

**The Impact of Artificial Intelligence on Literature and the Big Language AI Model**

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**Abstract:**

Artificial Intelligence has taken the world over by storm. It has made its impact and in fact replacement in every sphere of life and occupation. The use of English language and its impact in the global world has created newer and newer masterpieces and creations. Models of Teaching-Learning in English have changed and also the approaches. A Study conducted by a researcher named Yan Hu of the University of Stirling in the UK has examined a Language Model named GPT 4 and its impact on literary creation.

Cutting edge models will be evolving. This could also challenge the Natural Language Processing as well as the interaction of people. GPT 4 and BERT could help in creating the simulations of human beings' capacity for language. Only specific content would be doled out for language use. This language model creates new data by continuously processing the old and redundant data. This is referred to as "deep learning technology" which helps in the interpretation and production aspects. Radford, a scholar has thrown some light on the aspect of the generative pre-training model. Content generation is created using a pattern. It will generate a given content and based on the selection, the text gets matched as per the probability. The BERT Model judges the missing phrases and words and helps in completion and compilation. Thus the creativity is enhanced in the frontiers of literature.

**Keywords:** Artificial Intelligence (AI), Language Models, GPT-4 and BERT, Deep Learning Technology, Literary Creativity

Artificial Intelligence is the concept of technological adjustments which bring about a change in the way one thinks, learns and advances. It performs multiple operations that include one's capacity to see and believe. It is one more step ahead of the make-believe world. In terms of innovation, AI becomes predominant as it is highly beneficial in computing and the business world alike. The feature of OCR otherwise known as Optical Character Recognition is useful in order to provide content along with images and converts them into readable pages and pieces. It can be a take-off from Artificial Intelligence. It projects computers as almost replacing the human brain and aids in the growth of machine intelligence. Almost all human fields of activity is involved in it. Streams like Computer Science, Statistics, Mathematics, Linguistics and Philosophy are deeply interdependent on the same. It plays a very generic role in Natural Language Processing and Linguistics. It is a great assisting feature in speech classification,

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summarizing texts, bringing about new content, identifying poetic devices and contexts. These are the umpteen tasks that can be performed in terms of Language Competence.

This research paper is based on a study conducted by a researcher Yan Hu from the University of Stirling. He has given a new model named GPT 4 which is a Language based one. This model will become a precursor for the Natural Language Processing itself. The BERT Model evaluates the simulation part in order to create and build one's capacity for language. Specific content and at times missing words could be replaced by the BERT Model effectively. This could be referred to as "Deep Learning Technology". A scholar named Radford has in general discussed about the Model. He referred to it as the pre-training model. This is effective in dolling out specific content only.

My research paper examines 3 premises.

1. The GPT 4 Model and its contribution to English Language Learning.
2. Creative Destruction (vis-à-vis the emergence of new ideas in technology and language) in the context of the big Language Model AI
3. Literary Creation from a Historical Context.

The frontiers of the GPT 4 Model is a very big prototype one. It is magnanimous and has a culmination of both image and text which enables it to handle English and other languages. Programming instructions are the basis on which this model runs. Text and images have an access to real time visual information based on the aspect of conversion. It also generates and creates new Language based tasks. At a given time it can analyse upto 25,000 words and it executes instructions even more effectively than GPT-3. This GPT 4 makes use of the Transformer Architecture which is a type of Deep Learning Model. Its information can be used as an open source and a licensed kind of an approach is used.

This model is completely in synchrony with the Computational linguistics kind of model in Literary Studies. Syntax and Speech Analysis, Semantic Analysis and Machine Translation are the areas of operation and classification. Chat bots and Virtual Assistantship, Machine Translation and Language Instruction are its features that can be explored. Reinforcement Learning from Human Feedback is used for the improvement of its alignment with human preferences and policy compliance aspect.

In order to make multilingualism more effective, there is a feature of Open AI's Translated Language Model (T-LM) which translates various prompts into the English Language and back to the parent language in order to reduce potential costs.

Next comes in the aspect of Creative Destruction. Creative Destruction or the negation of creativity exists when the capacity to think in a different way gets halted due to the impact of something minor. Economic and Social Growth and development gets severely hampered. A

scholar named Bessen has analysed on the aspect of creative destruction and its role in Technological Innovation. The most important aspect of any process is the content generation skilling. This will be vanished in the years to come. According to him, a lot of content can be generated by the Mass Media or culture. This will merely become the models for the developing society. Other experts like Vargo and Hopp discuss the fact that creative destruction emphasizes on a service minded culture wherein both positive and negative thoughts can be correlated.

The integration of Technology and Culture could be a very dicey situation and this will also pave the way for further chaos and disintegration. Other experts like Mateos-Garcia, Windsor and Chataway affirm that AI can improve the area of non-creative work. It is in no competition to the human beings capability for innovation. Even simple language activities like summarizing, writing in patterns, sorting can be a challenge for the System based Operation work.

Large Language Models often make use of Autoregressive Algorithms in order to generate writing content and generating it too. Artificial Intelligence will be able to develop content which is capable of enhancing the creative aspects. It is also useful in Ecological Studies wherein a whole new set of guidelines can evolve. It is a type of Archetypal Model in which large amounts of data is used for the purpose of analysis. Chat GPT 3 and 4 are an offshoot of Natural Language Processing. These models are also involving others like Met's Llama Models, Roberta and PALM Models.

The LLM is projected on a Transformer Architecture and connected to neural networks which enhances the network by various layers called as the attention mechanism. These models are programmed in such a way as to predict the next word in advance. The performance of this model could be enhanced by the aspect of hallucinations like engineering and reinforcement. The most integrative feature they possess is that of assisting persons with disabilities. Retrieval Augmented Generation is the capacity of the Large Language Model to write algorithms with Language Generating abilities, writing blogs, posts etc.

Content can be made into a summary like news stories, reports, and also feeding customer history into the space which requires it. The AI Chat bots are a very effective way of asking for queries and finding easy solution of items. Customer Care Solution is another area of easy operation. Code Generation tactics helps in finding codes for solutions.

The most current area of operation involves the Language Translation Feature. It is used with a wide coverage over regions, geographical locations and people over various multilingual access. The Large Language Model can also have a few limitations in terms of its Language capabilities. Historical Criticism can be impacted because of the restructuring of texts and

patterns of literary writings considering the thematic conception. Historical aspects of works cannot be fulfilled or the critical aspects will have to be relooked and reworked upon. There will not be a liking for the writers who instituted Historical Criticism and the age of Literary achievements. Concise Language activities like proof reading, editing and appropriate writing needs to be evaluated. The shortcoming is that there is no Standardised Evaluation Standard. This is the work of the human brain. No matter how much of genetic programming is done, some evaluation of literary texts become very problematic without human intervention or thinking process. The Language of Morality is also difficult to experience and evaluate in this Large Language Model. Story-telling and forming narrative structures can only be done by a Human being. Aesthetic and philosophical views of Literature itself is made difficult and complex because of the nature of the problem. Sometimes the human language and experience cannot be comprehended by the Computing Language Software. In this case, errors may show up. Likes and dislikes are not communicated by the system software. It has no human like emotions. These Literary and mental aspects are the privilege of only humans.

Most importantly at a larger level, questions regarding authorship and intellectual property crops up. If the content is created by the use of AI, then there will be a dispute regarding its ownership. The Copyright Section of the law does not have the provision for making AI generated content as original works. Hence the usability and the credibility is lost rendering little safety for the aspects of originality which is an important element in the creation of a literary work. The only other consideration is the fact that the AI related Language based software has to be true to the nature of a human being with associated emotions, feelings and wisdom. This is the true test of time and software. Just like Content Creation takes the cake in the present generation of the SEO industry, so does the AI- related Language generated software have a greater edge when combined with human intelligence, not in isolation.

AI documents can be assessed from the aspect of Historical Criticism by making Algorithms that uncovers the past and analyses historical documents and arranging it as per the historical documentation process. Articles and historical documents are analysed as per the requirements of the historical data process. They can be appropriate and a sequencing is followed by the terabyte method and sifting as well.

Transcription and the Translation method of documents are easily comprehensible as the gaps are identified and filled by the AI Algorithms. Linguistic gaps as well as cross cultural patterns are analysed. It goes one step ahead and recognising stylistic methods, leitmotifs of a play or drama and theme shifts. Intertextuality can only be done by literature experts but AI has a method of doing it too. Anachronistic references, identifying a misplaced word, anomalies are encouraged by the programs being fed into it.

In conclusion, the Big language Model and AI is the biggest advantage for a student of literature. It will generate ideas, draft matter, make conclusions and complete the entire process of a literary taste and endeavour, but the challenge remains that litterateurs have a great thinking capacity and their ability to use diction will never be replaced by any coding machine. The right brain of the human physiology has marked excellence for Language related skills which promotes holistic thinking and approach that cannot be contested in any of the universe's creation.

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