



We Hear From

Dilip Kumar Sinha

Artificial Intelligence at Crossroads

It sounds to be a pity and perhaps, a misnomer if any adjunct to the word ‘intelligence’ encounters a sort of scepticism. Artificial Intelligence (AI) started off with an initial abode in realms of computer studies, essentially as a facilitator. AI has continued over the decades to convey the ability of a machine of artefact to perform functions similar to those that characterize human thought. J McCarthy and J Haugelaut are oft-quoted names in seeking definitions of AI, since early eighties. There has been no dearth of techniques drawing upon neural, fuzzy, genetics etc. and hence, algorithms associated with them. One can hardly rule out a genuine coupling of some of them e.g. Genetic Algorithms and Fuzzy logic. Some sort of cohortism in such directions has come to stay. Even, Neuro-fuzzy algorithms have begun pay off dividends to AI. Multiplicity of AI has kept on seeking some sort of unfolding, implicitly or otherwise. In fact, nuances, of late, are expected to be enablers to reach out to frontiers of AI. Obviously, choice of unifying elements becomes a necessity.

Whatever be the on-going studies on AI, a schism of one sort or the other on AI has begun appearing, e.g., the latest concern of UN’s 72nd General Assembly, where the Secretary General Antonio Guterres in his address, mentioned about “misuse of artificial intelligence”. To him, a critical review can hardly preclude ‘new-age warfare-robot soldiers and remote killings’,

which Mr Guterres calls ‘the dark side of innovation’. The meticulous way the Japanese ‘Bullet train’ makes use of AI, in their own country, can in way be missed by a country like ours, where railway mishaps are often in the furore.

Japanese Internet of Things and Artificial Intelligence (IoT and AI) have kept up an assiduity for the holistic array where AI finds residences so that non/anti-human tendencies are stubbornly brushed aside. This is brought out in a recent article ‘From Theory to Practice : Real Applications of IoT & Robotics’, USA Today, July 31, 2017. Japan Inc. Companies are proactively engaged in developing real applications to increase efficiency and productivity. Hiroshi Kanda, Executive Director, Yunmar is assertively non-aligned with crony-capitalism, by saying that “our goal is not to replace man with robots in order to increase productivity”. Robotics, to him, has to have future generations so that jobs are not adroitly done with. A mix between the industrial and service robots is always sought for, without being aware of what is being sought after for global dimensions.

Let us look at the seamy portrayal on AI and allied robotics in USA. To some there, AI often turns to be “existential threat” to mankind. Hence, Good AI of USA is fast going to make a dent on AI and seemingly, unfriendly robotics. This is excellently put forward in the Economist

(2017), July 13 issue. Good AI in US circles, along with Responsible Robotics Group can affordably to have an ethics on its own, to put in fairly knowledgeable terms. Any one steeply involved in teaching over decades can well turn to the pedagogy for a roboticist. One has to rake up 'ethics' so that an 'ethical adapter' is built in these ; more so, human frailties and fallibilities can be taken care of. Simulation has to be taken recourse to, so that robotics has opportunities to become useful. Hence, a continuing problem to search for what an adverbial adjunct that the 'intelligence' would suffice, as what it ought to be. The furore is intensely about 'intelligence'. Can human element take a backseat ? So, the need for appropriating intelligence in apposite ways. In an issue of Futurography (June, 2016), One thus finds Simon Parkin along with Cicilia Tilli, a Ph.D. in philosophy and neuroscience, pleading for 'sentience', meaning lexicon-wise 'to be conscious/capable of sensation'. A kinship with the humanity has to be put in and here, a control somewhere.

In conclusion, why shouldn't one turn to la Piketty's contentions on inequality, dealing with productivity vs employability, based on rethinking of the distribution of income ? Can there be a globally basic choice ? How would Piketty relish that ? Hence, AI can hardly rest on its oars. Tempering AI with human element is a necessity. How can we dispense with human cognition stored somewhere in layered configuration in AI algorithms ? The French AI scientists would equally be well at home with algorithms seeking localisation and autonomy for developing savvy structure from simple and lucid ground levels, vide, Guaranteed Computation of Robot Trajectories (2016), Vol. 93, p.93. A synergy can well assume an avowed inclusivity in the days to come.

Dilip Kumar Sinha

email : dilipkumarsinha@rediffmail.com

History of Technology

Cradle for the Building of Printing Machine

Spirit of invention drives the mechanical engineers Koenig and Bauer of Würzburg on the 9th August, Wednesday of the 2nd week of 2017 celebrated the 200th anniversary. Before the establishment of the firms the educated printer Johann Friedrich Gottlob Koenig went to England in 1807 while in his own country if did not go well with the start up promotion.

Koenig had his mind set up that it would have been a good idea to drive a printing press with a steam engine. In London he met the precision toolmaker Andreas Friedrich Bauer. Both saw in spring 1814 in publishing firm of old venerable daily, "The Times" the first pilot customer for their double cylinder machine. Since then Koenig and Bauer AG named in short KBA is closely associated with the
