

Understanding Artificial Intelligence as the Gateway to Human Utopia

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Abstract

The purpose of this interdisciplinary paper is to complete multiple tasks in relation to the human mind and the interaction with AI as well as its impact on societal structures. These include 1) the analysis, comparison, and contrasting of the human mind and AI, 2) in-depth research, application of, and interaction between multiple philosophical perspectives regarding the human drive to complete activities and the purpose of such activities, 3) evaluation of the implications of AI on our current ethics systems and other aspects of our world such as science and education, and 4) construction of an argument on how AI is vital for the progress of humanity into potential utopia. The main closing statement is that the key feature that separates humanity from AI, the ability to partake in an activity for the activity's sake, is similar to game-playing, which may be the ultimate purpose of all activities in life. Despite some of its flaws, AI could very well serve as our final act of labor and work to push us into a human utopia based upon game-playing, so long as we allow it to cause drastic changes in all aspects of life and transform our educational and scientific structure. Just as the world changed with the Scientific Revolution in the 17th century, so too the world must now change with the Age of Artificial Intelligence to help us achieve the golden Age of Humanity.

Keywords: artificial intelligence, humanity, scientific revolution, game-playing, work, intrinsic motivation

Understanding Artificial Intelligence as the Gateway to Human Utopia

As a relatively recent invention, artificial intelligence (AI) tends to stir up intrigue due to its potential in the future. The notion of AI integrating into our lives introduces significant metaphysical and epistemological concerns. One of the most prominent debates revolving around AI is on the idea of whether it can be considered as conscious. If AI were able to be aware of its own thoughts, it would transform our perception of what it means to be human. This project conducts a comparative analysis of AI and the human mind. It would be beneficial to evaluate whether the process of learning and experience of knowledge are similar between the mind of machines and the mind of man. Referring to the Gettier problem and applying this to artificial intelligence could potentially reveal whether there is an element regarding experiences or knowledge that is shared between the human and artificial mind, or if it may become a sort of glorified version of the Chinese Room Thought Experiment.

When creating AI, humans are attempting to mimic the structure and functioning of our own minds. This alone brings up a variety of philosophical implications and concerns about our society and ethics. For example, if humans are successful in the creation of an artificial intelligence that is capable of perfectly mimicking the human mind, the metaphysical and ethical question of whether we are able to, or should, attribute personhood to it arises. Additionally, the possibility of a machine that is fundamentally built on the foundations of the human epistemological framework introduces the necessity to address whether AI should be attributed this epistemology, or if it would be a mistake to do so. It is possible that the language we use to define our epistemological framework and refer to concepts such as knowledge and experiences may not be applicable to AI, much like the process of anthropomorphizing animals with human

terms, thought processes, and emotions. Even then, there is the concern whether any epistemological frameworks of biological beings can be attributed to AI at all.

In utilizing the concepts learned through my interview with Dr. Curtis Larsen of Utah Tech University's Computer Science division, as well as drawing upon further research on AI, this research project will explore the realm of AI and the philosophical impacts and concerns that it introduces. This research project hopes to touch on and utilize several philosophical perspectives to address the metaphysical, ethical, and epistemological concerns that the rise of AI presents. Among these perspectives are Suits's philosophy that life's ultimate purpose is game,-playing, Arendt's concept of the human condition, the Felt Tip Marker Psychology Study, Kuhn's analysis of the philosophy of science, as well as Gettier's account of knowledge. The intention of this research project is to apply these perspectives to the discussion of AI. In addition to this, it will evaluate the epistemological framework of AI and its version of experiences and knowledge, as well as determine whether a new language and epistemological system outside the limits of human epistemology is necessary to address AI appropriately. Finally, the hope of this project is to also discuss AI within the context of Arendt's philosophy regarding work versus labor as well as Suits's philosophy of games and how these perspectives on life may be the solution to addressing our concerns regarding AI integration within our workspace while enhancing humanity's outlook on our own purpose.

Artificial Intelligence and the Human Mind

Artificial Intelligence Defined

When one thinks of AI, images that come to mind might resemble stereotypical rogue machines with human capabilities found in science-fiction films, such as *The Matrix* and *iRobot*.

AI is often perceived as a foreign species due to the advanced engineering and complex programming that is required to create one, along with the fact that it is a non-biological and artificial creation. It is therefore detached from any sense of relatedness to the human species, although there may be a spooky feeling of familiarity for many individuals.

However, Stanford University professor John McCarthy, who coined the term “Artificial Intelligence,” officially defined it as the field in which one studies and attempts to engineer intelligent computers:

It is the science and engineering of making intelligent machines, especially intelligent computer programs. It is related to the similar task of using computers to understand human intelligence, but AI does not have to confine itself to methods that are biologically observable. (IBM, n.d.)

A decade earlier, in his paper "Computing Machinery and Intelligence" Alan Turing gave way to discussions on whether machines are able to think or act as humans. As the father of computer science, Turing eventually proposed an evaluation of intelligent machines by having a human interrogator attempt to discern whether a response was in fact from the machine or a person, appropriately termed the “Turing Test” (IBM, n.d.).

Sometime afterward, the textbook *Artificial Intelligence: A Modern Approach* by Stuart Russell and Peter Norvig offered different definitions of AI. The textbook claimed that AI could be considered as systems that 1) “...think like humans,” 2) “...act like humans,” 3) “...think rationally,” and 4) “...act rationally” (IBM, n.d.). We see here how AI has transformed from being defined as a field of study into being a type of artificially intelligent being. Since then, as we have advanced in our attempts of creating AI, we have only broadened what AI truly is and

what it means to humanity. For example, Encyclopædia Britannica defines AI as “...the ability of a computer or a robot controlled by a computer to do tasks that are usually done by humans because they require human intelligence and discernment” (Encyclopædia Britannica, 2023).

One thing, however, is seemingly shared among all definitions of AI, this being the fact that they all refer to humanity’s possible ability to artificially recreate the human mind.

Another aspect of AI to note is that the terms “Artificial Intelligence” and “Machine Learning” are often mistakenly used interchangeably, but they refer to separate concepts. Machine learning is a prerequisite of AI, as it is “...the method to train a computer to learn from its inputs but without explicit programming for every circumstance. Machine learning helps a computer to achieve artificial intelligence” (Encyclopædia Britannica, 2023). With this being stated, it would also be noteworthy to recognize that machine learning is often considered to be a sub-field of AI (IBM, n.d.).

Understanding Artificial Intelligence

There are several methods by which machine learning can take place. All machine learning or AI must have an objective, or utility function. The utility function is a system programmed within AI that serves as a representation of certain ideal values assigned to specific actions that the AI may take (C. Larsen, personal communication, November 11, 2022). This allows the AI to evaluate whether an action that it has taken or soon will take could lead to the desired outcome in order to achieve the objective with the most value. Usually, the utility function is assigned values by the programmer so that the AI may be told what the objective it needs to strive for is, since it cannot do so for itself yet (C. Larsen, personal communication, November 11, 2022). One of the tasks programmed within AI is to learn or find a set of actions it can take to maximize achieving

that desired objective. In order to do so, it can take one of several learning approaches (C. Larsen, personal communication, November 11, 2022).

One such approach of machine learning is known as supervised learning. In supervised learning, the AI is usually given a certain set of data and is also provided with the answers for each respective data point (C. Larsen, personal communication, November 11, 2022). The AI then utilizes the known variables associated with the data to find the patterns across all relevant data sets that it was given in order to predict or determine an appropriate outcome or answer to the initial problem it was assigned to solve (C. Larsen, personal communication, November 11, 2022). To illustrate an example, let us imagine an AI was given a data set describing specific features of a house such as square footage, the number of rooms, and the presence or absence of a pool, and it was also provided the value of the house, which would be the price it was sold for. If this AI was given many sets of information regarding houses and each house's respective price, then it would eventually recognize the correlations between house features and price range. By analyzing these patterns, it will have learned how to price houses. When the AI accomplishes this, one could simply feed information of house features to the AI, and the AI would produce an acceptable pricing for which that house could be sold.

Another style of machine learning is called unsupervised learning, which is utilized when the programmer is unable to give the AI any specific set of answers related to the initial problem that requires solving (C. Larsen, personal communication, November 11, 2022). For example, consider a television streaming service that would like to offer suggestions on what you should watch. This type of AI would analyze what television shows have been watched by all users of the streaming service. Then, using unsupervised learning, the AI would begin to categorize or

group viewing activities and behaviors of users, and attempt to place you into one of these many groups based on your past viewing activity (C. Larsen, personal communication, November 11, 2022). If your viewing activity overlaps with any other individuals or groups, the AI will assume that you will enjoy the other television shows that they have viewed but you have not yet. It has attempted to solve the problem of what to recommend to you by evaluating and categorizing the overall trends and patterns of attributes across its entire collection of data (C. Larsen, personal communication, November 11, 2022).

Finally, there is reinforcement learning, which serves as a sort of middle ground between the supervised learning and unsupervised learning methods (C. Larsen, personal communication, November 11, 2022). To best illustrate reinforcement learning, suppose that a programmer has assigned an AI the task to complete the video game Super Mario Bros. The programmer will have created a utility function that would have values assigned to certain degrees of performance by the AI (C. Larsen, personal communication, November 11, 2022). In this scenario, the programmer does not feed the AI any information regarding the game rules, how it is played, or how to win. Instead, the AI will interact with the video game and learn by trial and error (C. Larsen, personal communication, November 11, 2022). Each time the AI fails to complete the game, it does not receive the “reward” in the form of the value assigned within the utility function. Once it succeeds in completing the game, it will be rewarded with a certain value depending on its performance. The AI will learn that the actions it took to succeed will lead to the reward, and it will attempt to do so again. In doing so, it may be more effective or quicker in accomplishing the task, so it will be given a higher value as a reward. It then begins to learn that completing the game with fewer errors and faster times leads to the best outcome according to the utility function (C. Larsen, personal communication, November 11, 2022).

In addition to the various approaches of machine learning that can occur, there are also multiple possible exploration styles that can be utilized. One such exploration technique is a branch-like logic structure known as a search tree. The search tree is made up of connected conditions and relevant pieces of information (C. Larsen, personal communication, November 11, 2022). Beginning at the root, the AI moves through the search tree and is eventually confronted with multiple logic paths to follow. Each path choice made by the AI progresses it further down the search tree until it reaches another point at which multiple paths are available. The AI will either soon come to a conclusion or reach a dead end before restarting the whole process (C. Larsen, personal communication, November 11, 2022). Two prevalent types of search trees are depth-first and breadth-first. The depth-first search tree consists of the AI choosing a specific logic path and evaluating every option that it would come across in that path (C. Larsen, personal communication, November 11, 2022). When it is finished, it will backtrack and choose another path, again proceeding to explore every option in that specific path until it is finished and moves on to the next path to explore. The breadth-first search tree works similarly, but rather than repeatedly choosing a specific path to explore in depth, it consists of exploring every choice in one level at a time then moving to the next until every option on every level has been explored (C. Larsen, personal communication, November 11, 2022). However, these two search trees are not without flaws. For both search trees, memory capacity becomes an issue as the AI would need to be able to recall every piece of information it encountered in order to properly remember and solve a problem without having to retread its steps repeatedly or processing through each thing too slowly when recalling everything (C. Larsen, personal communication, November 11, 2022).

Future Artificial Intelligence Capabilities

Despite some current limitations in AI technology regarding data capacity that we may encounter in our present time, there are some exciting possibilities that may be readily available to overcome these limits sometime in the near future. One such example is quantum computing, which uses different laws of physics entirely in order to complete computations (C. Larsen, personal communication, November 11, 2022). The usual method of computing in machine learning, and by extension in AI, is deterministic. This deterministic computation only allows limited amounts of logic operations to occur at a time (C. Larsen, personal communication, November 11, 2022). The search tree previously explained is deterministic in the way it would take specific actions at a time moving throughout each choice branch. Quantum computing, on the other hand, utilizes probabilities of objects being in certain conditions at any given time (C. Larsen, personal communication, November 11, 2022). This process is exponentially faster as it can jump to an assumed conclusion instead of following more linear reasoning processes to determine the correct conclusion, but it is also much more susceptible to errors and reaching the wrong conclusions (C. Larsen, personal communication, November 11, 2022). The machine learning process consists of acting randomly on many options until the generalized experience leads the AI to recognize the choices or actions taken that provided the most successful patterns based on the likelihood of probabilities (C. Larsen, personal communication, November 11, 2022).

Another theoretical possibility for AI, yet physically unachievable at the moment, is the ability to evolve and improve upon itself based on its own experiences and knowledge gained. For this to be feasible, the AI needs to have a utility function built within it that encourages the

directive for learning (C. Larsen, personal communication, November 11, 2022). This directive would be one that tasks the AI with the objective of creating newer, more advanced, complex directives based on the AI's own exploration experiences, without the original directive overpowering or hindering the AI's exploration process in the first place (C. Larsen, personal communication, November 11, 2022).

One hypothetical example of a directive that the AI could be tasked with is to create new AIs. Although this theoretical scenario would not be feasible to engineer anytime soon, it is a possible invention. A program that is designed to design programs with various objectives is possible if the original parent AI was programmed with the appropriate utility functions that rewards it whenever the AIs it created complete their objectives (C. Larsen, personal communication, November 11, 2022). With this hypothetical AI, it would constantly be creating improved AI, better than the last and even far superior to the original itself. As fascinating as this idea is, it is currently unknown whether AI can create or adjust its own utility functions without a human programmer setting it in the first place. Additionally, it also brings up the issue of whether the values in the AI's utility function are appropriately set, and whether such a utility function would require another utility function overseeing and determining the adjusting desired outcomes for the AI programs that it creates (C. Larsen, personal communication, November 11, 2022).

Regardless of these possible future versions of AI, the shortcomings still remain the same as those that we are currently developing today. All AI, in the context of what has been discussed within this paper, must have an objective, either binary or subjective, that it needs to be tasked with to solve or complete (C. Larsen, personal communication, November 11, 2022). Today's AI

is programmed with objective-based language that determines the utility function and tasks to accomplish. The objective is vital for the AI to take action and complete any given action. Even the hypothetical parent AI along with each of its own created superior offspring AI would need the objective of creating superior offspring AI to function.

Artificial Intelligence and Humanity: Epistemological Differences

The discussions regarding the many possibilities arising within the field of AI and its capabilities bring forth the question of whether it can be assumed that the human mind and AI share the same epistemological framework, much less similar logic and reasoning processes. Before moving forward, it is worth noting that AI is a massive, vague field. For the purpose of this paper, I will focus on a small area, as well as the vocabulary and assumptions grounded in the foundations of my interview with Dr. Curtis Larsen regarding a basic comparison between the human mind and AI. I am aware that there are many other fascinating discussions that delve much further in depth on this topic, but for this project I am only discussing certain things about this particular AI framework through its response to the Gettier Problem in contrast to the human analysis of the problem.

In comparing the human mind and AI, it quickly becomes quite evident that AI and even simple machine learning programs are structured after the human brain. Machine learning programs and artificial intelligence nowadays have neural networks built into them. Neural networks are essentially artificial neural networks that are structured after and mimic the human brain and nervous system (C. Larsen, personal communication, November 11, 2022). With enough connections between pieces of information, one could train the artificial network to recognize certain inputs and their respective outputs through some supervised learning (C.

Larsen, personal communication, November 11, 2022). Constructing a machine learning program that functions in this method will eventually become a larger, complex neural network that holds all the information and is able to process and interpret incoming data as well as produce pieces of information based on the connections between concepts learned (C. Larsen, personal communication, November 11, 2022).

This is not too different than how the human mind operates. The key difference between AI and the human mind is that AI is able to use its neural network to process information and produce answers to any given problem, despite our inability to understand the exact process by which it does so (C. Larsen, personal communication, November 11, 2022). It is not that humans lack the capability to reason as AI does, but that AI logic is governed by complex, overlapping mathematical computations. Humans are simply unable to use that specific process of thought and reasoning, despite the logic and conclusions being similar between the human mind and AI. All developments in the field of AI have been directly influenced and impacted upon by the discoveries and observations we have made regarding human learning within academic fields such as psychology and cognitive science. AI mimics human reasoning (C. Larsen, personal communication, November 11, 2022).

Despite our inability to understand how AI may reach its conclusions, humans have one ability that AI has yet to achieve, and that is the capability to change our own objectives at will. For example, consider the paperclip thought experiment proposed by Bostrom (Gans, 2018). In this thought experiment, an AI is given the goal to complete the menial task of producing paperclips, and this AI has the ability to learn and adapt to its goal of creating paperclips out of any resource that would work (Gans, 2018). However, due to its single-minded utility function of

creating paperclips, the AI has used up all resources in doing so. However, this does not stop the AI, as it simply moves on to other resources until humans become involved in order to stop it (Gans, 2018). The AI realizes that we are attempting to prevent it from completing its objective, so it becomes focused on its own survival in order to continue producing paperclips (Gans, 2018). To ensure its survival, the AI begins defending itself against humanity and soon a war over resources occurs, which the AI will most likely win. Now that it has learned it must fight humans for resources, it concludes that humanity is a threat to its utility function (Gans, 2018).

Although this paperclip thought experiment seems to be ridiculous and purely hypothetical, it does hold one vital truth about the nature of AI, which is that it cannot change its utility function on its own like humans do when the objective no longer serves the community. The distinction between AI is further revealed when we refer to the Gettier Problem.

The Gettier Problem was originally proposed by Gettier as a challenge to the Justified True Belief theory of knowledge, which claims that knowledge essentially consists of simply justified true beliefs. However, the Gettier Problem argued that one may hold a true belief that is solely derived from a justified false belief. In doing this, Gettier proves that justification for a belief or the belief being true does not constitute knowledge (Gettier, 1963).

An example of a Gettier problem and a human response to such a problem is as follows: let us assume that you are waiting for a meeting with an employee. As you wait, you look out the window for his yellow Mini Cooper to drive past the window on the way to the parking lot. Eventually, the yellow Mini Cooper does pass by the window, so you tell your assistant to allow the employee in the office when he is ready. When your employee walks into the building, your assistant directs him into your office and you have your meeting. However, unknown to you,

your employee did not drive his yellow Mini Cooper to work that day. His car broke down and he drove to work in a blue rental van. The yellow Mini Cooper you saw driving by your window was actually a new employee's car. You clearly had justification in your belief in the form of the Mini Cooper, and your belief ended up being true when your employee arrived at the meeting on time shortly after the Mini Cooper drove by the window. Gettier claims that although you had justified true belief, you didn't have the knowledge (Gettier, 1963).

What was described was a human response to the Gettier Problem, but a machine learning program would react differently. A machine learning program would constantly switch back and forth between outcomes of the problem, attempting to resolve the issue but never able to settle on an answer as one outcome directly contradicts the others. Additionally, during a discussion with Dr. John Wolfe, my philosophy professor, we prompted Chatbot to solve the Gettier Problem, but it responded with a rather political claim:

As an AI language model, I do not have personal beliefs or opinions. I am designed to provide information and knowledge on various topics, including the Gettier problem and its proposed solutions. Philosophers have debated the most probable solution to the Gettier problem for many years, and there is still no consensus on a definitive solution. It ultimately depends on one's philosophical perspective and the criteria for what counts as knowledge. (ChatGPT, personal communications, March 28, 2023)

Essentially, it stated that there are many potential solutions to the problem but that it was unable to provide an answer due to it not being its place to do so.

Despite Chatbot being able to write out seemingly well-thought-out and creative responses on a multitude of prompts by anyone who can access it online, it was rather odd that it

suddenly shut down the discussion on the Gettier Problem and could not take any particular stance on the issue. This is the central issue with artificial intelligence, in that it is seemingly bound by the laws of logic much more strictly compared to humans, who seemingly can jump to illogical conclusions regardless of any evidence supporting or contradicting the fact.

Additionally, one must remember that all information that AI may produce is dependent on the information it was given or learned, which in turn is almost always produced by humans. This can be problematic as if the Chatbot were to be asked whether it would be acceptable to take a loved one off life support, it would give a rather biased answer according to the data it was given and the information it could find. This issue is exacerbated if Chatbot had learned that you were already searching online about one possible decision outcome, as it may tailor its response according to what it thinks you may be searching for, which would not be a true, neutral, professional opinion.

It seems that the Gettier Problem poses an issue to machine learning algorithms and AI. The AI make inferences based on the data they are fed and will continue to try and resolve the paradox to no end. Since there are several “truths” present, the AI will see this as a contradiction and conclude that both must be incorrect all the while seeking the correct answer. This could be an interesting perspective on the Gettier Problem, since humans most likely try to justify their beliefs but a machine would simply conclude through logical reasoning that the problem is illogical and therefore the answers presented are incorrect. Where the machine runs into a barrier, however, is when they are prompted to seek a single correct answer, which they are doomed to never find. Humans have the advantage in this aspect, since our susceptibility to assuming an answer allows us to accept a final status of the paradox, whereas a machine would be stuck solving the problem or simply shut down altogether.

AI seems to be a mirror of human logic and reasoning, in both advantages and flaws. Although the process of machine learning itself is different than our process of learning, the logic and reasoning that machines utilize is similar to ours. As the creators, humans have imposed human laws of logic and reasoning onto machines, so most machine learning mimics human learning. After all, how would a mind limited by its own epistemological boundaries create an entirely new epistemology for another being? It seems that any non-human mind created by humans is destined to be bound by the same epistemological laws as us. Following this line of thinking, we can also assume that even if we end up creating an AI whose objective is to create improved AIs, every successor would still be restrained by the laws of logic and reasoning given to them by the original AI, which in turn was given its logic system by humans. In our image, we will have created them.

Distinguishing Between Artificial Intelligence and the Human Mind

There is one significant difference between humans and all current AI, and that is humanity's ability to create, change, and reflect on their own objective functions. Current AI are incapable of moving past their directives, although advancements in AI technology in the distant future may rid of this problem (C. Larsen, personal communication, November 11, 2022). Since we create AI after our own understanding of ourselves and our psychology, it seems a bit foolish to prematurely assume that AI will never reach the same level of thinking as us, should we continue developing them. This ability to change the direction or purpose of exploration seems to be the missing aspect in current AI that divides it from humanity.

Another feature that distinguishes between the human mind from AI, despite AI being modeled after human logic structures and reasoning, is that AI is entirely focused on achieving

its purpose, destination, or conclusion (C. Larsen, personal communication, November 11, 2022). The unique human element seems to be the ability to easily state that the process of thinking itself is the real purpose, regardless of whatever conclusions we may arrive at and whether our logic is challenged or flawed much like what was seen in the Gettier Problem.

Life is a Game, Said the Grasshopper

In his book, *The Grasshopper: Games, Life, and Utopia*, Bernard Suits challenges the typical view of what a perfect society would look like, and proposes that all meaning of life is derived from game-playing. Game-playing, according to Suits (2017), is the ultimate end in of itself and therefore is the only human activity that corroborates with the ideal of human existence, since games themselves are at its foundation meaning-creators.

In this book, Suits weaves a narrative consisting of a grasshopper who serves as a sort of representative of Socrates in his dialectic. The Grasshopper has been given a vision of a perfect Utopia and describes this Utopian society to his audience, Scepticus and Prudence. In doing so, Suits masterfully lays out the definition of games and constructs his Utopia through the Grasshopper's dialogues. Through the character of the Grasshopper, Suits (2017) writes that:

To play a game is to attempt to achieve a specific state of affairs [prelusory goal], using only means permitted by rules [lusory means], where the rules prohibit use of more efficient in favour of less efficient means [constitutive rules], and where the rules are accepted just because they make possible such activity [lusory attitude]. (p. 43)

Before addressing what Suits means by this passage, let us focus on the definitions of goals and means that he provides here. According to Suits (2017), games have four aspects built into them.

The first he mentions is the prelusory goal, which is the state of winning the game. Prelusory goals exist outside of the game and the existence of a game relies on the existence of a prelusory goal (Suits, 2017). As Suits (2017) writes, "...any achievable state of affairs whatever could... be made the goal of a game.... I suggest that this kind of goal be called the *prelusory* goal of a game, because it can be described before, or independently of, any game..." (p. 38). On the other hand, Suits (2017) defines the goal to win the game as a lusory goal of a game, since "...winning can be described only in terms of the game in which it figures..." only after the game has started (p. 39).

Moving on to the means of a game, Suits describes the methods by which one can achieve the goal of any given game, so long as it is permitted by the rules, as lusory means. "Lusory means are means which are permitted (are legal or legitimate) in the attempt to achieve prelusory goals" and they are means that "... are *permitted* without examining the nature of that permission." (Suits, 2017, p. 39). An example of this could be seen in the game of chess. In chess, a given piece can only move in certain directions with specific distance limitations. A chess grandmaster utilizes the lusory means of the pieces' move set in his attempt to win the game. Finally, Suits (2017) describes that in order to be a player and engage in the activity of the game, one must be willing to accept the terms set forth by the game. Suits (2017) names this mindset toward the game as lusory attitude and writes that this is simply "...the acceptance of constitutive rules just so the activity made possible by such acceptance can occur." (p. 43). In simplifying his definition of a game, Suits (2017) states, "I also offer the following simpler and, so to speak, more portable version of the above: playing a game is the voluntary attempt to overcome unnecessary obstacles." (p. 43).

Game-playing Leads to Utopia

The fundamental concept behind being a player in a game includes Suits's (2017) definition of play, which he writes is "...any intrinsically valuable activity" (p. 182). This mindset of finding the intrinsic value of activities is central in Suit's Utopia, as he claims that the ideal of existence for humanity is "...that thing or those things whose only justification is that they justify everything else; or, as Aristotle put it, those things for the sake of which we do other things, but which are not themselves done for the sake of anything else." (Suits, 2017, p. 182). Later in the Grasshopper's dialogues, the philosophical creature begins to define Utopia, and how games play a role in the creation and maintenance of such a society. Speaking through the Grasshopper, Suits (2017) claims that game-playing is a vital aspect of life that makes Utopia possible (p. 188). In such a society that focuses only on game-playing, and assuming that all needs and instrumental activities, that is, activities that are designed to achieve an end, are eliminated in Utopia, there is nothing for humanity to accomplish (Suits, 2017, p. 188-189). "What we need, therefore, is some activity in which what is intrinsically valuable, and where the activity is not itself an instrument for some further end," Suits (2017) writes, "Games meet this requirement perfectly. For in games we must have obstacles which we can strive to overcome *just so that* we can possess the activity as a whole, namely, playing the game." (pp. 188-189). It is the intrinsic worth of the activity itself that grants humanity new meaning in this Utopian society, so that "... a Utopian could engage in all of the achieving activities that normally occupy people in the non-Utopian world, but that the quality, so to speak, of such an endeavor would be quite different." (Suits, 2017, p. 193). Game-playing, in this sense, allows humanity some reassurance that life is still worth living, despite having no ends to achieve due to all needs being met.

Artificial Intelligence and Game-playing

Suits's philosophy of game-playing being an inherently human trait that is necessary for the creation of a perfect society poses an interesting thought regarding artificial intelligence, this being whether AI can intentionally act inefficiently like humans do in games. The answer resides in the Gettier Problem previously discussed. As we concluded on the topic, we noted that a human's response to the Gettier Problem, although the intention is to solve it, is very much like that of a player's response to a game. The Gettier Problem, along with the philosophy of logic, provides the lusory means of the game to achieve the prelusory and lusory goal of solving the dilemma. In abiding by the rules of logic to solve the problem through logic, we are adopting a lusory attitude. In doing so, Suits would argue that those partaking in the Gettier Problem are in fact playing a game for the sake of the act, which is to reason and solve it. This reasoning through the problem to solve it is not a result, but the process of game-playing.

On the other hand, AI seems to be incapable of moving beyond attempting to solve the issue, to the point that it will either continue switching between possible answers forever or simply shut down the problem altogether as it concludes it cannot produce a result. Suits would claim that the machine, although abiding by the lusory means, is not adopting a lusory attitude that will allow it the freedom and realization that it can simply explore possibilities or even produce its own alternatives to the game that is the Gettier Problem.

However, there is one minor flaw to Suits's game-playing Utopian society. No matter how perfect this Utopia could be, there may be some individuals who refuse to adopt the lusory attitude and wish to return to a more result-making lifestyle, due to a myriad of factors such as boredom or a sense of lost purpose. As Suits (2017) excellently puts it, "Life for most people

will not be worth living if they cannot believe that they are doing something useful, whether it is providing for their families or formulating a theory of relativity” (p. 196). Through the Grasshopper, Suits (2017) departs a lesson on the greed of man, the lust for power and to make something of himself that leads to eventual existential suffering, “We might call this state of affairs the Alexandrian condition of man, after Alexander the Great. When there are no more worlds to conquer we are filled not with satisfaction but with despair” (p. 189).

I saw time passing in Utopia, and I saw [them] coming to the conclusion that if their lives were merely games, then those lives were scarcely worth living. Thus motivated, they began to delude themselves into believing that houses made by people were more valuable than houses made by computers, and that long-solved scientific problems needed resolving. They then began to persuade others of the truth of these opinions and even went so far as to represent the computers as the enemies of humanity... And if it had been possible to convince these people that they were in fact playing games, they would have felt that their whole lives had been as nothing—a mere stage play or empty dream. (Suits, 2017, pp. 195-196)

This Utopian collapse is an all too real idea on the forefront of our minds today when we consider the eventual rise of AI. In a society where AI is able to create works of art, manage businesses, evaluate laws, and write academic papers, we can feel the relevancy of humanity slipping away from us, for our technology is simultaneously our *magnum opus* and *memento mori*. As AI becomes more advanced and more integrated within our society, we will see to it that AI begins taking over menial tasks for us, and after that, the important tasks so that we may revel in life and not work, and soon all that is ever created or produced will be by AI. So while

Suits's game-playing Utopia seems feasible, in the end it may come down to humanity being prepared to let go of thousands of years of a result-oriented mindset and forevermore adopt a lusory attitude. Perhaps we are not all that different than the outcome-focused AI, but philosopher Hannah Arendt may have the answer to helping humanity divorce from result-oriented activities in her distinct definitions between labor, work, and action.

The Human Condition: Labor, Work, and Action

In *The Human Condition*, Hannah Arendt discusses the concept of labor and work. Within this book, Arendt lays out the arguments that distinguish *vita contemplative*, the contemplative life, from *vita active*, the active life. Arendt (1998) believes that we, as humans, are meant for more than simply contemplating things, and rather should be "...actively engaged in doing something" (p. 22). In doing so, Arendt (1998) proposes that *vita activa*, all of human activity that occurs in life, is a trinity of human conditions. These human conditions include labor, work, and action. Arendt (1998) writes, "With the term *vita activa*, I propose to designate three fundamental human activities: labor, work, and action. They are fundamental because each corresponds to one of the basic conditions under which life on earth has been given to man" (p. 7). It is important to note that Arendt (1998) makes a case that the human condition is a very different concept than human nature, in which it is what makes us human rather than what is naturally human.

On Labor

First, Arendt discusses labor, and differentiates it from the notion of work. In her work, Arendt challenges the notion of labor and argues that the true boundaries of the meaning of labor and work have become blurred together with the rise of the modern age. With increased focus on

what is necessary to survive, whether a necessity such as shelter and food or something more financial such as a bigger paycheck, humanity has lost focus on why one would labor and why one might work. In doing so, Arendt begins by providing clear, distinguished definitions for labor and work, as well as another concept she terms as action.

Labor, according to Arendt (1998), is a never-ending cycle of activity bound to life and survival itself. Humans undergo labor in order to produce and provide consumables that improve the chances of survival:

Labor is the activity which corresponds to the biological process of the human body, whose spontaneous growth, metabolism, and eventual decay are bound to the vital necessities produced and fed into the life process by labor. The human condition of labor is life itself. (Arendt, 1998, p. 7)

To further deepen our understanding of what Arendt truly means with the term labor, let us construct a hypothetical scenario in which you are a victim of a plane crash over the Amazonian Rainforest. Upon surviving the initial crash, you realize that you and several other remaining fellow passengers of the plane are lost deep in the jungle, with no way of gaining your bearings at the moment. Plane equipment such as the radio is damaged. The first order of action is to survive, and to do so you must consider your biological and environmental needs. Let us assume that you decide to gather the fruits off the trees and hunt for wild pigs to provide meals for the group of survivors. Another plane passenger is tasked with the responsibility of keeping watch at the camp for wildlife predators after an uneventful event involving a Jaguar. One other plane crash survivor begins exploring the area to find a source of safe drinking water.

All of these activities in this thought experiment are activities of labor. Necessary activities that promote the chances of survival. The activity of guarding the camp is labor for meeting the necessity of safety. The search for water and the gathering and hunting for food are considered acts of labor to meet our biological needs. These activities are deemed as labor in Arendt's eyes due to the reason for committing to the activities: survival against environmental and biological dangers. However, this is all that labor is good for. Labor, according to Arendt, is a never-ending cycle, as can be seen in our Amazon Rainforest plane crash thought experiment. In order to maintain our survival in such a setting, you and your fellow plane crash survivors must continue to gather resources or keep watch for the camp to avoid a Jaguar dragging away another survivor in the group, or even to go out every day in search of fruits or meat for food. This is what Arendt defines as labor, the continuous cycle of activity to ensure survival. However, we humans can never break free from this cycle of activity so long as our needs remain necessary to be met.

On Work

Work, on the other hand, can address the issues that labor cannot. According to Arendt (1998), work is activity that moves beyond labor in order to improve our existence, to better provide for our needs so that we do not have to be as focused on survival alone. Work, Arendt (1998) states, is activity that produces a result that is artificial and lasting beyond the individuals themselves:

Work is the activity which corresponds to the unnaturalness of human existence, which is not imbedded in, and whose mortality is not compensated by, the species' ever-recurring life cycle. Work provides an "artificial" world of things, distinctly different from all

natural surroundings. Within its borders each individual life is housed, while this world itself is meant to outlast and transcend them all. The human condition of work is worldliness. (Arendt, 1998, p. 7)

Returning to our previous Amazon Rainforest thought experiment, let us assume that you and the other survivors begin gathering resources from within the jungle such as vines, wood, and leaves to construct shelter and set up camp. One other crash survivor in your group has the idea to construct a trough out of a fallen tree trunk to collect the constant rain for drinking water rather than trekking a day to the nearest water source. Another in the group tasks himself to fix the radio and also eventually creates a signal tower out of the plane wreckage parts. He ends up creating multiple sets of makeshift walkie-talkies and distributes them among the group so as to maintain contact with those who explore past the known areas. These efforts eventually lead them to finding civilization and getting rescued. However, it is worth noting that at this point in time, the survivors are thankful to be rescued not for survival, but rather for personal reasons such as returning home. They had already achieved the means of survival at their camp.

These activities would be deemed as work by Arendt, since they are not necessary for survival, but improve the survivors' lifestyle. The survivors' works have transformed their little jungle area into a sustainable human settlement like Arendt stated work would do. The artificial creations of the survivors such as the walkie-talkies, radio tower, and improved housing and settlement, all are results of work that will endure throughout civilization. For example, if we imagine that in our thought experiment our survivors are rescued, but years later another plane crashes over the same site, we can assume that the labor of the previous survivors will not mean much to them, but the work that they had done will still be around and impact them, such as the

housing in which the new survivors can now move into. As we can see now in real life, artificial creations such as these end up making a significant impact for years to come, for example the creation of inventions such as the tv and radio played a role in the eventual creation of the computer, which in turn is leading to the creation of artificial intelligence today. Each of these creations has significantly transformed the natural world into a human world, and along the way humans have gained a sense of freedom from the never-ending cycle of labor.

On Action

In separating the concepts of work and labor, Arendt (1998) proposes that there is another type of activity, which she terms as action. Action, she states, is activity that is inherently social and promotes change within society:

Action, the only activity that goes on directly between men without the intermediary of things or matter, corresponds to the human condition of plurality, to the fact that men, not Man, live on the earth and inhabit the world. While all aspects of the human condition are somehow related to politics, this plurality is specifically *the* condition—not only the *conditio sine qua non*, but the *conditio per quam*—of all political life. Thus the language of the Romans, perhaps the most political people we have known, used the words “to live” and “to be among men” (*inter homines esse*) or “to die” and “to cease to be among men” (*inter homines esse desinere*) as synonyms. (Arendt, 1998, pp. 7-8)

Where labor is the never-ending cycle to maintain survival, and work is the repetitive creation of results that are not necessary for survival, action is the social process of humanity coming together with each of our individual skills and values to cause change and structure the world according to how we want or need it to be (Arendt, 1998). When laboring, humanity is not free.

When working, humanity frees themselves from necessities, but is still limited in the environment they are placed in. When acting, humanity is able to enjoy complete freedom in relation to the world, in which we can do whatever we deem fit at the moment, whether that be transforming one's inner world into a physical book, reimagining life as a game, reshaping huts into skyscrapers, reinventing the landline telephone into the iPhone, or redefining humanity in response to the rise of artificial intelligence. Arendt includes an excerpt from Dante Alighieri in her book, and I feel it is appropriate to include it here as well due to the relevancy of its truth regarding this subject. In discussing action, Dante writes:

(For in every action what is primarily intended by the doer, whether he acts from natural necessity or out of free will, is the disclosure of his own image. Hence it comes about that every doer, in so far as he does, takes delight in doing; since everything that desires its own being, and since in action the being of the doer is somehow intensified, delight necessarily follows... Thus, nothing acts unless [by acting] it makes patent its latent self.)
(Arendt, 1998, p. 175)

Dante's remark on action intensifying the notion that one is his own self, his own being, by acting on something in his own delight rings true when one recalls Suits's argument that in his utopia all action is to be directed toward the purpose of simple play rather focusing on achieving an end result of one's activity.

Artificial Intelligence as a Tool of Labor

However, when we recognize the fact that we have not achieved Suits's utopia or Arendt's action, we see that we are still stuck in the activities of labor and work. This is especially true of our process of creating artificial intelligence. One of the most prominent

reasons why we are so interested in creating AI, much like all other tools humanity has ever created, is due to the potential freedom it may offer us from certain labor and work activities. For example, AI could step into roles and tasks relating to maintenance, repair, care, construction, and many others. However beneficial this may be, the introduction of AI also poses a problem of completely taking over all activity for humans, rendering human activity useless and pointless. This issue is the same one that AI poses to Suits's utopia. Another concern that would arise for Arendt is the fact that, like many of our tools now, AI may eventually become more destructive than helpful to humanity. As Arendt (1998) states:

The question therefore is not so much whether we are the masters or the slaves of our machines but whether machines still serve the world and its things, or if, on the contrary, they and the automatic motion of their processes have begun to rule and even destroy the world and things. (p. 151)

We have already begun to see the effects of technology on humanity, especially with the smartphone and the internet. The smartphone has provided humanity an extreme degree of ease with many aspects of life, such as maintaining relationships over long distances, searching online for information regarding anything you choose, accessing without limitations any items one may need or want with a click of a button, and much more. However, there are also many ugly flaws of this technology, which include depression and body image issues as a result of social media, cyberbullying on the internet, pornography, hacking into another's account and stealing their information or finances, and an increasing reliance on the technology in order to function in one's life. It seems then, that our technology is a double-edged sword that we both wield and kneel to.

The same issue presents itself regarding AI. We have already previously seen in the paperclip thought experiment that even AI may be susceptible to the never-ending cycle of labor, despite this process being slightly different than ours. We will further discuss the ramifications that AI has on society later in this paper, but it is worth noting now that we must be aware at all times whether AI is truly serving humanity so that we may be free from both labor and work if we choose to be.

The Overjustification Effect

There is actual psychological precedence for the claim that shifting one's focus from the motivation of doing the action for the action's sake to the motivation of external factors such as money, power, fame, another's love, and any other source of motivation one can imagine that doesn't reside in the notion of doing an act simply for the action. In psychology, when one's motivation to do an act for the act's sake is reduced by the presence or knowledge of an external incentive, this is known as the overjustification effect. Additionally, psychology also has a term for the inner incentive of doing an act for the sake of the act, which is the intrinsic motivation. As Cherry (2022) writes in her article, "What Is Intrinsic Motivation? How Internal Rewards Drive Behavior," intrinsic motivation is the engagement of behavior for an activity that is rooted from inner rewards. "Intrinsic motivation refers to actions that are driven by internal rewards. The motivation to engage in a behavior arises from within because of the inherent satisfaction of the activity rather than the desire for a reward or specific outcome" (Cherry, 2022). Cherry (2022) goes further in depth on her discussion of intrinsic motivation before addressing the fact that intrinsic motivation occurs when individuals are able to "... act independently, feel that their efforts matter, and gain satisfaction from becoming more skilled." Finally, much like the values

exhibited in Suits's utopia and Arendt's philosophy of action, Cherry (2022) notes that the "... three main elements of intrinsic motivation are autonomy, purpose, and mastery."

Felt Tip Marker Study

In 1973, Lepper, Greene, and Nisbett conducted a psychological experiment on the overjustification effect with the focus being placed on the influence that the presence of extrinsic motivation can have on one's intrinsic motivation regarding completing an action. In their article, titled "Undermining Children's Intrinsic Interest with Extrinsic Reward: A Test of the 'Overjustification' Hypothesis," the authors state that the purpose of the study was to determine whether the introduction of extrinsic motivations or goals can undermine one's intrinsic motivation and desire to engage in an activity, "In short, a person induced to undertake an inherently desirable activity as a means to some ulterior end should cease to see the activity as an end in itself" (Lepper et al., 1973, p. 130).

In this study, the researchers obtained a sample of subjects consisting of preschool children showing intrinsic interest in drawing (Lepper et al., 1973). These children were randomly divided into three groups and assigned to three different conditions, these being an expected-award setting, an unexpected-award setting, and a no-award setting (Lepper et al., 1973). In the award-expected group, the children were told that they would receive a certificate with a gold seal and a ribbon, while those in the unexpected-award group also engaged in drawing without the knowledge that they were about to receive a certificate with a gold seal and a ribbon (Lepper et al., 1973). In the no-award group, the children also engaged in the drawing activity but did not expect or receive an award (Lepper et al., 1973). The experiment was designed in such a way by the researchers so as to maintain similarity to other typical activities

and avoid appearing "...out of place..." as well as interesting the children enough for them to complete the task (Lepper et al., 1973, p. 132). This was achieved by offering the children "...the opportunity to draw freely with multicolored felt-tipped drawing pens ("magic markers") not normally available in the children's classrooms" (Lepper et al., 1973, p. 132).

Lepper et al. (1973) found that, as they hypothesized, "...children in the expected-award condition spent less time playing with the drawing materials than children in the other conditions" (p. 134). The results of this Felt Tip Marker Study suggest that an overjustification effect, in which the extrinsic motivation overpowers the intrinsic motivation, can be produced:

In the expected-award condition, children showed decreased interest in the drawing activity after having undertaken it in order to obtain a goal which was extrinsic to the pleasures and satisfaction of drawing in its own right. In the unexpected-award condition, on the other hand, children receiving the same extrinsic reward showed undiminished or increased interest in the activity. This detrimental effect of the expected-award procedure was manifest both in quality of performance during the experimental sessions and in subsequent unobtrusive measures of intrinsic interest in the classroom setting. (Lepper et al., 1973, p. 135)

As we can see, the results of the study produced significant evidence that the children who were in the expected-award group had decreased interest in the activity of drawing itself than those who were in the unexpected-award and, by extension, no-award groups, whose interest in the activity of drawing remained constant or increased (Lepper et al., 1973). These results are a form of scientific evidence backing Suits's and Arendt's claims that truly matters is the inherent value of the activity itself, rather than the end result or goal of said activity. Without the intrinsic

motivation to begin and complete an activity, interest and therefore satisfaction decrease, and with the presence of extrinsic motivations, one begins to lose their own intrinsic motivation which then leads to further dissatisfaction.

Overjustification Effect On a Massive Scale

The question the Felt Marker Tip Study poses in the context of this paper relating to Suits and Arendt is whether humanity has forgotten about or has yet to discover that the purpose of progress is to render labor useless, so that they may willingly work on what truly intrinsically motivates them, regardless of the results. The possibility that humanity has focused far too long on survival and end results is one that must be considered and weighed against all our reasons behind any of our activities. Having been built upon thousands of years in which humanity has been forced to focus on activities that lead to results, like labor or work for survival and making a living, may have caused us to become habitual in our committing to these activities today when it may no longer be necessary. This has caused us to adopt a grind mindset, much like working ants. Although admirable creatures, ants are doomed to live, procreate, serve, construct, and die for their community. Without intrinsic motivation, what purpose is life to humanity other than living as ants? I argue that the overjustification effect is operating upon the entirety of humanity on a massive scale spanning thousands of years. Suits, Arendt, and the Felt Marker Study all share a common argument, and that is that the activity of action, the process of doing, according to one's own intrinsic values, may and should be enough.

In a way, this is much like the discipline of philosophy as a whole itself. Although there are many perspectives and divided sub-disciplines within philosophy, and regardless of the arguments for the search for truth or other end goals, philosophy is, at its core, a process of

thought and understanding, a position of beliefs and rejections. These are individual human values stemming from the self that could never be changed unless the self allows it, therefore setting philosophy up as a process that requires intrinsic motivation, perhaps more so than all other activities in human history, for to what end should one partake in philosophy other than for philosophy's sake? Regardless of the fact that many philosophers may have an ulterior motive that reaches to a designated end, such as arguments to prove a point, philosophy as a discipline and an act still remains bound to intrinsic motivation since no external factor has the power to destroy the true act that is philosophy.

All of this is to argue that all activities should and need to become fully acted upon through one's intrinsic motivation for humanity to achieve a perfect society unrestricted by survival needs or limitations of tools necessary to get there. Prior to the age of artificial intelligence, we were bound to work with no end in sight, destined to forever only sample but a small taste of freedom. However, AI could change all of this and break our chains to experience true freedom. We need only to partake in the activity of work slightly longer until we achieve this idealized reality, until we fully immerse ourselves into the age of artificial intelligence in order to ironically usher in the golden age of humanity.

However, before we discuss this new age and how we can get there, we must recognize the significant ramifications that the introduction of AI has, and will have for years to come, on our society as well as what it means for humanity's future.

Ramifications on Our Society

Education and Artificial Intelligence

The introduction of AI would simultaneously improve our lives and wreak havoc in our society. The ramifications and influence of AI would instantly be felt and ripple across many aspects of life, such as ethics, the education system, the workplace, and the economy. Some of the ramifications are already being felt as I write this paper. For example, the introduction of Chatbot has begun to stir the academic world as an increasing number of students are caught cheating by utilizing Chatbot to write their papers. As Chatbot becomes more advanced, and with the inevitable introduction to more evolved AI in the future, academic dishonesty is becoming near undetectable and most often requires a confession by the perpetrator in order for the dishonesty to be found out. Another method by which AI could affect the education system is by upsetting the roles that teachers and students take on. The presence of AI could prompt many schools to reconsider the responsibilities of the teachers if the machine could simply teach students at a less costly and more efficient rate, while students could potentially use it as a free source of all knowledge and manufacturer of their works. At this point, students may need to take on a more managerial role over the AI regarding their work's quality and making sure that what is produced for assignment is in fact, correct. Additionally, teachers may end up in a more supervisory role in which their sole responsibility is to ensure that students are correctly learning how to manage and filter through what the AI produces for them. The arrival of AI would necessitate change throughout the entire education system, causing the current methods to become pointless and outdated as AI would serve these functions.

Some of these changes are already occurring within universities across the United States. These universities are creating new policies and attempting different methods of learning in their process of addressing the presence of AI within the education system. One such example can be found at Stanford University, where they made a statement that “Absent a clear statement from a course instructor, use of or consultation with generative AI shall be treated analogously to assistance from another person,” therefore the use of AI is disallowed for assignments or exams (Stanford University, 2023). Stanford University (2023) has also declared that faculty are permitted to decide what degree AI utilization is allowed in their own courses, “...instructors are free to set their own policies regulating the use of generative AI tools in their courses...” Other universities, like La Trobe University, focus more on providing students with guidelines on when it is acceptable to use AI. At La Trobe University, students are allowed to utilize AI as a tool to “Generate practice quizzes or flashcards to help you prepare for exams” and “Quickly learn more about a new subject or topic” along with many other advantageous uses (La Trobe University, 2023). However, it is not allowed for use if students intend to “Cut corners and avoid reading or writing” or “Edit and improve your assignments” (La Trobe University, 2023).

The Accrediting Body for Colleges of Business (AACSB) takes a more proactive attitude toward AI than the previous universities mentioned. On reading their website, it becomes clear that the AACSB has the opinion that universities serve a purpose beyond job training, as they develop knowledge of the structure and nature of our reality and society within citizens (Roos, 2023).

AI tools like ChatGPT do not change the university experience, but as they become more powerful, they have long-term consequences that compel us to look at the purpose of

higher education on a deeper level. It's a process that exists not only to prepare students for careers, but to help them develop what Aristotle called *phronesis*, a term that Thomas Aquinas later translated to mean "practical wisdom." (Roos, 2023)

The AACSB acknowledges that the integration of AI will happen, regardless of our feelings on the matter, and so we must use it "...as a tool we can use to encourage the development of practical wisdom" (Roos, 2023). The AACSB states that the benefits of AI "...will enhance educational delivery, improve student learning, and accelerate the research process" (Roos, 2023).

An excellent instance of this proactive attitude toward AI can be seen at the University of Nevada, Las Vegas where they have created a virtual copy of their president. As stated on their website, "Digital President Whitfield is here to serve as a personal connection and FAQ guide to all prospective and current students, as well as their parents" (University of Nevada, Las Vegas, 2022). With this tool which is only possible via AI, President Whitman can ensure that all students are getting interpersonal communication and direct responses tailored to each student's questions (University of Nevada, Las Vegas, 2022). This tool helps to instantaneously provide more detailed answers to questions that the usual FAQ webpage may not be able to address and also serves as a reminder of how beneficial the unification of education and AI could be (University of Nevada, Las Vegas, 2022). As the AACSB argues, "History teaches us that it never works to ban new technology from our classrooms—it is more productive to adjust to its implications while exploring its potential" (Roos, 2023).

Ethics of Artificial Intelligence

Similarly to the ethics of the education system, the ethics and policies of ownership would need to be addressed. Today, we are already experiencing confusion over the ethics and ownership of intellectual or creative works produced by AI. The question is no longer whether AI can produce art comparable to humans, but whether art produced by AI is owned by the company that created the AI, the individual who tasked the AI to create art, or if due credit should solely be directed toward the AI itself. AI poses a threat to many artists due to its ability to create pieces of art that rival human artists. It would not take long for the entire art, media, and entertainment industry to be dominated by AI. The same issue can be found in fields such as science, mathematics, engineering, and many others. AI has the potential power to replace humans in the entire workforce across almost all careers. This dramatic exodus from jobs among human workers could result in an economic collapse. Without jobs, people are not getting paid, and in most countries around the world, society is held together by economics. The rise of AI within the workforce could herald economic ruin until a new societal structure is formed.

Like the students of the education system, many would soon utilize AI as a type of modern “crystal ball” for advice and possible predictions based on patterns across all disciplines. Some possible examples include AI producing war strategies for militaries, the legal system depending on AI to construct and analyze arguments on whether certain laws should be implemented based on statistics, lawyers and judges relying on the “neutral” conclusion of AI on a verdict, and doctors consulting with AI on which treatment is best for their patients.

Related to this usability of AI as a source of guidance for advice, the Dean of the College of Humanities and Social Sciences at Utah Tech University asked ChatGPT “What are the ethics

of chatgpt?” (S. Lee, personal communication, January 28, 2023). In response, the Chatbot (personal communication, January 28, 2023) gave a set of ethical guidelines entailing six separate topics regarding the “...complex and multifaceted issue” of its ethics revolving around the use of ChatGPT. On the topic of transparency, it stated that “It is important for users to be aware that they are interacting with a machine, not a human, and for the limitations of the technology to be made clear” (ChatGPT, personal communication, January 28, 2023). On bias, it responded that “Language models like GPT-3 are trained on a dataset of text, which can contain biases and stereotypes. These biases can be perpetuated in the output generated by the model, which can have negative consequences” (ChatGPT, personal communication, January 28, 2023). It also stated that language models such as GPT-3 “...can generate text that is factually incorrect or misleading. This can be especially concerning when the output is used for decision-making or other important tasks” (ChatGPT, personal communication, January 28, 2023). On privacy, “The use of GPT-3 and other language models can raise privacy concerns, particularly with respect to the collection and use of personal data” (ChatGPT, personal communication, January 28, 2023). The Chatbot (personal communication, 2023) even branched out to academic-specific ethical concerns, as it “...can be used to generate text that is passed off as original work, which is a form of plagiarism.” It also gave a haunting response regarding its own impact on people’s jobs, “The use of language model like GPT-3 could lead to job loss, as the model can be used to automate certain tasks that were previously done by humans” (ChatGPT, personal communication, January 28, 2023).

However, the Chatbot's following note on its comments was of most interest:

It's important to consider the potential negative consequences of using such technology and take steps to mitigate these risks. It's also important to consider the potential benefit of the technology and how it can be used responsibly and ethically. (ChatGPT, personal communication, January 28, 2023)

It is intriguing that a Chatbot would list several flaws within the ethics of using ChatGPT, then make a minor comment on how we should consider the positives of using ChatGPT without explaining these benefits any further. The Chatbot is most likely drawing upon a wide range of relevant sources across the internet, thus producing the common negative aspects of the use of such a technology. Much like many other areas of our life, our ethics may need to change in order to better reflect the concerns that may arise with the integration of AI into our society. Only then, we may be able to properly address the issues surrounding the use of ChatGPT-3.

Man's Journey or Man's Destination?

Additionally, with the integration of AI into our society, labor would soon become nonexistent and work useless due to AI doing our jobs for us. In this type of society, all work becomes automated and we would be robbed of our reasons for working. We would adopt a new lifestyle of reaping all the results and doing none of the work. The Alexandrian condition of man would then begin to seep into the seams of society. As a result, humanity would encounter severe confusion as well as misunderstanding of its purpose in life and would soon insist on retaking the responsibilities of certain tasks once again to avoid the empty void of being worth nothing within a perfect reality that no longer needs humanity.

It is this very reason why the words of Suits and Arendt need to be heeded as a warning and guide to all future generations. We need to adopt the perspective that the journey is more important than the destination, and that activities should be undertaken as a result of one's own intrinsic motivation. Negating all external motivations would allow us to overcome the Alexandrian condition of man and enjoy a lifestyle ungoverned by results. An appropriate analogy is the activity of painting. When one paints, one unleashes their inner drive for creation, which is satisfactory in itself. The intrinsic reward of actually doing the work is secretly far more important than the end goal of the finished artwork. Therefore, utopia becomes a necessity for humanity to avoid the possible despair brought about by AI. However, for humanity to achieve such a state, drastic changes in society may be necessary. But it is of utmost importance that we understand how we may achieve the state of humanity as described by Suits and Arendt, and the solution resides within Thomas Kuhn's book *The Structure of Scientific Revolutions*.

Kuhn's Revolution

In his book, Kuhn (2012) discusses scientific thought and the stages that each scientific breakthrough occurs within. In doing so, he covers how there are various forms and methods of discovery throughout history, and that each was contained within its own paradigm (Kuhn, 2012). These paradigms determine the rules of discovery and with each paradigm growing stale, a series of worldview-shattering ideas heralds a new paradigm for science to work within (Kuhn 2012). Especially relevant to this paper are Kuhn's (2012) thoughts on how one scientific paradigm shifts to another and what constitutes such a change, as the same process can be applied to not only science, but every aspect of life.

Interestingly, much like in Suits's *Grasshopper*, Kuhn (2012) defines normal science as a game, a form of puzzle-solving. He states that normal science is a structure that scientists play in order to solve a problem, for “If it is to classify as a puzzle, a problem must be characterized by more than an assured solution. There must also be rules that limit both the nature of acceptable solutions and the steps by which they are to be obtained” (Kuhn, 2012, p. 38). Since scientific paradigms restrict scientists to certain rules of discovery, and therefore only allow certain answers to problems, scientists play the puzzle-solving game of science. It is only when science fails to provide any answer or method of discovery for a problem, that the rules of the game need to change and be redefined (Kuhn, 2012, pg. 39-40). However, the key difference between the games in Suits’s Utopia and the game of science is that Kuhn (2012) claims that science as it is provides no intrinsic motivation at all, but rather only the end results of succeeding “...in solving a puzzle that no one before has solved or solved so well” (p. 38). At this point, Suits would argue that the perspective on science and its purpose needs to be changed and restructured into a game for humanity that operates upon purely intrinsic motivations.

Kuhn does discuss this much-needed change of perspective in his attempts to define a paradigm within science. First, Kuhn (2022) notes that this change in the scientific paradigm is usually heralded by a focus on the importance of rules. The discussion on the rules of science is a sign of an unstable or out-of-date paradigm for current problems or scientific crises:

Normal science can proceed without rules only so long as the relevant scientific community accepts without question the particular problem-solutions already achieved. Rules should therefore become important and the characteristic unconcern about them should vanish whenever paradigms or models are felt to be insecure. (p. 48)

Therefore, Kuhn (2012) writes, the shift to heavy philosophical discussions on the nature of the rules of science due to a crisis or the presence of a new alternative paradigm "...loosens the rules of normal puzzle-solving in ways that ultimately permit a new paradigm to emerge" (p. 80). As a result of this act of challenging the paradigm, scientists begin to step outside the bounds of what was previously considered to be disallowed, and produce different findings that better address the problems that the methods within the old paradigm failed to solve (Kuhn, 2012, pp. 86-87).

The gradual challenging and improving of current theories leads to an eventual overthrowing of the paradigm "... in whole or in part by an incompatible new one" (Kuhn, 2012, p. 92). Kuhn (2012) writes that the scientific revolution that occurs during the new paradigm's arrival instills a new perspective within scientists that they can never undo, much like a gestalt switch in psychology, "...though the world does not change with a change of paradigm, the scientist afterward works in a different world" (p. 121). The new scientific and philosophical implications of the paradigm are now incommensurable with those of the older paradigm, "The normal-scientific tradition that emerges from a scientific revolution is not only incompatible but often actually incommensurable with that which has gone before" (Kuhn, 2012, p. 103). Kuhn (2012) admits that the shift from one paradigm to the next cannot be forced but rather is a natural conversion experience, and that oftentimes the acceptance of the new paradigm is a required act of faith (p. 151, 157).

Although Kuhn's discussion focuses on science, it becomes clear that his ideas on paradigm shifts and new worldviews can be applied to artificial intelligence in all aspects of our society in addition to science, ranging from education to ethics as well as the workforce. With the integration of AI, our current paradigm relating to almost all areas of life will be challenged

and cause us to reevaluate certain structures maintaining order, much like the previous example of a Chatbot producing its own ethical guidelines or the universities' attempts in creating new policies to adapt to the presence of AI. The gradual changes toward a new scientific revolution are occurring now due to AI's impact on the scientific community. The impacts of AI know no bounds and will soon cause cultural, economic, educational, and labor revolutions as well. We may very well be entering a new significant phase or era on the tapestry of human history, much like the Renaissance, the Age of Enlightenment, and the Industrial Revolution. This new era, which in this paper I will deem the Age of Artificial Intelligence, will root out all remaining archaic foundations upon which many aspects and values of human civilization are built. The Age of Artificial Intelligence will usher in a new worldview incomprehensible at the moment, and our society will be needing to adapt to this new unknown interpretation of reality as Kuhn wrote scientific revolutions usually do. However, there is a key difference between the inevitable paradigm shift within science that Kuhn discusses and this paradigm shift that AI is imposing on our world, and this difference is the fact that we have a choice in how we respond to the integration of AI.

Regression and Stagnation

Although the rise of AI is inevitable, the choice to remain in the Age of Artificial Intelligence will present itself since humanity will have the power of choosing to either regress, stagnate, or progress in response to AI. The regression of human society from the Age of Artificial Intelligence would consist of choices made such as the banning of AI. Without AI, we are left without any potential for progress and therefore enter a new dark age brought about by humanity's fear of drastic changes. The stagnation of human society during the Age of Artificial

Intelligence would be characterized by choices made to maintain the status quo while hesitantly and restrictively integrating AI into a few specific elements of society. An example of this would largely be seen in the workforce or education system. With the workforce, many institutions may refuse to allow AI to take over for human employees out of fear for the economy but may allow AI to oversee related computations. With the education system, this would be characterized by the hesitancy to utilize AI in classrooms by attempting to force AI to adapt to current policies and academic standards rather than fully embracing it and changing the structure of education.

Progression of Humanity

The progression of human society from the Age of Artificial Intelligence could lead us into a golden age of humanity. This progression would be characterized by the choice to freely accept and allow AI in every aspect of society. This, however, would require the willingness to see through with the destruction and transformation of many institutions that today's society relies upon, since the current form of said institutions would no longer serve the purpose for which it was created. An example of this could be provided through the education system, since we have already set precedent for a discussion relevant to this topic earlier. As previously stated, universities are attempting to adapt AI to their policies, so that they may address the problem of academic dishonesty that occurs through the use of AI, or to preserve the experience and tradition of undertaking a long, arduous journey of learning. Although noble, these choices may not address the actual issue at hand, which is the inevitable advancement of AI and the increasing potential of AI as a tool. The cycle of AI becoming more advanced and the education system regulating aspects of technology within classrooms becomes never-ending and contentious, much like Arendt's definition of labor. Therefore, the solution to this specific

problem lies with Kuhn. It is going to require a complete upheaval of the education structure and process of learning, as a new paradigm shift within education will become necessary.

As an example of this paradigm shift, we can liken the arrival of and access to AI to the creation of the textbook. At one point in human history, textbooks were once revolutionary as they improved our ability and method of gaining knowledge, and in doing so transformed education forever. Similarly, AI is the invention of a new method of learning that can further increase our learning capacity and improve our methods of gaining knowledge. To achieve this, we would need to adapt to AI instead of the inverse. This would entail no longer clinging onto out-of-date learning methods, which would not rob students of the traditional experience of learning because it would no longer be required of them to have this experience. That being said, the education system should be willing to fully embrace AI in such a manner that transforms the notion of using AI as cheating into the notion that AI may be necessary for improved learning. A concern that comes to mind is that the current method of learning, being a long and arduous process, could now be suppressing students' possible potential. It is worth considering that the full use of AI could help us gain the ability to amass a wide range of knowledge and skills at a far quicker and more efficient rate. If this outcome were true, it would do away with our current society's educational limitations such as the requirement of dedicating decades of life toward only a few academic specialties. It seems that it is time to tear down the academic ivory tower that has for so long divided those who have had access to academic training versus those who for any given reason could not commit to such rigorous training. Much like how democracy evolved from the deteriorating usefulness of aristocracy or monarchy, thus shifting power and responsibilities from the few royalties to the many citizens, so too must a form of democratic educational system arise to replace the hierarchical structure of the academic world. After all, AI

would be able to maintain what is factual so academic dishonesty, either intentional or unintentional, by those who may be academically untrained would be nearly impossible.

All this is not to say that we should no longer partake in lengthy, arduous academic journeys, but that it would no longer be required. It would become an opportunity for personal choice due to the intrinsic value of the lifestyle for several people, myself included. Additionally, we should not underestimate the efforts that universities are taking to adapt to AI, as it is a necessary step toward recognizing that the policies will eventually need to change in due time. It should serve as a consideration and reason to look deeper into the process of policy-making in order to create rules that better serve the future rather than hold onto the past. This example regarding the education system could arguably be applied to all other aspects of our current society as well. We may have to begin reevaluating the core reasons or foundations for why we have specific systems or structures in place, as the AACSB suggests (Roos, 2023).

As Arendt and Suits argue, the reasons and rules of our activities must shift from desired outcomes to intrinsic values in order to achieve utopia. If we choose to embrace AI as a tool as common as a piece of paper and use it to our advantage, we would be able to move beyond participating in activities for the sole or partial reason of providing for our necessities and begin living as if life was one eternal game for the sole purpose of entertainment. Therefore, the Age of Artificial Intelligence would serve as a transitional period for humanity to shift priorities and values to set up Suits's Utopia in advance and enter the Age of Humanity. The Age of Humanity would truly be that, as we will have achieved the full understanding of and connectivity to our pure human state of nature through the ironic invention and use of artificial intelligence as our finest and final activity of work. From there, freedom of action according to intrinsic motives,

which humanity may have been striving for since the dawn of time, will finally be accomplished.

However, the possibility of the perfect utopia is contingent on one sole element: our choice.

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