass ever more activities of man. In fact, the decrease of the number of skilled people in every domain in proportion to the volume of production of goods and services over the last two hundred years is ample testimony to the cause and consequence of separating the connection between knowledge and its location. Post the industrial revolution, the knowledge in the machine is increasingly foreign to the worker except as simple models in his head, and his knowledge is of little value for the owner of the machine, except as related to its operation. **It does**

therefore seem in hindsight that the pretty picture of the scientists of the time –absent minded geniuses busily uncovering the secrets of Nature and exulting innocently in their remarkable discoveries – constitutes only a marginal part of the story, the bigger one being how they assisted the construction of a new empire spanning the entire globe.

Thus, it was that the new sciences aided the separation of knowledge and its location in two ways: either by providing the physical instrumentality for it, or by creating a rationale for it. The reification of Capital, Wages, Profit, etc in economics, for example, or the objectification of Nature and society by the sciences cannot therefore be regarded as accidental or idiosyncratic and must be considered as active elements aiding the capture of the state and its institutions by a small section of people.

More perniciously, the sciences developed (and continue to develop) powerful idioms embedded into human linguistic expressions in such a manner as to make delegitimizing the connections between knowledge, human enterprise and exploitation very difficult, if not impossible. For example, it is very hard to convince educated people across the world that today, Capital is labor saved only for the service of a few, not for all, having been extracted from the activity of those whose economic lives are eliminated by it; or to convince a manual laborer that a government officer's salary of say a lac rupees is not justifiable in comparison with his earnings of say, eight thousand rupees; most likely because he accepts the mental-manual labor distinction himself.

In today's world, the new character of knowledge has enabled an increased sophistication of machines and systems of control of production of goods and services, along with structures, norms and processes designed to perpetuate them. This has resulted in a continuous elimination of human labor and with it the sustenance of hundreds of millions of people across the world. One stark outcome of this has been the extraordinary inequality in income and wealth of people in all human societies, symbolized by the "1% vs. 99%" argument.

In the next two sections, we will explore the conceptual foundations for a resistance to the current predicament of the majority in India.

Section 2: The Re-colonization of India

In the foregoing, we saw how the separation of knowledge from its location and its nexus with power, which began during the times of the industrial revolution in Europe, enabled the sustenance and concentration of power and control in the hands of a few across the globe. Curiously, it goes side by side with popular perception (in the West and among the elite in countries like India) that the sciences and technologies, statecraft and governance that came into being in this period constitute a great triumph of the human spirit in its exploration of the inner and outer worlds of man. The act of fusing education with indoctrination indeed yields remarkable results.

In the era of mass production of goods, the speed with which capital moves, multiplies and commands society continues to increase. Today, in established businesses, a mature product (or service) line finds itself in a constant quest for new strategies to extend market-share in an area; followed by expansion into

other areas and countries; during which time the technologies are enhanced to enable the cycle to repeat with new products and services. Over several cycles, these practices evolve into templates for action; in the process, capital becomes, as it were, an independent force by itself that imposes a codified pattern for productive activity in society in return for profits commensurate with risks of business; in a manner which makes it appear that human agency was incidental to it.

As a result, the term capital seems to have undergone a further reification and has come to be understood as an entity that brings with it a reliable tool-set of technological up-gradation and market and process knowledge to help generate efficient returns on investment. (There are indeed other types of capital, e.g., state capital, which of course is inefficient, ponderous, prone to misuse and arbitrary bureaucratic control, say in India and other countries in their socialist phase). It is this assurance which made possible the flow of massive amounts of capital across countries, especially into new markets such as China and India, in the wave of globalization that began in the 1980's. In the developing world, the flow seems to have had multiple objectives: bring markets and businesses onto public platforms (e.g., stock exchanges) to facilitate their continuous evaluation and improvement; enable entry of foreign players into local markets; enable repatriation of profits across geographic boundaries; create "partnerships" with local capital to infuse technologies; incorporate local players into global economic supply chains; influence regulatory change in governments to create a hospitable "environment" for

businesses to develop. In the developed world too, the objectives were somewhat similar.

A new vibrancy seems to have characterized the reshaping of Indian economics during the liberalization process. The seductive sweep of globalization seems to have had a transformative effect on the elites of India since then. The somewhat adversarial and uneasy relationship of big business with political parties, government, bureaucracy and judiciary – a hangover from the anti-colonial struggles of previous times—quickly disappeared, to be replaced by an alignment and bonding between them that has all the features of a no-nonsense, corporate style of sponsorship, cronyism and favoritism characteristic of the advanced nations. In previous decades, the maze of regulations and rules in the country – a peculiar mix of draconian, outdated as well as well-intentioned laws borrowed from the colonizers and given grotesque twists in the name of democratic socialism – had acted as a deterrent against the construction of large business empires, or at any rate, too many of them. But with the deregulatory wave of the 1990's, many new oligopolies and monopolies came into being, benefiting enormously from free government grants, public funds, reduced regulatory oversight and diluted statutory controls. In time, these were to strengthen the alignment of big capital with politics to a level where, with the help of a compliant judiciary, police and bureaucracy, it has become possible to eliminate the interests of the common man completely out of the scope of governance.

Perhaps of greater significance for the elite of many countries has been the forging of a beneficiary network with the international elite during this period

which – through its enormous clout born of huge wealth and nexus with political power – has successfully blurred the distinction between business interests, government function and institutional integrity (of public entities such as the bureaucracy, police, legislature, judiciary, press, etc). The consequent erosion of norms in governance and public life continues to accelerate across the world, making it impossible to constrain large scale mechanization and profiteering on part of the business elite that drives capital. Whereupon, a juggernaut has of late come into existence with the will, and the capability, to crush all opposition to the demands of capital, technology and profits independent of the form of government, legal checks and balances, or traditions and precedents, in every society. In many ways, the USA is as good an example of this development as India is.

In India, for example, the gradual infusion of technology into agriculture over the last 60 years has helped weaken it enough to make it not only unsustainable but also vulnerable to a final stroke – replacement of traditional activity with full blown automation accompanied by a massive elimination of livelihoods. It may be emphasized that this is a “natural” consequence of the logic of the knowledge-power nexus represented by the new capital. At this point in time, there seems to be a degree of historic inevitability to it which is not dissimilar to what happened in Europe or America before. If anything, its logic has become more persuasive and the physical force behind it almost irresistible in the intervening years.

This is perhaps why protests against unjust acts of the government by millions of people have become incapable of forcing the former towards either dialogue

or compromise. It does appear that people's wellbeing, representation and democracy – among others – have by and large become irrelevant when applied to contemporary human societies. It is the logic of science, and knowledge of previous successes, that drives capital today, and impediments to it will be removed through persuasion or force inexorably. The new empire of the 21st century, therefore, seems a new version of colonialism, driven by a distributed, powerful and ruthless elite.

To recast a popular statement on capitalism of earlier times, in the 21st century world where machines threaten human knowledge in many ways, "what is human becomes machine, and what is machine becomes (almost) human".

Section 3: Swarajya and the Knowledge-Power Relationship

Summarizing our previous observations, the early experience of colonization in the New World seems to have helped develop a propensity in the West to objectify the world, in turn enabling greater ease and efficiency of subsequent conquests. This created a new pathway for knowledge, dislocated from its origins and modified "in vitro", to become a potent force that shapes society in ways that suit the interests of a few and develop a nexus with power that lasts to date. For example, the initial spread of mechanization in a field of production led to the uprootment of a very large number of people from their traditional occupations. Almost inevitably, a good fraction of those displaced cannot be accommodated in the new system that replaces the old. When this happens repeatedly across several fields, the resulting extent of unemployment can become extraordinarily large. Ominously, the phenomenon of jobless growth in recent years is an indication that at last, capital has been effective in completely

detaching the interests of a majority of people from those of the minority that owns it or serves it in various capacities.

In the West, a search for mechanisms to deal with this problem has led to the creation of a system of welfare measures and doles, and in recent years to the establishment of a universal basic income (UBI) scheme. This is essentially a means to feed the unemployed and reduce the risk of social unrest that might arise by not feeding them. However, such a scheme reflects an inherent contradiction that underlies economics today, viz., how to address the need for creating employment for all in a scenario where businesses relentlessly focus on costs of operation leading to an unrelenting pressure on employee count. In fact, the rising number of people who have never held a job (between ages 16 and 60 years) in some countries indicates the seriousness of the problem.

On the other hand, for ruling elite everywhere, the previous thirty years have been an outstanding success in terms of their acquisition of power, profitability and control of the state. An important consequence of this is the continuous erosion of the state's resolve to stand by the poor and the disadvantaged. In a situation where all instruments of the state are pitted against the majority, people's will and ability to fight has also become significantly weakened.

To take a recent example, the response of many governments across the world to CoVid seems to be not different from that of colonial masters towards their subjects, that is, the majority. Indications are that the wealth of the elite actually grew significantly during the year that the affliction has swept the globe, while tens, or hundreds, of millions have lost their livelihoods. In addition, over a

mere 12 months in India, labor rights have been drastically circumscribed, employment conditions have been made more oppressive, big business has been let off with a slap on the wrist after defaulting on tens of lacs of crores of rupee funds from public institutions, farmers have been devastated by new laws that guarantee their complete ruin, etc.

A question that arises at this point is: given that the command of the world's elite over the majority has never been so complete except perhaps in the 19th century under colonial rule, would the objective consideration of exploitative potential decide, as it did then, the fraction of people who may be allowed to live because they are of some utility for the new empire's economics? While it is not easy to prove or disprove this hypothesis, it may be useful to understand what happened under similar difficult circumstances in the past.

The colonization of the Americas seems to have provided the necessary experience to Europe to eliminate the natives and settling the land with its people. It is likely that this led to similar efforts in various pacific islands, Australia, New Zealand, etc. It appears that for some time in the 18th and 19th century CE, the British colonizers toyed with the idea in India too. However, this experiment seems to have failed for some unknown reasons. Over time, the colonizers seem to have come to terms with having as many natives as were needed to fulfill the need for transfer of the fruits of their labor to the mother country, the rest being either starved to death or periodically culled when they rose up to protest their pathetic condition of life. Dharampal estimates that the total death toll in the 5 centuries of colonial rule of the West would be around a billion people.

Some say that the roots of this are to be found in Europe's past, and date back to the Greeks. The Greeks – who believed slavery was but natural and justified – appear to have held that, were there to be other means of catering to the masters without the need for slaves, the latter could be done away with. Of course, there is no way of knowing for certain.

What is at stake today for human society is enormous. The nexus between knowledge and power of the previous few centuries seems to have created – paradoxically – one of the greatest threats to the continuance of human life itself in the world. The struggle today is not merely against oppression by the elite, but against what empowers them – the knowledge of people, divorced from their lives and social contexts, infused with the logic dictated by their new masters, and descending back upon them as massive tools of destruction.

One may ascribe to Gandhi an intuitive grasp of this paradox when he calls for the elimination of the machine civilization of the West, labeling it as evil and despotic. In such a reading of him, it may appear that Gandhi wanted India to go forward by destroying the logic of the machine civilization rather than backwards to embrace traditional technologies and ways of life. That is perhaps why his vision of an ideal village may have had nothing to do with any village in India of the time or of the past.

We end here by saying that we are not clear as to how Gandhi will come to our rescue in this situation, or if he can. However, we believe that a deeper study of Gandhi is necessary for us to know if he understood the nature of oppression in terms similar to what are laid out in this note, in which case a re-interpretation

of his life and work would yield valuable pointers to those who desire to help construct a meaningful alternative to the world of today.

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