

AI, ChatGPT and ELT: A Maverick's view

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ABSTRACT:

Chomsky, one of the greatest living linguists in the world today has expressed his opinion on what AI really is. With advancement of science and using AI in a variety of disciplines including language teaching, we seem to have jumped on the bandwagon praising its glories. Are we doing the right thing? We language teachers, do we accept the views expressed by Chomsky or do we subscribe to the more popular view. In this short write-up, I shall try and present my views and show how using AI and ChatGPT can cause more harm than promote learning. The views expressed here are my own (a novice to science of AI, but a practicing language teacher with some decent years of teaching experience) and need not necessarily subscribe to the larger world perspective.

Keywords: ICT; Cognitive skills, algorithmic thinking, lateral thinking, creativity, language exercises, manipulation techniques.

Introduction:

Just about a year ago, while talking to reporters from the New York Times, Noam Chomsky, the most respected linguist living today said the following. I quote:

*“The human mind is **not**, like ChatGPT and its ilk, a lumbering statistical engine for pattern matching, gorging hundreds of terabytes of data and extrapolating the most likely conversational response or most probable answer to a scientific question. On the contrary, the human mind is surprisingly efficient and even elegant system that operates with small amounts of information; it seeks not to infer brute correlations among data points, but to create explanations. . .”*

“Let's stop calling it ‘Artificial Intelligence’ then and call it what it is and makes ‘plagiarism software’ because, it doesn't create anything but copies existing works or existing artists, modifying them enough

to escape copyright laws”

New York Times
March 8th 2023

In order to see the validity of what Chomsky says, we need to look at the few characteristic features of language teaching (including the production of teaching materials) as well as of our understanding of ICT and its uses in language teaching. We may divide this write-up into two parts, the first part devoted exclusively to the discussion of ELT practices and principles and looking at the advantages and shortcomings of using ICT in the second part.

Part 1: ELT emerged as a discipline a few decades ago. The discipline grew rapidly with concerted efforts put in by scholars around the world, including a few major contributors from India. What was pejoratively called the ‘third world’ became a rich laboratory to experiment with new methods and materials to teach English either as a second or foreign language. These experiments were supported by research in the

fields of Psycho and Sociolinguistics. India contributed in a big way because of its size and the natural flair the Indians had for learning languages and the encouragement provided by the Government in the earlier days of independence to learn English. ('English is the gift of Goddess Saraswathi' C Rajagopalachari; 'English is a window on the World' Nehru; 'English is to be taught as a service language' Secondary Education (Kothari) Commission; etc.)

Though English was taught for over eight years before a learner joined the university, the proficiency acquired was said to be not adequate to cope with higher education. However, this statement was not based on any tangible data for students entering the University were fewer in number and most of them did well in their studies as is evidenced by the positions of power they occupied during the early years of Independence. As time progressed, the education became accessible to a larger number of students and with an inadequate number of well trained teachers, ELT slid back in its progress. Since 1986 (NPE) and 1998 (CIEFL-CBSE Project) and with various reforms brought about in education policies, ELT has been showing a brighter face.

Having provided a brief historical background, let us now look at what constitutes language teaching (especially English Language Teaching) and look at some of its tenets. It is well established that language learning is an innate process and it is difficult to induce it artificially. However, we may draw on the principles of first language learning (an innate process) and try to appropriate them in our second language classroom situation. This is exactly the attempt that is being made with the ushering in of Communicative Language Teaching (CLT) since 1998. (CBSE-CIEFL

Project)

CLT believes that as human beings we are social animals, and language helps us in being social – in other words it facilitates us to communicate and mingle with others. As we communicate using language, our proficiency in its use also develops. Can we do this in our classrooms? Can we provide enough opportunities to our learners to communicate, and at that in a second language? This question is answered by three words – 'create an opportunity'. It is easier said than done. We may create an opportunity, and these opportunities may at best be simulated and not natural. However, since classroom teaching demands a bit of exaggeration (e.g. while teaching pronunciation, word stress, intonation etc.), dramatization, a realistic situation is likely to work equally efficiently as a real situation. Here I am reminded of what Keith Johnson said in one of the lectures he delivered in RIESI Bangalore way back in 1978. He was at that time producing a course book as well as a book on CLT methods and materials. (*Communicative Syllabus Design and Methodology*). He wanted his book to be as authentic as possible in terms of the examples he provided. He was planning a lesson on 'Giving Directions' and went round the town asking every stranger he met: 'Which way do I take to the railway station?' He received expected responses for quite some time: *take a right turn, take a bus/rickshaw etc.* Finally, he was floored when one of the respondents blurted out 'Walk along the tracks'. This response is real. But in a course book a realistic illustration makes more sense than the real one.

This brings us to the moot point that we are looking at in this small write-up. A human brain is capable of thinking both laterally and vertically. It can find a large number of expressions using

limited resources. When we think of a child communicating with us, the child adopts some of the pragmatic principles which Grime and Leech have elucidated upon. They often use coping strategies and use a word (either their own creation, or in some ways related to the concept) to express their needs. Recently, my little grandson from the USA was visiting us. He was barely 18 months in age and was quite eager to talk to us. One morning, he found a key lying on the floor. He showed it to me and said, “*Thatha, open*”. Open was part of his vocabulary, and he associated ‘key’ as an instrument that can open a lock and used the word as a compensatory strategy. Can AI do this? In simple words, does the corpus that we play with include expressions such as these? I am not looking for an answer, but I thought language was a marvelous gift given to us and perhaps trying to approximate it in a synthetic manner is neither desirable nor possible. This in brief is the message that Chomsky conveys in a succinct way (see the quote above).

Today, ELT, though it employs CALL (Computer Assisted Language Learning) strategies, keeps itself in its limits to teaching skills, providing excellent editing skills and perhaps provide help with some grammar (better not to depend on it) and spellings (if one swears by the American system). Computers can be used to teach different skills such as reading and speaking by providing tasks that can be manipulated or customized depending upon the needs of the learners. This saves the teacher from having to prepare multiple sets of test papers and this also facilitates evaluation and keep a progress report of individual learners (Portfolio assessment). Computers have made the job of a teacher easy, but they are nowhere near replacing a teacher. (AI claims creating a Robot teacher who can replace the real teacher. It is interesting to read

a story by Isaac Asimov ‘The Fun They Had’ to understand this concept.)

Language learned needs to be used, practised for helping us grow with the language. For this, there are exercises that are produced by materials developers. Such exercises are helpful (they are realistic) and provide support to cultivate natural language. In other words, what is learned through grammar exercises receives a fillip when used in natural conversations. There is a further point to it. Exercises may not always help us gain knowledge related to ‘appropriacy’ (Widdowson 1978), it is the use that helps us gain it. To understand this, I have since long defined language as ‘an organic and dynamic entity’. This simply means, that since language is a living entity, it should naturally undergo changes. Dynamism of the language accommodates the changes that take place in a language. (‘Language is in a constant state of flux’ is a well-known axiomatic statement made by a linguist.) The changes that occur can be influenced either by space (distance) or time (period). Since such changes are possible, learning of language happens in the course of interaction with others who are at higher levels of competence than the learner.

So language learning is a complex process, and our claim to teach language using a variety of methods and materials, though well in place, may not achieve all the goals of language teaching. It is for this reason, CLT advocates creating opportunities in the class to allow children to interact, or simulate life-like situations in the classroom. Pair and group work are well suited for such learning. Further, since language learning is a highly cognitive process, learners taking support from mother tongue (for thinking and formulating ideas happen best in mother tongue) should be welcome. Today, such dependence is

encouraged and several experiments in this area have been conducted with encouraging results. (Uma C 2014)

Part 2: Having given brief perspective on the status of ELT in India, including the use of ICT, let us look at what the computers can really do.

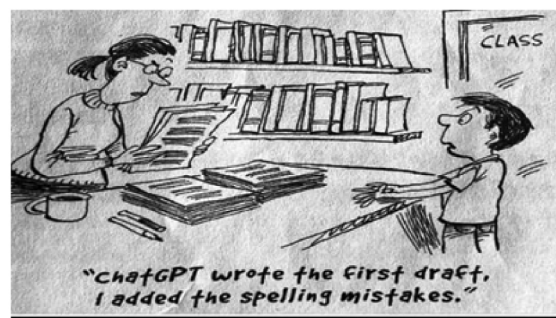
Computers are undoubtedly a boon to the mankind. They were designed as numerical processors but soon they were harnessed to do word processing as well. Some aspects of language that are finite could be captured on the system (e.g. spellings and structures) were stored on the system to algorithmically decide what was acceptable or not. Unacceptable spellings were marked with red underlining while a deviant structure was marked by a green underline. This was during the initial days. (Computers worked on DoS environment, and the ubiquitous mouse was unheard of.) Subsequently, some of the programmes became versatile and attempts were made to help learners with comprehension and composition. Variations in Cloze were introduced to help the learners recall the words (with or without assistance) and Text Salad helped learners organise sentences in a paragraph and develop skills of writing. With further advancement, help in producing a text and editing it became easy.

By harnessing computers for language teaching, some thinking went into expanding its scope to produce a language as near as possible to the human language. Initially, attempts were made to use computers to translate texts from one language into another. Dictionaries of the two languages in question were fed into the system and the computer was able to find equivalents. Though this attempt was commendable, some of the results were hilarious. This was because, the computer was not programmed to capture the context (culture) and choose the right

expression while translating. The connotative meanings could not be captured, it was restricted to denotative meanings only. However, the scientists were not daunted by this and tried to appropriate language production by providing huge corpora to help computers generate language. Several IITs (Indian Institutes of Technology) and IIITs (Indian Institute of Information Technology) in the country have research projects dealing with this aspect. They are making attempts to provide cognitive abilities to the computer, but most of the work still remains algorithmic.

The latest in ICT is the ushering in of AI and ChatGPT. AI has its applications in almost all the fields of knowledge and life. ChatGPT (Chat Generative Pre-trained Transformer) is a novel attempt to enhance the capabilities of NLP (Natural Language Processing). Using this, it is possible to produce a new (fresh) document based on the humongous data stored within the computer. It also customizes the document in such a manner that it defies plagiarism. Such modification can at best be called 'a manipulative exercise' which has been in use in ELT from days of yore. Manipulative exercises were used to allow a learner to complete a piece of writing without making errors. Gerald Dykstra has produced a book called *Ananse Tales* way back in 1965. This book employs a set of very short stories about a super-spider called Ananse (a variation of Ah Nancy). These stories are popular in the Congo Region of Africa and the book was used to teach the children of the tribes English. ChatGPT is repeating these processes using sophisticated computer programmes. While appreciating the efforts of Computer wizards to make learning available to a large number of learners, we as serious academicians, need to ask a question 'Is this acceptable?' To my mind, the firm answer is 'NO'.

We have seen students (including some of the research students) downloading articles from the net and submitting it to the supervisors. Occasionally, the supervisor may not be able to detect the source (but today we have sensitive software to trace such lapses) and award the student decent grades. Does this not amount to cheating? The answer to a question like this is obvious. There are many illustrations one can cite to show how learners are smarter than their teachers in producing acceptable answers without being detected. The master stroke of this is captured in a cartoon published recently. This summarizes the argument better than my words.



Here it is for you.

Do I need to say more?

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