



Technological advancements and Indian society

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Amongst his many published workpapers, "Yoga Therapy" speaks volumes of his experimental work. Dr. Naug has many Associateships with varied professional societies, amongst which the Behaviour Therapy & Research Society (USA) stands prominent, where he is a clinical fellow. Dr. Naug is also a well known Amateur musician and excels in flute which he was taught by the famous Panna Lal Ghosh.



Since Independence Indian society has undergone rapid technological changes, and is now leaping towards the 21st Century hoping for a complete switchover. As a **PSYCHOLOGIST** how do you see it?

The British transferred technology to suit English markets and not for technological growth of India. So they gave us first generation technology when they themselves were coursing through fifth generation technology. So much so, one could not compare English mechanical devices with Japanese or European advancements. Furthermore, through culmination of the educational process, British conditioned overall Indian mental atmosphere to an English format. Moreover, experts who were basically trained in English society opted only for British technology.

Thus it can be concluded that whatever little advancement had taken place in the post-independence era was much like the technological transfer from Germany to the USSR or USA after the IInd World War. However, in these countries technological developments existed and eased the process of assimilation. Here, whatever technology transfer had taken place was in the tune of urban acclimatization and the process never allowed to cater to the rural indigenous economy and trade.

I call craftsmen rural technologists, whose rich heritage based on traditional learning, know-how, and skills were not exposed to the technological progress, were better suited to undergo advance training. But, he was not allowed to develop his hereditary trade and was left to disband his family trade and forced to migrate towards urban industries where his background did not matter and he became part and parcel of the Industrial wheel as an unskilled worker.

What are the psychological factors which influence the process of adaptability? I am given to understand that

it mainly involves Human Engineering, Emotional Responses to the technological advancements and psychological needs of the worker.

You have seen people using prosthetic devices like artificial limbs as if it is a natural part of their body. This culminates the designing of the device according to the best possible ways of adapting man to use it without much effort and overcoming the emotional stress when he first learns to use it. The impact of machine on technological devices is similar. Man-Machine relationship involves gradual adjustments of the man to machine, so the machine and the environment in which the worker is placed should be comfortable and handling should not be strenuous. Discrimination, reaction time, vigilance are psychobiologically controlled. Monotonous type of work may bring in hypnotic sleep, fatigue, or loss of vigilance, and increase of humidity, dust, carbon-dioxide, and other toxic gases also have harmful effects. The psychobiological clock also gets upset by change of normal sleep and working hours.

Well, as industrial progress goes on, manpower output does not increase in India.

Manpower for industries have a rural base. Urban population mostly opt for white collar jobs. The large gap that exists between exposure to technological developments—bullock cart and Jumbo-Jet is very clear. How do you bridge the learning experience gap? After all you don't need only engineers and managers to improve work in industries! Mishandling of sophisticated machines is a general trend, workers work better with crude devices. No incentive, no in-service training for promotion is given to unskilled or semi-skilled workers. In India, our system is "No Degree No Promotion". Experiments in education are going on with pulses and minuses, open and closed



schools, informal and formal education, linking and delinking, etc. etc. But what about the people who are engaged in it?

Now we have televisions, tape-recorders, videos and cars but they are not an indicator of technological progress as such, they show only our commercial development.

Technological advancements like computer and its daily use create some sort of anxiety in the minds of many who are not conversant with it. How do we overcome the fear and ease the process of adaptability.

If you are realistic, in India, computers and other sophisticated gadgets have benefited the rich. As unemployment figures show we can do with more people and less machinery. The rapid disintegration of the social and human values that we Indians are proud of preserving is gradually on the decline!

Adaptability is actually a two-way process but we try to adapt the man to the machine. Fear and anxiety are natural preservatives but we always label them as

abnormal or pathological. If you want to get the best results use only the technical gadgets which are not threats to human survival but as aids.

It is feared that the time is not far off when human beings will be ruled by machines. Who will win—Brain or Machine?

The fear is justified. Brain will win. Specialists of Cybernetic machines will never be able to create a machine which can have abstract concepts or creative ideas of an Einstein or Jagdish Bose. Machines, on receipt of instrumentive material in the form of programmes, can submit fast and precise data. The results are quantitative and do not have a new quality.

The brain has the ability, on the basis of a comparatively lesser number of chemical and nervous connections, to generate complex original ideas and generalise them to a wide area of application. Machines can facilitate and serve human labour and automate human drudgery.

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