A Treatise on Creative Artificial Intelligence Ritvik Singh Word Count: 1212 The field of Artificial Intelligence (AI) has progressed at an unprecedented rate, allowing for a multitude of breakthroughs. Its multifaceted nature has allowed for a myriad of applications. Some of the more impressive results of AI can be seen through its ability to compose musical pieces, write poetry, or even create scenic landscapes. It has gotten to the point where AI-generated art is almost indistinguishable from human generated art. However, this brings up a very important question, whether AI can be considered to have true creativity. I will argue that true creativity cannot be achieved by AI because of its inability to ascribe a purpose to its creations.

I first define creativity as the ability to create something with a purpose. When an artist creates a work of art, there is a purpose behind their work. For example, a poet creates a poem to convey an idea and this would be reflected in the word choice, rhyme, tone, rhythm, metre, etc. Likewise, a musician would create a piece of music to also convey something, be it an emotion or an idea, and this too, can be reflected within the structure of the piece. Overall, there is a reason behind the creation of an artist's work. The work of art has a purpose, be it for conveying an idea, making something aesthetically pleasing, alleviating boredom, or simply for monetary value. Even in art where the interpretation is left up to the observer, or art that is meant to symbolize no meaning, it still has a purpose as it has been created to convey something, or to simply be something. The artist has, before even creating the art, already endowed it with a purpose. Thus, it must be recognized that the criteria for creativity is not simply just the ability to create something, but also to bestow a purpose upon it.

Aristotle soundly concludes that human being is something that is metaphysical as it is comprised of both a body and a soul. He says "For the body is not something predicated of a subject, but exists rather as subject and matter. The soul must then be substance as *form* of a natural body which has life potentially. Substance is actuality. The soul therefore will be the actuality of a body of this kind", (Soul and Body, Form and Matter, *De Anima*, 213). Aristotle establishes the existence of both a body and a soul. Humans are made up of material and this consists of the body. These materials are then *actualized* by the soul. In other words, the body is the physical whereas the soul is the metaphysical. This is what distinguishes the mind from the brain. Whereas the brain is simply the physical, an amalgamation of tissue and nerve impulses, the mind is something that transcends the physical. Aristotle states that the human being consists of both the body, and the soul. This ultimately shows how human being is metaphysical.

True purpose cannot come from something that is purely physical. An inanimate object has no intrinsic purpose. A canvas has no inherent purpose, however, a painter may choose to endow it with a purpose by painting on it. Thus, an inanimate object can only be given a purpose by an entity that can conceive of a purpose to give it. In other words, it can only be given a purpose by something that is metaphysical. This is because consciousness, or something that has the capacity for thought, can only exist through the mind, something that transcends the physical. In fact, it should also be noted that purpose itself is metaphysical. It is not concerned with the physical make up of an object, but rather, deals with the reason for the object to exist the way it does. In this way, it too, transcends the physical. However, that which is in the effect must be in the cause. If an entity causes something else to have purpose, then it follows that the entity must also have the same properties as the purpose, namely, it must be metaphysical. Thus, a painting is not automatically endowed with a purpose, but rather, it is the painter who conceives of the purpose to confer onto the painting. Humans are able to create things, and are also able to confer a purpose on to them due to their metaphysical nature. This satisfies the criteria for creativity, hence why humans can be creative.

AI, unlike human being, is merely physical. An AI is strictly limited in its programming. The programming is simply the optimization of a convoluted multi-dimensional function. The way a neural network is trained in AI is through trial and error and accordingly adjusting certain factors within its complex function. This means that whatever it creates is ultimately a result of trial and error and has no real purpose. Similar to how the brain consists of chemical impulses, a program is merely a result of electric impulses and cannot be anything more. Even at a more fundamental level, it has no being as it simply lacks the ability to transcend the physical into the metaphysical. That which is physical cannot all of a sudden become metaphysical. As such, it cannot confer a purpose onto the program, it does not necessitate the program to bear the same properties as the purpose. And so, while the program may in fact have a purpose, it cannot confer a purpose onto what it creates as to do so would require the program itself to be metaphysical. As such, it is unable to meet the criteria for creativity because while it can certainly create a multitude of things, it cannot pass on a purpose.

Here, I would like to make another important distinction. With the art that is generated from AI, we must not be quick to confuse the aesthetically pleasing aspects of computer generated art and creativity. While even the AI generated compositions can be seen as virtually indistinguishable from human compositions, there is still no creativity in them. The programmer may have endowed a purpose onto the art by programming the AI in such a way as to allow for patterns that are pleasing to an observer, and as such, can be considered creative. However, in no way does the AI become creative as again, it was not the agent that conferred purpose onto the work of art. It is evident that AI does not have the possibility of being truly creative. If creativity is defined by the ability to create something with a purpose, it then follows that while AI can certainly create, it cannot do so with a purpose. This is due to its inability to transcend the physical which ultimately means that it cannot endow a purpose onto anything else. It is merely the sum total of its electric impulses. Purpose is inherently metaphysical and so, AI's inability to ascribe purpose does not allow for it to meet the criteria for creativity. Only that which is metaphysical can endow onto an object properties that too, are metaphysical. That being said, humans, which exist as metaphysical beings, have the ability confer purpose which is why they are able to achieve creativity.

Works Cited

Aristotle. "De Anima." *Western Philosophy: An Anthology*. Ed. John Cottingham. Oxford: Blackwell Publishing. 2008. 210-214. Print.