# Review of: "From Turing to Transformers: A Comprehensive Review and Tutorial on the Evolution and Applications of Generative Transformer Models"

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Potential competing interests: No potential competing interests to declare.

The paper offers a comprehensive overview of advancements spanning from Alan Turing to the present period of Transformer models. Nevertheless, some of the content requires clarification to enhance reader comprehension and ease of following:

1. In page 9, the author need give a citation for the idea: “Fast forward to the advent of neural networks, which Turing had touched upon in his lesser-known works. These networks, inspired by the human brain’s interconnected neurons, were designed to learn from data.”
2. It appears that there are no visual representations illustrating the models from the neural network to the Transformer. It is recommended that the author includes images to assist readers in better understanding these models.
3. Figure 2, 3 and 6 need to be redrawn for more clarity and detail.
4. The sections 3.1.3 and 3.1.7 have the same titles.
5. The title of section 2.1.2 is “Early Neural Networks and Language Models”. But the author only presents information on neural networks within its content and has not addressed language models.
6. Formulas 14 and 15 require additional explanation. It's essential to clarify the roles and functions of the three variables Q, K, and V.
7. Figures 7, 8, and 9 need to be reviewed as they contain code instead of images.
8. The article structure should be reorganized to be more reasonable.