

# A Subjectivity-based Perspective on AGI Technology

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**Abstract.** This study focuses on profoundly exploring the issue of the relationship between AI and human subjectivity, which is crucial to counteract the current panic brought about by AGI. **METHODOLOGY:** A multi-faceted argument for whether AGI (exemplified by GPT) is creative is made using a logical analysis of causality and problem awareness. This logical approach, which combines theory and technology, can fill the non-technical or non-theoretical gap in the current research methodology. **RESULTS :** AGI generalization does not produce new things that are the opposite of the "old" or essentially changed by the use of visual technology, and it is not known whether the results of AGI generalization are in accordance with the laws of development. The paradoxical study of the subject and the model still lacks the characteristics and creative properties of the new thing. **CONCLUSIONS:** First, the innovative aspect of logic finds that man and AGI do not exist in opposition, but complement each other. Second, the innovative aspect of the theory finds it necessary to solve the problem of the relationship between human and technology rationally in the critical and revolutionary spirit of dialectics, emphasizing the unity of human historical development with the principle of wholeness. Third, technological innovation finds that enhancing human subjectivity should focus on the field of scientific and technological innovation, accelerating human enhancement of technological development and avoiding human arrogance.

**Keywords:** Artificial General Intelligence, Subjectivity, Risk Assessment, Computer Vision.

## 1. Introduction

Taking the disciplinary history of Artificial Intelligence (AI), it is 67 years old since 1956. Research on the relationship between AI and human subjectivity has focused on the field of machine ethics, including robot ethics (G.Veruggio,2002), military robot ethics (Ronald Arkin,2009), computer and information system values (Patrick Lin,2012), philosophical challenges brought by computers to human society (Cheng,Su-Mei,2017), humanistic environment construction as well as technical statute construction (He Junlin,2020), AI technical bottleneck breakthrough (Zhang Cymbal,2020), etc. The current research approach to AI is dominated by three schools of thought, including the symbolism school, the connectionism school, and the behaviorism school. One of them, the symbolism school, as an early research approach to AI, uses symbols as the cognitive unit for understanding the objective world. Later, it developed into a logical approach and a technical approach, not only to describe the process of human cognition, but also to simulate the intelligent activities of human cognition. Second, connectionism is a research method based on the doctrine of neural network and the principle of learning algorithm of neural network-cum-connection mechanism to form an intelligent machine simulating human brain. Thus, connectionism is inspired by brain science and emphasizes physiological and bionic approaches, making the intersection of connectionism with biology, cognitive science, and network science very close. Third, the activist school is based on the cybernetics of psychology, emphasizing perception and action control methods. The cybernetic science allows computers to feel the unpredictable environment through the cybernetic science to allow humans to obtain the processing and application of intelligence. Based on the three schools of thought on the nature of intelligence and the structure of the human brain research methods, there are still technical bottlenecks today, based on which the development and technical path of AI is still a long way to go.

Based on the above research, there is still a research gap in the philosophical and moral logical exploration of the relationship between AI and human subjectivity. The shortcomings of current

research methods are the lack of multi-method integration, innovation and development of the times, which can fill the non-technical or non-theoretical gaps in current research methods. Therefore, a logical approach that combines causal analysis and problem awareness can address the issues of the times. With the rapid development of Artificial general intelligence (AGI), AI has gone from conquering the natural level to threatening human subjectivity, and has posed threats and dilemmas to humans in society in terms of employment and entrepreneurship, morality and law. At the same time, it is worth exploring whether the current AI technology deviates from the original design, which is the key to affect human subjectivity. Based on the survival and development of human beings, it is particularly important to explore the relationship between AI and human subjectivity to solve the current social panic brought by AGI.

Theoretical and technical arguments are combined with causal analysis and problem-aware logical analysis to determine whether AGI(GPT for example) is creative. Assuming that AGI is creative, the generalized things should conform to the characteristics and creative properties of new things, including that the things created by AGI should be the opposite of the "old" and change in nature, and that AGI should be socio-historical and subjective in accordance with the law of development. Only when the above conditions are met can the creation of new things by AGI pose a substantial threat to human subjectivity. The analysis of creativity after AGI generalization, the analysis of AGI visual technology, the propositional assessment of the results of AGI generalization, and the study of the paradox of the subject and the model show that, on the logical side, innovation finds that man and AGI do not exist in opposition to each other, but complement each other. On the theoretical side, innovation finds it necessary to address the issue of the relationship between man and technology rationally in the critical and revolutionary spirit of dialectics, emphasizing the unity of human historical development with the principle of wholeness. In terms of technology, innovation finds that enhancing human subjectivity should focus on the field of scientific and technological innovation, accelerating human enhancement of technological development and avoiding human arrogance.

## 2. Methodology

In order to explain the development of AI and human subjectivity and the effects it brings, this paper uses the method of causal analysis, this method belonging to the qualitative field. In a general sense, causal analysis is the analysis of the relationship between elements and phenomena, and any event that arises is a direct or indirect factor in this outcome, in which no other intervening factor is required, constituting a causal link in such a special case. Thus, causal analysis is usually used as a topic or event analysis for a particular topic or event, and causality is more controversial, with many views on the description of the object, process, and nature. David Lewis<sup>1</sup> proposed an explanatory chain of causality<sup>2</sup>, and Paul<sup>3</sup> proposed the "causal chain of causality". In addition, there is also L. A. Paul's aspect model.

### 2.1 Reference standard: Risk assessment of AGI

On the one hand, AGI is conducive to promoting cross-modal special applications under big data. For example, psychological mapping technology originated from criminal psychological portraits for a series of multi-angle detection of criminal characteristics, but is not only limited to the narrow sense of detection, but applied to a wider range of psychological applications, through the digital identity to obtain big data, to achieve the rapid establishment of predictive models as well as accurate ethical assessment under the interdisciplinary model. At the same time, The abuse of digital will lead to social ethical risks, whether the responsible subjects of digital supervision will have disputes due to digital rights, how to solve the balance between digital identity and digital rights, and ethical consequences after the transformation of digital identity due to the existence of ethical and legal norms of intelligence. Among them, the most important is how to solve the

problem of intellectualization on human consciousness and cognitive control under the background of big data. (Fig. 1)

**2.2 Using the instrument: AGI trends and the human subjectivity model**

In this study, the independent variable is the trend of AGI changes, while the dependent variable is the human subjective development. In order to ensure the accuracy of the model, other control variables such as Ethical Utilitarianism, Non-utilitarian Consequentialism, and Social Welfare Utilitarianism were also introduced. The causality analysis combined with the logical orientation of problem awareness shows that the relationship between AGI and human subjectivity presents the following four scenarios.

- Reason: The stronger the development of AGI, the stronger the human subjectivity. Result: Ethical Utilitarianism, showing positive overall upward trend of moral legislation, etc.
- Reason: The weaker the development of AGI, the stronger the subjectivity of human beings. Result: Social Welfare Utilitarianism, followed by existence for the sake of existence. Embodied in the theory that the social interest orientation originates from the social law school, named for the special attention given to the issue of interest.
- Reason: The weaker the development of AGI, the weaker the subjectivity of human beings. Result: The Ethical Utilitarianism expresses that there is a bound tendency for the overall decline of moral legislative restrictions. Therefore, applying the Empirical Positivism of Western Philosophical Methodology and the Utilitarian Ethical Perspective, understanding the principle of utility as the principle of legislation.
- Reason: The stronger the development of AGI, the weaker the human subjectivity. Result: Non-utilitarian Consequentialism, limited by moral margins. In the Non-utilitarian Consequentialism, Austin's asserts that law should remove values, rather than studying what law should be in law. Therefore, it is more normatively enforced orderliness.

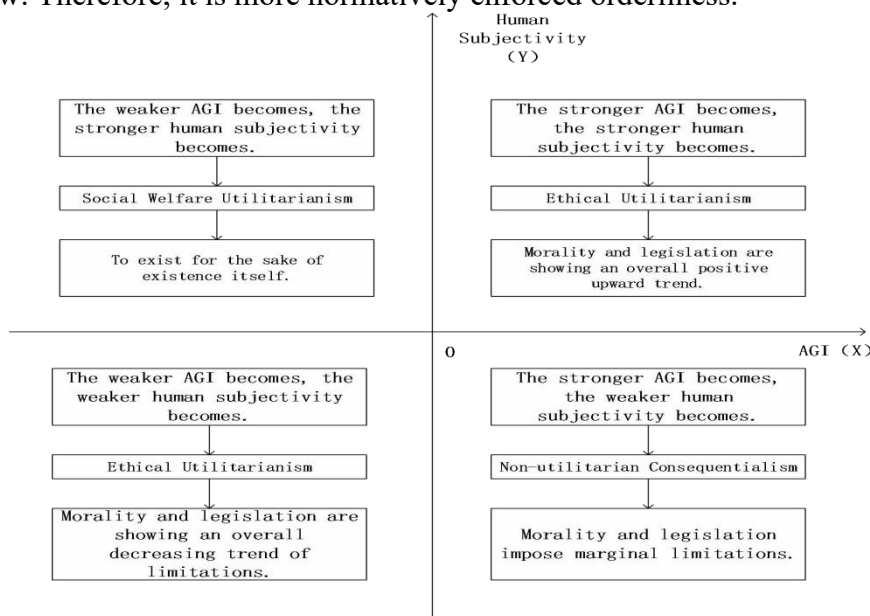


Fig. 1. Quadrant diagram of the relationship between AGI and human subjectivity

**2.3 Reliability and validity: Is AI to AGI the inevitable path?**

OpenAI released ChatGPT software on November 30, 2022, and the number of active users exceeded 100 million within 2 months of its release. It can bring unexpected new power to make humans get more cognitive help. First, from a transition perspective, AGI transitions to a new world of intelligence faster than AI, allowing the world to progress much faster. So each system will build and deploy models on a prudent basis will be infinitely closer to AGI. Although the use of AGI will cause unforeseen risks to humans, it will still be prudent to ensure safety with the risks. Second,

AGI will create a bootable model more easily than AI. The process of moving from the first version of the GPT-3 model to InstructGPT and ChatGPT is at the discretion of the individual user. Third, AGI is going to be easier than AI to have a global conversation. AGI operates under the constraint of targeting human interests as a way to manage and distribute benefits that can incentivize better ways to generate new mechanisms and make fair and better distributions to share data usage.

### 3. Results

#### 3.1 AGI risk assessment

For these reasons, although AGI frees humans from repetitive labor, the result is a "Dysynchrony".

#### 3.2 The relationship between AGI and human subjectivity

The relationship between AGI and human subjectivity can be inferred from the above logic to produce two results: full subject and non-full subject. In fact, it is the game process of human group and non-human group.

#### 3.3 Is AI to AGI the inevitable path?

In the above conditional context, the development law of AI and AGI evolves directly into general AGI influencing AI, and AGI is the next stage of development of AI, a coordinate point in the history of intelligence development, therefore, AGI is the inevitable path of AI development.(Fig. 2)

#### 3.4 Does AGI threaten human subjectivity ?

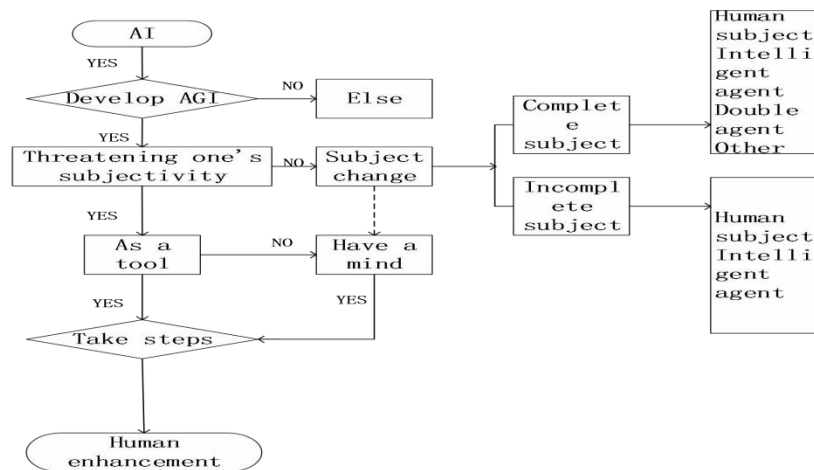


Fig. 2. AGI and the development technology path of human subjectivity

### 4. Discussion

Creation is the act of linking two or more concepts or things in a certain way and subjectively producing something that is objectively and universally acceptable to achieve a certain purpose. New means "to appear for the first time as opposed to "old"; to change the nature for the better as opposed to "old". Suppose AGI can create "new" things. Assuming that AGI is creative, the result of its generalization should be something "new". Take the current top-level ChatGPT as an example, ChatGPT generates generalization capability by building models through various processes such as instruction learning and large-scale training, as well as improving algorithms, computing power and data set collection capabilities. (Fig. 3)

First, ChatGPT collects data up to 2021 and does not collect information at the current stage, so it will be a situation that cannot be answered due to the lack of information, so the generalized scenes are just a patchwork of information.

Second, when the data is augmented, more data is carried out through the original picture in the form of constant transformation. For example, changing the angle of the original image, changing the random noise added to the original image or not, changing the size and deformation of the original image, or intercepting part of the original image, through the above different forms become a common data and expansion approach. As shown in the figure, the new image produced by interception ( Fig. 5 ) and mirroring adjustment (Fig. 6) still has no essential change from the original image (Fig. 4)

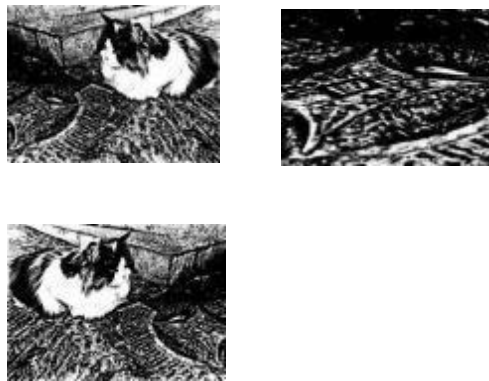
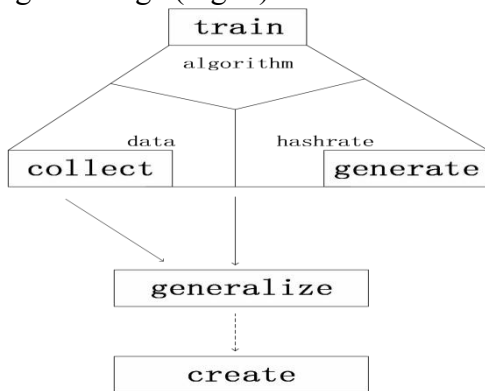


Fig. 3.AGI generalization technique diagram Fig. 4.363×273 Fig. 5.365×279 Fig. 6.361 ×278

**4.1 Will AGI create "new" things in visual technology?**

The innovative ability to analyze artificial intelligence with computer vision technology is a simulation of technology through epiphenomenal and macroscopic functions. The method is to obtain a clear image that is easy to process by measuring the object, thus forming an image under the sensor projection of the 3 D object to facilitate image acquisition. Which uses A/ D converters to generate PC capabilities. The innovative ability to analyze artificial intelligence by computer vision technology is a simulation technology through epiphenomenal and macroscopic functions. The method is to obtain a clear image that is easy to process by measuring the object, thus forming an image under the sensor projection of a three-dimensional object to facilitate image acquisition. In addition, three-dimensional recovery of image texture, edge points, grayscale, is recorded through the camera for recognition, and finally useful information is identified and analyzed to draw conclusions. Therefore this technology is usually used in a wide range of fields for locking and accurate location identification. In this process, the nature of the original image does not change the conditions.As shown in the Fig.

**4.2 Will AGI create "new" things in visual technology?**

The prerequisites are(TABLE I) :

$$P(T)=1-P(F);P(P)=1-P(N)$$

It is known that:

$$P(TP)=P(T) \cdot P(P)$$

$$P(FN)=P(F) \cdot P(N)$$

$$P(FP)=P(F) \cdot P(P)$$

$$P(TN)=P(T) \cdot P(N)$$

Thus, the following four scenarios arise after generalization( TABLE II) .

Table I. Classifier Sample Analysis Result Prediction Table

TRUE POSITIVE( TP)	FALSE NEGITIVE( FN)
FALSE POSITIVE( FP)	TRUE NEGITIVE( TN)

TABLE II. Agi Cognitive Analysis Table

Case	The cognition of AGI
1	AGI recognizes that it can create true propositions
2	AGI recognizes that it can create false statements
3	AGI cannot recognize that it can create true propositions
4	AGI cannot recognize that it can create false statements

### 4.3 The paradox of subject and model

Despite the ideal model, the differences with the subject are ignored. Firstly, it is hard to build human trust with data; secondly, human emotion cannot be data- driven; thirdly, human experience cannot be preserved for a long time through data; finally, the model becomes an instrumental rationality, which predicts the subject with rationality and breaks the fact that human is a living and dynamic being. This is the gap between ideal and reality, and the conflict between subject and model. And this is precisely the effort and measure that digital identity makes to protect human subjectivity. The production and life of human are free and uncertain, and the individual thoughts, consciousness and behavior of human cannot be foreseen. “Kanarik and colleagues have shown that combining AI with human experts is a fruitful strategy, but that careful timing is crucial to its success.”<sup>4</sup> By applying AI simulation to connect the relationship between human and AI, however, the process can also produce other situations, such as the continuous simulation of humans in the process of chasing technology, which will show a gradual loss of subjectivity and a trend of gradual objectification of personhood.( TABLE III)

TABLE III. Agi Creative Analysis Table

AGI Creative Evaluation		New Things To Evaluate				
		Characteristics ofNew Things		Creative Attributes		
		Opposite of"Old"	Undergoes fundamental changes	Social historicity	Subjective agency	Conforms to the laws of development
1	Creativity of AGI after generalization	×	×	×	×	Unknown
	Creativity of AGI visual technology	√	×	×	×	√

2	Propositional evaluation of AGI generalization results	×	×	×	×	×
3	Paradox of Subject and Model	√	×	×	×	×

### 5. Conclusion

This study argues and analyzes the problem of the relationship between AGI and human subjectivity, and forms a construction method of causal analysis. It can effectively promote the logical relationship between the two analyses and provide a new reference for the development trend of both. At the same time, in the future development process, AGI and human subjectivity will continue to be built and improved, which takes a long time. The relationship between the two will also be explored and researched in depth in data extraction and knowledge discovery, providing new ideas for the future development of human beings. According to whether AGI is able to innovate new things, the evidence reveals that the new things after AGI generalization do not change essentially, and their propositions may not be true propositions, revealing a gap in the paradox of subjects and models, which is currently unbridgeable. At this research stage, AGI and human subjectivity moment changes, and its descriptive evidence is not sufficient, so it is insufficient in the application of resource development.

Next, logic finds that a correct view of human and artificial intelligence does not exist in opposition, but complements each other. The theory should use dialectic to analyze the relationship between AGI and human subjectivity, and solve the problem of rational view of AI in a critical and revolutionary spirit. The unity of human historical development is emphasized by the principle of wholeness, while AGI is only a stage of human historical development. Technologically, the future focus should be on mastering technology, transforming technology, and the field of innovative technological development, balancing the relationship between technology and ethics. At the same time to avoid human arrogance and to accelerate the development of human enhanced technology, retaining the subject to reflect the ideological discernment and the quenching of the essence of morality and the temperature of humanity.

### 6. Acknowledgment

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### 7. References

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