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Philosophy's Recurrent Problem: Language Confusion

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Abstract

It has been demonstrated by a host of Analytic philosophers that language imprecision and equivocation have been sources of confusion on many philosophical issues. This paper explores five such issues, and attempts to not only scrutinize the confusion, but further to show that once this is done, we can make progress on the issues themselves. First, the word "think" has various definitions which lead to diverse conclusions on whether computers or AI can or will think, and whether we do or will have duties to computers or AI. Second, Hume's misunderstanding of "identity" when referring to "personal identity" caused him to mistakenly conclude that the self or personal identity was a fiction. Third, there are dueling and incompatible definitions of free will offered by the libertarian and the compatibilist which unnecessarily muddy the waters on the issue of whether we have free will or not. Fourth, Paley's comparison of the order displayed by a watch and the order displayed in the universe failed to notice that a substantially different type of order is found in each one, and that the type of order found in the universe can be explained naturalistically and need not rely on an appeal to a maker (or a metaphysical creator such as God) unlike a watch which does need and have a creator or maker. Last, Sartre's differentiation of Christian and atheistic existentialists was based on a failure to notice that when he referred to human "essence" he was conflating two very different types of essence, specifically, innate essence and character essence. Sartre's equivocation error led him to mistakenly conclude that the religious person and the atheist have different views on existentialist issues.

Keywords

Philosophy of Language, Language, Language Confusion, Language Imprecision, Equivocation, Computers, AI, Artificial Intelligence, Computer Thinking, Can Computers Think, Personal Identity, The Self, David Hume's

View of Personal Identity, Personal Identity as a Fiction, Free Will, Libertarian Free Will, Compatibilism, Compatibilist Free Will, Predisposed Agency, Responsibility, Blame, Teleological Argument, Argument from Design, Paley's Watch Analogy, Order, Intentional Order, Functional Order, Self-Organization, Existentialism, Religious Existentialists, Christian Existentialists, Atheistic Existentialists, the Humanism of Existentialism, Existentialism Is a Humanism, Sartre on Existentialism, Character Essence, Innate Essence

1. Introduction

This paper fits within the Analytic tradition of philosophy, as typified by Ludwig Wittgenstein, Bertrand Russell, and Gilbert Ryle, and to a lesser extent to the branch of Analytic Philosophy called Logical Positivism, represented by the works of A. J. Ayer and Rudolf Carnap, which have pointed out that language has been a source of philosophical misunderstanding, and further, that a proper analysis of language can solve many philosophical problems as they were only language problems to begin with.[1]

For example, in his book *The Concept of Mind*, Ryle explains that the mind-body problem, the problem of how a non-physical mind (thoughts) without size, mass, density, shape, or velocity could interact with the physical body, can be solved by realizing that the mind is part of the physical world and thus can have causal powers in the physical world. Ryle argues that our previous thinking that our mind or thoughts were different than physical entities was a language category mistake (Ryle, 1949)[2].

The problem with language is certainly not limited to philosophy, as scientists have also created confusion for themselves with imprecise or multiple definitions for many of its fundamental terms. This was pointed out by Daniel Dennett when he stated:

> It is not unusual for a much-used and generally highly regarded technical term to have multiple incompatible definitions—think of "gene" or "species" in biology" and "cause" almost everywhere in science… (Dennett, 2013: p. 298)

Moreover, as Wittgenstein so aptly explained, due to the inherent imprecision

[1]Although I believe that the logical positivists make some important points about language and the confusion it often causes in philosophical discussions, I believe the claim by some of them, such as A. J. Ayer, that many religious and moral claims are meaningless, claims such as "God exists" or "God is good and just" or "Slavery is immoral", goes too far, and I certainly do not endorse such views.

[2]I have modernized Ryle's view as Ryle explains his position somewhat differently than I have. He states as follows: "First, the hallowed contrast between Mind and Matter will be dissipated… It is perfectly proper to say, in one logical tone of voice, that there exist minds and to say, in another logical tone of voice, that there exist bodies. But these expressions do not indicate two different species of existence…" (Ryle, 1949: Ch. 1, Section 3, pp. 358-359)

in language we will never be free of having to closely scrutinize and sort out language issues in our philosophical discussions.[3] This paper will examine the following five philosophical issues where language is causing considerable confusion:

1) Computer or AI Thinking: There is confusion as to what constitutes thinking, which can lead us to mistakenly believe that we have or will have substantial duties to computers or AI.

2) Personal Identity: Hume's unusual definition of personal identity led him to incorrectly conclude that personal identity (or the self) is a fiction.

3) Free Will: Dueling definitions of free will offered by the libertarian and the compatibilist have muddied the waters on discussions about whether we have free will.

4) Paley's Teleological Argument for The Existence of God: Paley committed an equivocation fallacy regarding the word "order" which led him to wrongly conclude that the universe must have a conscious creator.

5) Sartre's Distinction Between Christian and Atheistic Existentialists: Sartre committed an equivocation fallacy regarding the word "essence" which led him to erroneously conclude that Christian and atheistic existentialists differ in their existentialist views.

This paper will point out the language problem regarding each of these issues and also attempt to make headway on each of these subjects, with the exception of the issue of whether we have libertarian free will, which I have addressed in two previous papers.[4] (See Firestone, 2017, 2023b)

2. Confusion on Whether Computers Can Think

2.1. The Problem

Whether computers can or will think is a very exciting, sometimes frightening, and highly debated issue in the academic community. With the advances in artificial intelligence (AI), it is hard not to look at our present-day computers as thinking machines. They seem to know much more than any of us could ever hope to know, and further, they solve problems, compose papers and stories, analyze medical data and diagnose medical problems, and find solutions to problems with seemingly novel ideas. They display creativity.

However, the issue of whether computers can think is riddled with several examples of problems due to not clearly defining and agreeing to a single definition of the key terms. What does it mean to say that computers "think"? Is it accurate

[3]In Philosophical Investigations, Wittgenstein explained how the definition of what constitutes a game will never be able to include everything you would want to include in that definition, and to exclude everything you would want to exclude from that definition: "For how is the concept of a game bounded? What still counts as a game and what no longer does? Can you give the boundary? No." (Wittgenstein, 1953: pp. 69, 1162)

[4]I have already published papers on the following three issues: free will, Paley's Teleological Argument, and Sartre's distinction between Christian and atheistic existentialists. The issues of whether computers can think and whether there is a self or personal identity will present new material that I have not previously explored.

when analysts write that computers have "neural networks" or "artificial neural networks"? Are human beings merely "biological machines"?

So is it accurate to claim that computers think? Academics disagree, but their disagreement is primarily based on the definition of "thinking" that is being utilized. As stated by Peter Norvig, computer scientist and former director of research at Google, "it remains linguistically controversial whether machines think…" (Norvig, 2015: p. 176). [5] Emeritus MIT robotics professor Rodney Brooks explained the problem as follows: "*Thinking* and *intelligence* are both what Marvin Minsky has called suitcase words—words into which we pack many meanings so we can talk about complex issues shorthand." (Brooks, 2015: p. 108)

Timo Hannay, an expert on web-enabled science, points out how different definitions of "think" produce different conclusions regarding whether computers can think.

> Judging by one definition of the word *think*—to gather, process, and act on information—planet earth has been overrun by silicon-based thinking machines… For by another definition of the word, these machines don't "think" at all, because none of them are sentient. (Hannay, 2015: pp. 40 & 41)[6]

We need to distinguish information processing, thinking, and consciousness. It is my position that information processing is not enough for thinking, and that there is no thinking without consciousness. Consciousness, moreover, requires awareness of one's thoughts, feelings, and environment (Natsoulas, 1997) and presupposes subjective feelings and emotions, which no current computer or AI yet exhibit. Moreover, despite the confidence of many people in the computer field, the verdict is out whether AI will ever be able to think, and even if this is achieved, what computer thinking will look like when compared to human thinking.

2.2. Why Does It Matter Whether Computers Can or Cannot Think?

The reason that this has become an important issue in philosophy and potentially for business is because many AI experts claim that we owe or will owe computers moral duties if or when they do think. For example, a recent publication titled "Taking AI Welfare Seriously" and written by some leading academics in this field from New York University, Stanford University, University of Oxford, and London School of Economics, including David Chalmers who formulated what is known as the hard problem of consciousness, states the view of many, but not all

[5]Georgetown University Professor James O'Donnell expresses a similar sentiment when he asserts that "*Thinking* is a word we apply with no discipline whatsoever to a huge variety of reported behaviors." (O'Donnell, 2015: p. 106)

[6]Here are my conclusions: Machines are usually defined as artificial, mechanical, and not living, and humans do not fit any of these three categories. So calling humans "biological machines" seems misleading. Computers are not "neural networks" because at the present time they are not made of neurons. And computers do not yet display consciousness or sentience, so we should not conclude that they think. As such, we should stop claiming that humans are biological machines, or computers have neural networks, or computers think. Much confusion would be avoided.

experts in the field, as follows:

> In this report, we argue that there is a realistic possibility that some AI systems will be conscious and/or robustly agentic, and thus morally significant, in the near future. We also argue that AI companies have a responsibility to acknowledge that AI welfare is a serious issue; start assessing their AI systems for welfare-relevant features; and prepare policies and procedures for interacting with potentially morally significant AI systems. (Long et al., 2024: p. 3)

Their paper essentially argues that if computers or AI can think in a way that displays consciousness, interests, and things it cares about, and thus can be harmed, then we should not harm an AI by treating it as a mere object; rather, we should treat it as a subject that is entitled to moral respect.[7] As such, human beings would have moral duties to such AI computers.

2.3. Can Present-Day Computers or AI Think?

I think it is fruitful to compare present-day computers and humans. There are some similarities, but not as many as are claimed by some people in the computer and AI fields. For example, they have argued that both computers and people have inputs and outputs, hardware and software, and stored memories. However, these supposed similarities could be looked at as differences since the inputs, outputs, hardware, software, and memories of computers and people are quite different. We all can agree that both computers and humans are part of the physical world and have the ability to process and respond to information based on input received. They also have some complexity in that many parts work together to perform various functions. Both rely on electrical signaling to transmit information, although human neurons use electrical impulses to communicate, while computer processors use electrical circuits for the same purpose. Further, they both consume energy. If this is sufficient for thinking, then computers do think. But humans and human thinking can do much, much more than this.

First, we should note that humans are alive, and computers are not. More importantly, humans have subjective feelings while computers do not. Specifically, we have desires and interests, and computers do not. We judge others and things, while computers do not. We can be moody, bitter, angry, upset, jealous, revengeful, stubborn, anxious, fearful, and sad. Computers cannot. We can be outraged about social injustices, but computers cannot. We can feel baffled and confused. Computers do not. We can become unfocused. Computers cannot. We are often emotional, intuitive, and instinctive. Computers are not. We can exhibit youthful exuberance and be swept away by our passions. Computers cannot. We can feel

[7]The paper states that "an entity is a *welfare subject* when that entity has morally significant *interests* and, relatedly, is capable of being *benefited* (*made better off*) and *harmed* (*made worse off*). Being a welfare subject makes you a moral patient—when an entity can be harmed, we have a responsibility to (at least) avoid harming the entity unnecessarily." (Long et al., 2024: p. 5)

an emptiness inside of us. Computers do not. We can be excited to see another person and feel a special chemistry with them, but computers do not. We understand things and have "aha" moments. Computers do not.

But there is more. We can be happy, feel loved and love others, feel content, and be proud of our accomplishments. Computers cannot. We can be spontaneous, but computers cannot. We care about people and things, and further, have empathy for the suffering of others. Computers don't care. We have dreams and hopes, but computers do not. We think about and have anxiety about our future. Computers do not. We can suppress or forget unpleasant memories. Computers cannot. We often forgive those who have injured us. Computers do not. We question and judge ourselves and engage in self-reflection, which is often emotionally debilitating, but computers do not. We have a sense of purpose, while computers do not. We can comprehend and deeply appreciate abstract concepts such as friendship and beauty. Computers cannot.

Indeed, humans don't have a bare consciousness consisting merely of a recognition of our existence, but rather, we have a robust consciousness that endures mental and physical suffering, welcomes mental and physical pleasures, suffers when we see or learn of the suffering of others, and has hopes and dreams for the future. Our consciousness is in large part shaped by our society and those with whom we have relationships. Indeed, we have social lives that are both rewarding and challenging. Computers do not. As stated by N. J. Enfield, scientist at the Max Planck Institute Psycholinguistics and a professor at the University of Sydney:

> The thing is, machines aren't into relationships. Yet for us, relationships are pretty much all that matters. When we think, we don't just calculate, we worry about the social consequences. How might this decision affect others? How will it affect the way we interact next time? What will they think of me? Machines don't think like this. (Enfield, 2015: p. 397)

Social psychologist Roy Baumeister points out some of the differences between current computers and human beings.

> The computer, not alive and not designed by evolution, doesn't care about survival or reproduction—in fact, it doesn't care about anything…Human thinking thus serves to prolong life—by helping you decide who to trust, what to eat, how to make a living, who to marry. A thinking machine isn't motivated by any innate drive to sustain its life. (Baumeister, 2015: pp. 72-73)

Georgetown Professor James O'Donnell points out other differences between humans and computers:

> Could a machine get confused? Experience cognitive dissonance? Dream? Wonder? Forget the name of that guy over there and at the same time know that it really knows the answer and if it just thinks about something else for a while, it might remember? Lose track of time? Decide to get a puppy? Have

> low self-esteem? Have suicidal thoughts? Get bored? Worry? Pray? I think not. (O'Donnell, 2015: p. 106)

Neurobiologist Leo Chalupa of George Washington University brings this point home by examining the deeper abilities of human consciousness:

> No machine has ever thought about the eternal questions: Where did I come from? Why am I here? Where am I going? Machines don't think about their future, their ultimate demise, or their legacy. (Chalupa, 2015: p. 83)

Bertrand Russell in *What I Have Lived For* describes his passions, passions that no present-day computer experiences or feels:

> Three passions, simple but overwhelmingly strong, have governed my life: the longing for love, the search for knowledge, and the unbearable pity for the suffering of mankind. These passions, like great winds, have blown me hither and thither, in a wayward course, over a deep ocean of anguish, reaching to the very verge of despair. (Russell, 1967: Prologue. Bertrand Russell Autobiography, Routledge, London & New York)

Of course, if we define thinking quite narrowly as only requiring the processing of information, then present-day computers can think. But this introduces confusion into any intelligent debate about thinking because virtually nobody would advocate that we owe moral duties to our current non-sentient computers which do not possess consciousness, and do not feel pain or pleasure.

Furthermore, although computers can and do mimic thinking and emotions, mimicry of thinking does not thereby make it thinking. So even if a computer passes a Turing Test so that a person conversing with the computer would not be able to distinguish it from a person, it does not follow that the computer is thereby consciously thinking. Indeed, you can program a computer to communicate that it is unhappy whenever you feed it information that would make most people sad, but that does not mean that the computer is really sad. After all, you could also have programmed that computer to communicate that it is happy to those same sad events.

I think it is clear that present-day computers cannot think if we are using humans as our model for thinking. Since the advent of modern science, we have not attributed thought to inanimate objects. To say that computers can think is to ignore the many abilities and attributes that humans have but which computers do not. Indeed, to claim that present-day computers think and that we therefore owe those computers any moral duties seem materially misguided. As put by Andres Roemer, economist and diplomat, "In order for us to achieve the dream of thinking machines, they'll have to understand and question values, suffer internal conflicts, experience intimacy." (Roemer, 2015: p. 502) At this point, they cannot do so.

So as to prevent confusion, we should stick with the conventional definition of thinking as requiring, at a minimum, consciousness and subjective experiences.

As stated by Sheizaf Rafaeli, Professor and Director of Internet Research at the University of Haifa, "Thinking implies consciousness and sentience. And here, data, information—even knowledge, calculation, memory, and perception—are not enough." (Rafaeli, 2015: p. 343)

Moreover, while current researchers in this subject agree that present-day computers are not yet conscious, many seem to be confident that future AI will achieve consciousness.[8] Although we have seen that some experts think this will be achieved relatively soon, others conclude that this may not be achieved for a considerable amount of time, if at all (Aru, Larkum, & Shine, 2023). We explore the future of AI consciousness in the next section.

2.4. Will Future Computers Think?

Once we jettison the definition of thinking as merely being the processing of information and require of thinking that it display consciousness and subjective feelings, we are in a position to evaluate whether computers of the future will be able to think. We cannot yet know whether computers made of silicon chips or other non-living matter will ever be able to think and truly be conscious with subjective feelings. We certainly have no reason to doubt that computers made from living tissue with neurons could eventually be arranged to think. But could non-living artificial copycats of neurons be arranged so as to produce consciousness?

In his book *Minds*, *Brains and Science*, John Searle argues that non-living cells cannot produce consciousness.[9] He attempts to demonstrate this with his famous Chinese Room thought experiment. Searle argues that if you did not know Chinese and we were to place you in a room with a rule-book for manipulating Chinese symbols, what he calls a syntax, and you were passed Chinese symbols which were questions and you provided answers by following the rule-book, even if you could manipulate the symbols to provide meaningful answers to someone who understood Chinese, you would still not be able to understand Chinese. Searle claims we have placed you in the position of a computer in that you are manipulating symbols which are meaningless to you and will always be meaningless. You and the computer have a syntax but not a semantics as you can manipulate symbols but you do not understand those symbols, and never will. Searle concludes that only living brains can produce thoughts or minds. Without life, thinking or mental states are impossible (See Searle, 1984: pp. 28-41).

Is Searle correct—do only living things have the potential for producing consciousness? We cannot be sure at this point, but we can observe the following:

[8]For example, Butlin, Long, et al., conclude as follows: "Our analysis suggests that no current AI systems are conscious, but also suggests that there are no obvious technical barriers to building AI systems which satisfy these indicators." (Butlin et al., 2023: abstract p. 1)

[9]Searle specifically states as follows: "mental processes that we consider to constitute a mind are caused, entirely caused, by processes going on inside the brain…the project of trying to create minds solely by designing programs is doomed from the start…That is, even the most hardcore enthusiasts of artificial intelligence agree that in fact, as a matter of biology, brain processes cause mental states… mental states are biological phenomena." (Searle, 1984: pp. 39-41)

First, on earth non-living matter has been around longer than living cells, but no non-living things have ever produced consciousness, at least as far as we know. Second and related to this point, on earth consciousness has been an emergent property from life. It appears that only living things have consciousness, and it took billions of years on earth to go from the first living cells to the first conscious beings. Third, according to neurobiologists, neuroscientists, evolutionary biologists, and cellular biologists, AI is fundamentally different than cell-centered biological mechanisms which produce consciousness (Aru, Larkum, & Shine, 2023). Specifically, consciousness emerges from living cells that display nonlinearity and stochasticity, which means randomness and unpredictability, attributes that do not apply to non-living AI computers (Miller et al., 2025). Fourth, the human brain would not seem easy to replicate with non-living matter. Our brains contain approximately 86 billion cells, most of them neurons. On average, a neuron in the human brain has about 7000 synaptic connections with other neurons. This means that the human brain has roughly 600 trillion synapses.

These considerations point us away from the conclusion that non-living matter can achieve consciousness before going through the intermediate step of life. Moreover, although those specializing in computer science may tend to downplay the very significant differences between non-living matter and life, experts in the life sciences who study the basics regarding what it is to be alive seem less likely to do so. For example, in his latest book *How Life Works*, science writer Philip Ball, who holds a degree in chemistry from Oxford and a doctorate in physics, argues that comparing computers to living beings is misplaced.

> In particular, life is not to be equated with that special kind of machine, the computer…No computer today works as cells do, and it is far from clear that they ever will (or that this would be a good way to make a computer anyway)… One key reason for the failure of the machine analogy is that cells work at the scale of molecules, and things are different in the molecular world. They are noisy, random, unpredictable. (Ball, 2023: pp. 5-6)

There is also a practical challenge for a non-living AI to ever achieve consciousness, and that has to do with the consumption of power. This problem has been recognized by both philosopher Daniel Dennett and physicist Lawrence Krauss. Although Dennett disagreed with Searle's conclusion that only living entities could theoretically become conscious, at least at one point in time he thought that Searle's conclusion was probably correct from a feasibility viewpoint. Dennett stated that "it is empirically unlikely that the right sorts of programs can be run on anything but organic, human brains!" (Dennett, 1987, 1995: p. 326)

Krauss explains his view as follows:

> Given the current power consumption by electronic computers, a computer with the storage and processing capability of the human mind would require more than 10 terawatts of power, within a factor of 2 of the current consumption of all of humanity. The human brain uses about 10 watts of power.

(Krauss, 2015: p. 171)

Perhaps Dennett and Kraus have not correctly foreseen what our future technology will be able to achieve. It still does not follow that we could ever produce consciousness directly from non-living matter and skip the intermediate step of first having living cells before consciousness is achieved. I personally side with Searle and many life science experts who believe that consciousness is an emergent property of life and is unlikely to emerge directly from lifeless matter, although I may be wrong in this regard. What I believe is true is that we will not have conscious AI any time soon unless it is made up of living cells, probably neurons.

In fact, great progress is currently being made using brain organoids, which are cultures of brain cells that mimic the structure and properties of the brain. These brain organoids, which are living cells, consume very little power and also will likely be more effective than AI. In a recent article titled *Why Scientists Are Merging Brain Organoids with AI*: *Living computers could provide scientists with an energy-efficient alternative to traditional AI*, Brett Kagan, the chief scientific officer at Cortical Labs, which grows neurons in silicon chips, stated that the brain and brain organoids use "hundreds of thousands or hundreds of millions of times less power" than current AI, and explained that brains are also much better at learning than AI models. Specifically, when the brain goes head-to-head against AI algorithms it comes out on top because organoids can do many learning tasks much faster because of how living neurons process information (Spichak, 2024).

2.5. Will We Have Duties to Future Computers If They Are Conscious?

If and when we are able to create conscious computers or conscious AI, will we owe them duties? I think the answer will depend on the attributes of computer consciousness. At this point, there are good reasons to suspect that the consciousness of any AI would be a far cry from human consciousness and even the consciousness of the higher animals, and thus our duties might well be minimal and possibly non-existent.

Let's start off with a basic question and observation about moral duties. On what do we base our duties? The answer is that we evaluate our moral duties based on the attributes of the entity to whom the duty would be owed. We do not have duties to rocks because they are not alive and have no interests or consciousness. Unlike rocks, grass and trees are alive, but they likewise are not conscious and therefore have no interests, desires, or cares, so again we do not believe we owe them any moral duties. Insects are conscious,[10] but the attributes of their consciousness do not seem to warrant our having duties to them as they do not seem to have a concept of a future, nor loving and caring relationships with each other. Moreover, they have no clear individual purpose in their lives, and do not have

[10]Recent research indicates that insects not only think, but many, if not most, insects also probably feel pain and pleasure (See Chittka, 2023, Scientific American, July).

the ability to self-reflect. In the case of many insects, especially mosquitoes which carry diseases, they also present a threat to human well-being.

What attributes of consciousness would we expect computers to have? Since computers have not gone through the long evolutionary process that animals and humans have gone through, their consciousness might have quite limited attributes. We have developed attributes such as empathy, sympathy, cooperation, anger, sadness, etc. in order to help us survive and flourish in our environment. We care about others and about ourselves, and we care about existing in the future. But there is no reason to believe that a conscious computer would have developed these attributes.

Moreover, the degree of introspection AI would have is likewise open to question. Would its thinking have an unconscious or subconscious component? Would it be capable of the type of creativity that human consciousness produces? Gregory Benford, professor emeritus of physics and astronomy at UC Irvine, discussed these points.

> Originality—the really hard part of being smart, and utterly not understood, even in humans—is, so far, utterly undemonstrated in AIs. Our unconscious seems integral to our creativity (we don't have ideas; they have us), so should AI have an unconscious? Maybe even clever programming and random evolution couldn't produce one. (Benford, 2015: p. 170)

One might argue that in the 10 years since Benford drew his conclusion about AI creativity, there have been such enormous strides in AI that we should conclude that it is already exhibiting creativity. While I do not think anyone can doubt that a type of creativity has been exhibited by AI, in many ways AI creativity still seems limited in ways that I do not think apply to human creativity. For example, would our current level of AI, had it been developed in the early 1900s, have been capable of coming up with Einstein's insights on general and special relativity? I have my doubts. Will it ever be capable of doing so, especially if it is not constituted by living cells? I believe the verdict is still out. If some types of creativity require the ability to engage in chaotic and even irrational thought, as seems to so often happen in human creativity, then it is questionable whether a computer would be able to do this.

I think we need to here distinguish between computers made of silicon chips and computers made of living cells. When it comes to computers composed of non-living silicon chips, an analogy might be helpful. Water is H_2O. Could we make water a different way? If it had different atoms, then although it might be a clear and odorless liquid, it would not be water. It would be a different liquid. It might even kill you to drink it. Similarly, if we were to achieve a type of consciousness with non-living cells, we should not expect it to be the consciousness achieved with living cells. It would be made up of atoms of a different type.

Even if future AIs are created with living cells, it seems clear that we should expect computer consciousness to be very different than human consciousness.

Neurologist Gerald Smallberg speculates about how evolution and the lack of the kinds of challenges that humans have undergone will have an effect on the types and the degree of consciousness that future AIs would possess.

> In theory, as these machines become more sophisticated, they'll at some point attain a form of consciousness…This form of consciousness, however, will be devoid of subjective feelings or emotions…
>
> My opinion that machines will lack this aspect of consciousness is based on two considerations. The first is appreciating how we arrived at the ability to feel and have emotions. As human beings, we're the end product of evolution by natural selection—a process that arose in primitive organisms approximately 3.5 billion years ago… (Smallberg, 2015: pp. 297-298)

So we can see that even if we created machine consciousness with the use of living neuron cells, it would not have gone through evolution and all the adaptations that humans have undergone and developed. Whether we owe that type of consciousness any duties would depend on its particular attributes, and we cannot know what those attributes will be until such alternative consciousness is achieved in the future.

Indeed, we should expect future AI or computer consciousness to be very different than human consciousness. Furthermore, it may well not suffer pain or experience pleasure if it does not have the neural connections that our bodies have, or alternatively, any such pain might be appreciably different from human pain.

In conclusion, we need to be very careful about using the word thinking when it comes to computers or AI, especially in the context of considering moral duties to future versions of AI. If computers achieve consciousness, it does not follow that such thinking or consciousness will warrant placing duties on us towards them since computer consciousness might well not experience pain or pleasure nor be concerned about a future or survival.

Murray Shanahan, a principal research scientist at Google DeepMind and Professor of Cognitive Robotics at Imperial College London, had this to say about the conscious computers of the future:

> We can imagine a machine carrying out, coldly and without feeling, the full range of tasks requiring intellect in humans. Such a machine would lack the attribute of consciousness that counts most when it comes to according rights. As Jeremy Bentham noted, when considering how to treat nonhuman animals, the question is not whether they can reason or talk but whether they can suffer. (Shanahan, 2015: p. 3)

So can computers think? Not yet, and maybe never in a way that we should even call it thinking. Perhaps we will need to create a new word to better describe whatever attributes computers acquire in the future. If computers acquire a rudimentary and basic type of consciousness, maybe we should say that they "cink", which

would mean they "computer think." For now, I think it is better to call them computing machines and leave the thinking to us.

3. Hume's Confusion about Personal Identity

3.1. The Problem

It would be strange for any of us to question the reality of the existence of a self or personal identity. It seems obvious that we encounter different people in our lives, and that we recognize and differentiate them from every other person and every other thing. My self is different than your self, and also different than the self of each and every person who has ever lived or will live. But the existence of a self has been questioned by some schools of Buddhism, and by the great 18th century Scottish philosopher David Hume (1711-1776). We will be examining Hume's view and specifically how his unorthodox view of the self has introduced unnecessary confusion to the subject. Specifically, I will take the position that Hume misdefined the term "personal identity" and it was his improper definition which led him to his bold but misplaced conclusion that personal identity was a fiction. As Hume did, we will be using the terms "self" and "personal identity" interchangeably and to denote the same concept.

3.2. Why Would There Not Be a Self?

Human beings are always changing. If we analyze humans using the classical division of body and mind, we see that both our bodies and minds are continually in flux. By the time a child reaches 10-years-old, most of their cells are not the original cells, but instead are new replicated cells. Although quite similar to the original cells, they are not identical. That's what ageing is all about. Moreover, if we were to show an elderly person a series of photographs taken of them at various stages of their lifetime, such as when they were a baby, at 10-years-old, at 20-years-old, and at 70-years-old, they could not help but see the dramatic changes that their body has undergone.

The mind is even more subject to change. Our thoughts are always changing. Even when you think about something you have thought before, the fact that this is not the first time you have thought about it means you have a different relationship to that thought, and it is not the same as the first time you thought about it. Our character and personality also change with time, sometimes as a result of challenging or tragic events which take place in our lives. Additionally, our memories are certainly not stagnant. We are in a perpetual process of creating new memories and forgetting old ones. Moreover, we often incorrectly remember things because our memories are flawed.

So if our bodies and minds are always changing, then where is the self or our identity? Isn't the person who has gone through life's stages really a different person at different stages? Aren't the baby, the 10-year-old, the 20-year-old and the 70-year-old so substantially different that calling them the same person is a distortion of reality, or what Hume called a fiction?

3.3. Hume's View on Personal Identity

Due to the considerations discussed above, Hume argued that there is no self or personal identity, and that assigning a personal identity to a person, or even a tree, was engaging in a fiction. Specifically, Hume claims that personal identity requires that a person be invariable and uninterrupted, or in other words, identical over their lifetime, but a human being is always changing and variable, and further, is interrupted in that our memories are often inaccurate or forgotten. Therefore, since we are not identical there is no identity, and without identity there can be no personal identity over time. In his leading work *A Treatise of Human Nature*, in the section titled *Of Personal Identity*, Hume explains his view as follows:

> If any impression gives rise to the idea of *self*, that impression must continue *invariably* the same, thro' the whole course of our lives; since *self* is suppos'd to exist after that manner. But there is no impression constant and *invariable*. Pain and pleasure, grief and joy, passions and sensations, succeed each other, and never all exist at the same time…What then gives us so great a propension to ascribe an *identity* to these successive perceptions, and to suppose ourselves possest of an *invariable and uninterrupted* existence thro' the whole course of our lives?… the objects, which are variable or interrupted, and yet are supposed to continue the same, are such only as consist of a succession of parts, connected together by resemblance, contiguity, or causation. For as such a succession answers only to our notion of diversity, it can only be by mistake we ascribe it to an *identity*… A change in any considerable part of a body destroys its *identity*… The *identity* which we ascribe to the mind of man, is only a *fictitious* one. (Italics added) (Hume, 1739: pp. 251-259)

We see here that Hume treats the terms self and personal identity as if they are synonymous. More importantly, Hume is arguing that identity means identical, and since we are never identical to our past self, there is no identity in general, nor personal identity in particular. As such, he concludes that the self or personal identity is a fiction.

Hume asserts that this is not only true of people, but also of all living things since they likewise are continually changing. For example, the seeds of a tree are radically different from the large tree it becomes, and yet we improperly attribute identity to that tree although it is not identical to its prior self, but rather has markedly changed.

> …in a very few years both animals and vegetables endure a total change, yet we still attribute identity to them, while their form, size, and substance are entirely alter'd. An oak, that grows from a small plant to a large tree, is [improperly viewed as] still the same oak; tho' there be not one particle of matter, or figure of its parts the same. (Hume, 1739: p. 257)

Moreover, Hume claims that we are not only continuously changing and variable, but further, parts of us are interrupted, and this gives us another reason to

conclude that we are not identical to our past self. My example of this is the period of dreamless sleep that most of us go through on a nightly basis. Although our brain is still functioning, we are not consciously aware. We could conclude that our consciousness has been interrupted.

To demonstrate the idea of interruption, Hume uses the example of a church which has fallen to ruin and is rebuilt with new architectural designs and different materials. Some people would still assert that they are attending the same church even though it is variable or changed, and its existence was interrupted, but Hume wants us to conclude that this is a fiction. The former church no longer exists. Hume wants us to conclude that we humans also go through similar interruptions, and thus our personal identity is also a fiction.

Another important example Hume uses to address both variability and interruption are our memories. Memories are crucial since they give us a notion of a self, and yet we eventually either distort or forget many things we have experienced or thought. Hume explains his point as follows:

> As memory alone acquaints us with the continuance and extent of this succession of perceptions, 'tis to be considered', upon that account chiefly, as the source of personal identity. Had we no memory, we never shou'd have any notion of causation, nor of that chain of causes and effects, which constitute our self or person… For how few of our past actions are there, of which we have any memory? Who can tell me, for instance, what were his thoughts and actions on the first of January 1715, the 11th of March 1719, and the 3d of August 1733? Or will he affirm, because he has entirely forgot the incidents of these days, that the present self is not the same person with the self of that time; and by that means overturn all the most establish'd notions of personal identity? (Hume, 1739: pp. 261-262)

So not only do our memories change over time and thus display variability, but when we forget things, our memories are interrupted. With our changing bodies, changing thoughts, and changing memories, Hume concluded that there can be no self or personal identity—such notions are fictions.[11]

3.4. Hume's Language Confusion: Identity Means Identify, Not Identical

Hume argues that there is no self or any personal identity because we are always changing with new thoughts, experiences, and bodily sensations. Therefore, we are not identical from one day to the next. He therefore equates the "identity" of

[11]We should acknowledge here that this view of Hume's may well have changed over time, as he admits that many of his ideas expressed in *A Treatise of Human Nature* were not his final thoughts or positions. Specifically, he responded to critiques of "A Treatise of Human Nature" by largely disavowing the book, claiming it was a "juvenile work" and directing readers to his later works, particularly "An Enquiry Concerning Human Understanding," which he considered a more refined and accurate representation of his philosophical views. It is noteworthy that Hume's views on personal identity are not addressed in the later book, providing us with a reason to believe that he may have abandoned, or at least had some doubt about, his views on personal identity as enunciated in *A Treatise of Human Nature*.

"personal identity" with "identical". Without a doubt we are not identical from one decade to the next, or even one day to the next. But that is not what most people mean when they refer to a person and differentiate people from each other. We identify each person by their appearance, their habits, their gait and speech patterns, their actions, their personality, and their character, among other things, although these are always changing.

Hume creates language confusion by using the mathematical concept of identity and improperly applying it to our everyday use of language. Indeed, he uses the term personal identity in an unconventional way, and his new definition leads him to a counterintuitive, unproductive, and impractical result. In the context of personal identity, normal lexicon uses the word "identity" to mean "identify", not "identical". The issue of personal identity deals with the ability to *identify* one person and differentiate them from another person, not with being *identical* throughout one's lifetime.

One of Hume's examples demonstrates his blind spot on this issue. Hume argues that although a river is always changing, we continue to refer to it as the same river. His clear implication is that we should not do so as we would be engaging in a fiction.

> Thus as the nature of a river consists of the motion and change of parts; tho' in less than four and twenty hours these be totally alter'd; this hinders not the river from continuing the same during several ages. (Hume, 1739: p. 258)

Hume may well have gotten this example from the ancient Greek Pre-Socratic philosopher Heraclitus of Ephesus (approx. 540-480 BCE) who stated that "we step into and do not step into the same rivers." (Heraclitus of Ephesus, 6th century BCE: p. 122) Unlike Hume, Heraclitus is pointing out that although as the water flows down the river, the specific water at a given point in the river is always changing, there is also a sameness or striking similarity to the river over time as it is in roughly the same location and has the same approximate width and depth day-to-day, year-to-year, and often decade-to-decade. So Heraclitus recognizes both the similarities and differences between the river throughout time, while on the issue of personal identity Hume totally ignores a person's similarities and only focuses on the fact that people change and are different as they traverse their lives. Certainly day-to-day most of us are much more similar to our yesterday self than different, but this fact is totally ignored by Hume.

Indeed, personal identity is not mathematical identity. The term personal identity is and has been used both in the past and in the present day to address the similarities of a person which help us to recognize and identify that person over time. As a person ages, we do not expect that person to be identical to how they were. Hume focuses on the differences throughout time, but personal identity is more about the similarities throughout time. As the term is regularly used, the "identity" of "personal identity" means "identify", not "identical." Hume creates language confusion because he defines personal identity differently than the rest of us and his definition leads to the quite unusual conclusion that the self is a

fiction.[12]

3.5. What Is a Self?

3.5.1. A Definition of the Self

Hume claims that the self is a fiction—that it doesn't really exist. I will argue that the self is not a fiction, and I will begin with a brief discussion of Buddhism. There are good reasons to believe that Hume was exposed to Buddhist thought and that this exposure shaped his views on personal identity (See Gopnik, 2009: pp. 5-28)[13]. However, I believe that he drew poor conclusions from the Buddhist example, and I will try to make better use of Buddhist thought.

Buddha recognized that the world and everything in it was always changing, including each person. For this reason Buddha rejected the Hindu belief that the self or soul consisted of an unchanging core that was passed from lifetime to lifetime. The Hindus called this unchanging self or soul *atman*. Buddha rejected the idea of *atman*, and Hume may have thereby inferred, as many schools of Buddhist thought have, that Buddha did not believe in a self, but instead viewed the self as an illusion. However, it is not entirely clear that this was Buddha's belief. What is clear is that Buddha denied the existence of the *atman*, an unchanging self, but not the idea of a self that is continually changing and characterized by impermanence. In fact, Buddha believed that each of us consisted of the 5 skandhas, which were changing aspects of ourselves that went from lifetime to lifetime until one reached enlightenment or nirvana (Novak, 1995: p. 68).

Borrowing from Buddha the notion of a changing self, I propose a possible way to picture or define the self or personal identity. I start with the idea that the self is always in a state of change, as Hume asserted, but contrary to Hume, we should not downplay the close connection between our past, present, and future selves, nor forget that we each have unique genetics—and one's genetics distinguishes them from everyone and everything else in the world. With this in mind, I believe

[12]Why would Hume go with such an unconventional definition of a self or personal identity? In the next section we will briefly discuss his speculated exposure to Buddhist thought, but in addition to this, Hume may have wanted to caution us against viewing a person as if they were set in stone. This notion later became a crucial foundational idea for Jean-Paul Sartre's philosophy. When addressing what he calls bad faith, Sartre argues that since we are always changing, it is unfair to label a person as having a specific character trait, such as being honest or deceitful, since in the present and future that person can act quite differently than they have in the past. Sartre gives us the example of a convicted criminal who has rehabilitated himself so that in a sense he is no longer the wrongdoer he once was—he is a changed person. (See Sartre, 1943: pp. 106-107) So perhaps Hume, similar to Sartre, was concerned about our unfairly judging others in the present based on their past behavior, and one way to avoid doing so is by concluding that they are no longer the same person as personal identity is a fiction. This type of thinking would be consistent with Hume's approach regarding his famous Problem of Induction, where he is cautioning us about drawing conclusions about unobserved cases based on our experience of similar observed cases, or making conclusions about the present and future based on the past. In the case of personal identity, perhaps Hume's primary intent is similar—to caution us about assuming that a person will be and act in the present or future as they have been and acted in the past.

[13]Since Buddha's time, there have been many schools of Buddhist thought. Some Buddhists do claim that there is no self, while others claim that the self is no more than the sum of its parts, and as such is a fiction. Hume may have been exposed to one of these prominent Buddhist views, which closely match the view which he espoused and which we are examining in this paper.

that our personal identity or self consists of two primary parts:

1) One's DNA, which is largely determinative of many aspects of the body and greatly influences the brain/mind, and further, is mostly unchanged throughout one's life.

2) A Causal chain that starts from birth and continues until we die.[14]

3.5.2. DNA

With the exception of identical twins, each person's DNA and genetics are unique. Specifically, each person has a unique DNA sequence. Moreover, one's DNA sequence determines most of that person's genetics, as it contains the instructions for building proteins which are responsible for our physical traits and biological functions. So our DNA is the blueprint for our entire body and its characteristics. Although DNA can change over time in a process known as epigenetics, in most cases your unique DNA sequence will not change over your lifetime. It is only in rare cases that mutations during a person's life cause a change to their DNA sequence.[15]

To put it in Hume's own terms, our DNA sequence is invariable and uninterrupted, and as such should be considered a mark of identity instead of difference. To be fair to Hume, this DNA sameness that exists throughout our lifetimes is not something that Hume could have known about in the 1700s when he lived. Nonetheless, it is, in substantial part, a person's DNA invariability which gives them many of their attributes which helps us identify that person throughout their lifetime. Hume focused on the changes that occur as we age, but DNA invariability is crucial in forging our identity.

3.5.3. The Causal Chain

We each have a unique chain of experiences from our birth to our death. Even though we are always changing due to those experiences, each moment our changes occur to what is already there and has come before it. The causal chain is what makes you who you are and me who I am. My self and my causal chain are very different than your self and your causal chain. I cannot change into you, but I can and do change into my future me. You can identify me and I can identify you by our causal chains.

3.5.4. Considering Both Our DNA & Our Causal Chain

There is an important connection between my DNA and my causal chain. In fact,

[14]I admit that my definition might well need to be more detailed to be able to adequately deal with the many thought experiments about personal identity that have been set forth by Derek Parfit and others. For example, what if half your brain were put into your identical twin who had suffered an injury causing the death of his or her brain? Do you exist both in your original body and in the body of your identical twin, or has the causal chain been broken regarding your identical twin? Such thought experiments are beyond the scope of this paper, and further, I do not think these experiments invalidate the two primary characteristics of the self which I have identified.

[15]So the Hindus were on to something as there is a core in each person that does not change throughout our lifetime, although the Hindus believed that the core was a non-physical soul, an unverifiable metaphysical concept that is quite different from our physical DNA. Moreover, it is interesting to note that with our recent medical advances to treat genetic diseases, specifically gene-editing with the use of CRISPR, we have developed the ability to alter one's DNA sequence.

my DNA shapes my experiences and part of the direction my causal chain will go. Due to my DNA, I will never be 6'4", nor as smart as Einstein, nor be able to jump like LeBron James, nor run as fast as Usain Bolt. I will never know what it is like to be in a woman's body, or to be looked up at like Wilt Chamberlain or Shaquille O'Neal (Shaq), who were both over seven feet tall. My body and DNA will strongly shape my causal chain experiences.

Indeed, due to my unique DNA and unique causal chain, I will have very different experiences than anyone else. My life has proceeded and will proceed in a different direction than your life due to the parents I have had, the friends I have chosen, the places where I grew up as a child, the places I have lived, and a myriad of other things. They differentiate me from everyone else on the planet. My causal chain is very different than anyone else's causal chain.

Notice that humans are quite different than Hume's example of the church. The church was totally dismantled and then a new church was built in the same location but with a different architectural design and different materials. A human's architectural design is never totally new nor are the materials. As such, humans are more accurately described as being modified with age, not destroyed and created anew. The church did not have the continuity we find in a human life.

In summary, while we are changing selves and can agree with Hume that our past, present, and future selves will not be identical, this does nothing to negate that we are each identifiable by our DNA and causal chain of experiences. Personal identity is about identification, not identity. The idea of the self or personal identity is neither a fiction, as Hume asserts, nor an illusion. By introducing an unconventional view of personal identity which focuses on variability throughout time while ignoring the invariability of our DNA sequence and the close connection of our past and future self, Hume was guilty of misunderstanding the concept of the self or personal identity. He seemed to confuse mathematical identity with personal identity and thus introduced language confusion into our concept of the self.

4. The Compatibilist and Libertarian Dueling Definitions of Free Will

4.1. The Problem

The concept of "free will" has become a source of confusion because there are two substantially different and competing definitions of free will, and both definitions have been with us for quite a long time.[16] The problem is that when a philosopher or scientist states that they believe in free will, we have no idea which definition of free will they are supporting. To make matters worse, the two types of free will, libertarian free will and compatibilist free will, fundamentally contradict each other. For reasons which I will explain, I propose that we eliminate one of the

[16]For example, Aristotle (384-322 BCE) is associated with supporting libertarian free will, while the Stoics (300 BCE to 300 CE) are associated with the compatibilist view (See The Cambridge Companion to the Stoics, Inwood, 2003: Ch. 7, p. 192).

definitions of free will, namely, the compatibilist view of free will, and stick with the libertarian position.

4.2. The Libertarian Definition of Free Will

The view of free will that most people have today is known as libertarian free will. Eddy Nahmias explains this type of free will when he asserts that a full theory of our decision-making will be grounded on the idea that we, as human beings, are "unique, creative, unpredictable, imaginative, autonomous agents who are the sources of our actions." (Nahmias, 2018: p. 3)

In a prior paper I described libertarian free will as follows:

> It is the view that at least some conscious decisions a person or agent makes are decided by them and not by the many external and internal influences which act upon them. This type of free will is non-random in the sense that each decision unambiguously flows from the agent and does not just randomly occur for no reason at all and with no clear genesis or source. The agent is the author or source. It is the agent who chooses from among competing desires, instincts, habits, motivations, personal character and personality traits, and other mental states—even if that choice is to let one's instincts or desires run their course. This means as to the decision made, the agent could have chosen otherwise than they did. Although the decision can be and normally is influenced by both internal and external factors, these factors do not cause the actual decision that was made—the agent does. As Balaguer puts it, "(a) you did it, and (b) nothing made you do it." (Balaguer, 2014: p. 129; Firestone, 2017: p. 65)

The view opposing libertarian free will is known as hard determinism. The hard determinist believes that everything that has ever happened had to have happened exactly as it did happen, and at that exact time and place, and it could not have been otherwise. Furthermore, the hard determinist believes that this applies not only to inanimate matter, but also to all people—that no person could have acted otherwise than they have acted.

The philosophical and scientific issue of whether we have free will pits the libertarian against the determinist. We might frame the free will vs. determinism issue as follows: In a world that is primarily deterministic (with possible randomness thrown in), can human beings escape determinism and exercise free will? In other words, can human beings act contrary to what we might expect of them given their genetics and past experiences in such a way as to be the authors of their actions? Simply put, could people have acted differently than they have acted? Those who believe in libertarian free will answer these questions with a resounding "yes".

Why is this issue important from a practical point of view? If we do not have libertarian free will, then we do not deserve either blame or praise for what we have done, and arguably are not responsible for what we have done or will do because it would have been impossible for us to have done otherwise. In two prior

papers, I have argued that there are good reasons to believe that we have libertarian free will (See Firestone, 2017: pp. 64-93; Firestone, 2023b: pp. 621-645), but whether or not we have free will, the problem before us now is confusion over what free will means because there is a competing definition of it.

4.3. The Compatibilist Definition of Free Will Is Incompatible with Libertarian Free Will

Classical compatibilism, also sometimes called soft determinism, has a radically different understanding of free will. Compatibilists claim that free will and determinism are compatible, but do so by proposing a different definition of free will to achieve the compatibilism. Many such compatibilists exist today, especially among neuroscientists and philosophers. They assert that free will is present when we make choices or decisions free from undue coercion, force, or impediment, but not that we could have chosen otherwise than we did. In fact, they go along with the hard determinist view that we could not ever have acted contrary to how we did act. But if we cannot choose and act differently than we have chosen and acted, then we do not have the kind of free will that most people believe that we possess, namely, libertarian free will.[17]

Let us take an example. Suppose a boy named Billy goes to Baskin Robbins to buy some ice cream. There are many flavors to choose from. If someone, such as Billy's parent, does not force Billy to choose a particular flavor, then Billy was able to choose among many options. Let's assume that Billy chose chocolate ice cream. Since Billy chose chocolate and was not forced to choose chocolate, the compatibilist says that Billy exercised his free will, although they do not believe that Billy could have picked a different flavor than the one he actually picked. In other words, the compatibilist claims that Billy has free will but at that time could not have made a choice other than chocolate.

So classical compatibilism construes free will in a way that contradicts most people's notion of free will, which is libertarian free will. Libertarian free will is present only if we could have acted otherwise than we did, but classical compatibilists claim that we have free will even though we could not have acted otherwise than we did—as long as we were not forced or coerced into choosing and acting as we did.

We can now see that the compatibilist view is merely a disguised determinism because the compatibilist does not believe we could ever do otherwise than we

[17]The Stanford Online Encyclopedia of Philosophy explains this version of compatibilism and how it is contradictory to the normal notion of free will (libertarian free will): According to one strand within classical compatibilism, freedom is nothing more than an agent's ability to do what she wishes in the absence of impediments that would otherwise stand in her way… For the classical compatibilist, then, free will is an ability to do what one wants… [But] if determinism is true, and if at any given time, an unimpeded agent is completely determined to have the wants that she does have, and if those wants causally determine her actions, then, even though she does do what she wants to do, she cannot ever do otherwise. She satisfies the classical compatibilist conditions for free will. But free will requires the ability to do otherwise, and determinism is incompatible with this" (Stanford Online Encyclopedia of Philosophy, 2023, Compatibilism: 2.1-2.2.).

have done, which is exactly what the hard determinist believes.

Today, when a philosopher or neuroscientist, among others, proclaim that they believe in free will, a listener or reader would have no idea whether they believe in libertarian free will or not. They may well be endorsing only compatibilist free will, which is no free will at all from the libertarian viewpoint, and as I have stated, is really just a disguised determinism.

4.4. A Solution: Eliminate Compatibilism's Definition of Free Will

So what can we do about this? To answer this question, we need to notice that the real philosophical issue regarding free will is whether or not we could ever have acted differently than we did act. Our personal responsibility for our actions arguably rests on the answer to this question.[18] Indeed, the issue that is debated in philosophy and science is whether we have libertarian free will, not the compatibilist view of whether we have made our choice without undue impediments. Everyone, including the libertarian, the compatibilist, and the determinist, agree that we sometimes (and for most of us usually) make unforced or uncoerced choices. There is no disagreement about this. The disagreement is over whether the libertarian or the determinist is correct regarding whether we could have acted otherwise than we did.

For this reason, William James, the American philosopher and psychologist known as both one of the founders of the philosophical school known as pragmatism and the father of American psychology, claimed the compatibilist view was "a quagmire of evasion under which the real issue of fact has been entirely smothered." (James, 1897: p. 149) Focusing on where the philosophical and scientific disagreement exists, I believe that the best solution is for the compatibilist to stop claiming that they believe in free will because they do not believe that we could ever have acted otherwise than we have acted, which is the philosophical and scientific issue which is disputed.

Additionally, as I proposed in a prior paper, I recommend that for those people who believe in libertarian free will, the term "free will" should be changed to "predisposed agency", a term which both affirms that we are agents who could have acted otherwise, while also acknowledging that we are predisposed to take the actions we take due to our genetics and our environment, which include our temperament, our character, our past experiences, our past decisions, our habits, the people we have been with, and the situations we find ourselves in, among other things (See Firestone, 2023b: pp. 621-645).

Indeed, when we think of someone exhibiting free will, most of us think of someone who is the author of their actions and who weighs many factors and influences and decides which among them to follow, which to consider, which to accommodate, which to ignore, and which to reject. They control their decisions. They exercise autonomy. It is not determined or fated which decisions they will

[18]We should acknowledge that some, if not many, compatibilists claim that one can have responsibility even if a person could not have acted differently than they did act.

make and which actions they will take. They are the source of their actions and could have chosen differently.

For the compatibilists to deny all of the claims that are fundamental to the libertarian view of free will but then to claim that they still believe in free will presents us with undue confusion. Their definition of free will is in fact the opposite of the libertarian definition of free will, but today the two definitions exist side by side—leading to unnecessary confusion in our discussions of whether or not we have free will.

5. Paley's Confusion on the "Order" of the Universe as a Reason to Believe in the Existence of God

5.1. The Problem

In a prior paper, I argued that William Paley's classic version of the Teleological Argument for the existence of God, also known as the Argument from Design, which he wrote in 1802, is an example of an equivocation fallacy regarding the word "order". (See Firestone, 2020: pp. 155-186). Paley's argument contends that just as a watch is ordered for a purpose and we rightfully conclude that it had a creator who ordered it, the universe is also ordered in many ways and for a variety of purposes, so we should similarly conclude that it had a creator who put it in order.

Because of Paley's failure to see that there are very different types of order, and specifically that the types of order displayed in the universe are dissimilar from the order displayed in a watch, Paley draws the incorrect conclusion that the universe must have a conscious creator called God.[19]

5.2. Paley's Argument for God and His Equivocation Fallacy

Paley begins his argument as follows:

> But suppose I found a *watch* upon the ground…when we come to inspect the watch, we perceive (what we could not discover in the stone) that its several parts are framed and put together for a purpose, e.g. that they are so formed and adjusted as to produce motion, and that motion so regulated as to point out the hour of the day; that if the different parts had been differently shaped from what they are, or of a different size from what they are, or placed after any other manner, or in any other order, than that in which they are placed, either no motion at all would have been carried on in the machine, or none which would have answered the use that is now served by it. To reckon up a few of the plainest of these parts, and of their offices, all tending to one result. (Paley, 1809: pp. 1-2)

We see that Paley emphasizes that the parts of the watch are put together for the purpose of telling time, and that the parts have a precision in that if they were

[19]This section will highlight in summary fashion the points made in my earlier paper.

differently shaped or differently placed then the watch would not be able to carry on its purpose of telling time. Paley then concludes that the universe works the same way as a watch—as the parts are "accommodated to their end", and this implies an intelligent creator or designer.

> There cannot be design without a designer; contrivance without a contriver; *order* without choice; arrangement, without any thing capable of arranging; subserviency and relation to a purpose, without that which could intend a purpose; means suitable to an end, and executing their office, in accomplishing that end, without the end ever having been contemplated, or the means accommodated to it. Arrangement, disposition of parts, subserviency of means to an end, relation of instruments to a use, imply the presence of intelligence and mind. (Italics added) (Paley, 1809: p. 11)

> [E]very indication of contrivance, every manifestation of design, which existed in the watch, exists in the works of nature; with the difference, on the side of nature, of being greater and more, and that in a degree which exceeds all computation. I mean that the contrivances of nature surpass the contrivances of art, in the complexity, subtility, and curiosity of the mechanism; and still more, if possible, do they go beyond them in number and variety; yet in a multitude of cases, are not less evidently mechanical, not less evidently contrivances, not less evidently accommodated to their end, or suited to their office, than are the most perfect productions of human ingenuity. (Paley, 1809: pp. 17-18)

Paley makes it clear that his argument is based on the apparent order of the universe when he says of his opponent's position "that if such argument be listened to, it leads to the inference, not only that the present *order* of nature is insufficient to prove the existence of an intelligent Creator, but that no imaginable *order* would be sufficient to prove it." (Italics added) (Paley, 1809: p. 415)

We can formally set out Paley's Teleological Argument for God's existence as follows:

1) A watch displays order for a purpose.

2) We correctly conclude that such order was created by a conscious maker.

3) The universe also displays order for a purpose or many purposes.

4) Therefore we should likewise conclude that the order of the universe was created by a conscious maker, in this case God.

Although an emotionally appealing argument, the order in premise 1 which we find in a watch is what I call Intentional Order, which is order created for a purpose by a conscious maker, while the universe's claimed order in premise 3 does not display Intentional Order, but in fact displays both disorder and naturalistic order which does not need to have a conscious maker, and certainly not a supernatural one. Indeed, the watch's order is artificially created while any order in the universe is natural. This change in the definition of the word "order" from one premise to a later premise led Paley to draw an incorrect conclusion, and he was

thus guilty of committing the fallacy of equivocation. The typical example of an equivocation fallacy occurs when one uses the same word in an argument more than one time, but changes the meaning of the word the second time it is used, and thereby draws an incorrect conclusion.[20]

In this case, Paley ignores that the watch necessarily requires a conscious and intentional creator because it does not exist in nature, but the same is not true about the universe, which is nature. Nature's order and the order we find in a watch are appreciably different types of order that resulted from different types of causes.

In the following sections I will argue that Paley conflated the following four very different types of order.

1) Ramseyian Order: This is merely the inevitable patterns which emerge whenever multiple things exist and is not true order.

2) Purposeless Order: Order for no real purpose.

3) Functional Order: Order for a purpose which could and did emerge naturally.

4) Intentional Order: Order for a purpose which could not have arisen naturally and was therefore intentionally created or designed by a conscious being.

An example of Ramseyian Order, which are random patterns and are actually part of any disordered system, is seen in a cloud or a set of stars which are roughly in the shape of an animal, or the "man in the moon"; Purposeless Order is found in the shape and symmetry of a snowflake; Functional Order is demonstrated by the human eye whose function is to allow us to see; and Intentional Order is illustrated by human creations such as houses and watches.

Paley confused these four as he asserted that Intentional Order was present in situations which can best be characterized as disordered, or which display only Ramseyian Order, Purposeless Order, or Functional Order, each of which can be explained naturalistically without the need to posit a God or other conscious being. We will now examine how the universe's order with its accompanying disorder is a far cry from the Intentional Order of a watch.

5.3. Most of the Universe Displays Neither Order Nor Order for a Purpose

First, we should note that the universe as a whole does not clearly display any order for a purpose at all, unlike the watch which does. The watch's purpose is to tell time, and the parts of the watch contribute to that purpose, but it is not clear that the parts of the universe contribute to any overall purpose, or what that purpose would be. In fact, Paley never argues that the universe as a whole displays order for a purpose. Rather, he argues that many things in the universe display order—both the big things, such as the heavenly bodies, and much smaller things, such as the human body—although he admits that he does not know what order

[20]Here is an example of an argument that commits an equivocation fallacy: 1) Only man is rational, other animals are not. 2) No woman is a man. 3) Therefore, no woman is rational. Note that in premise 1 "man" means "mankind", while in premise 2 "man" means "male".

or purpose many things in the universe have (See Paley, 1809: pp. 378-382).

Second, although there are many pockets of limited order or patterns in the universe, including the order we find in living organisms, the universe in most places is still best characterized as disordered.[21] Disorder predominates over order, and it is the disorder that abounds, not order. In fact, the overall lack of order and design in the universe is supported by well-established physics. For example, the late physicist Victor Stenger explained as follows:

> Most of the matter and energy of the universe exhibits little structure and shows no sign of design. We noted above that 96 percent of the mass of the universe appears to be composed of dark matter and dark energy whose exact natures are unknown but that are definitely not composed of familiar atomic matter. As far as we can tell, these components have little structure. (Stenger, 2008: p. 162)

Furthermore, when we look at the areas of the universe where we conclude that order exists, in both living beings and non-living things, we see much disorder and destruction—in fact far more disorder than order. Black holes gobble up anything within their path, stars shred other stars and hurl planets into outer space, and planets collide with other planets and moons. Additionally, most of the universe is incompatible with life, and certainly with the higher forms of life, as life cannot survive in outer space, in black holes, on stars, on asteroids, nor on most planets. Moreover, on our own planet, at times, excessive volcanic activity and asteroids have destroyed the majority of the then-existing species. There just does not seem to be the Intentional Order or purpose which we would expect from an intelligent designer. Clearly the universe as a whole does not exhibit the order and/or order for a purpose that a watch does.

5.4. The Initial Universe Was Not Truly Ordered—Displaying Only the Inevitable Patterns of Ramseyian Order

One would expect that if there were a designer of the universe, then the beginnings of the universe would exhibit that design or order. But this is not the case. Supporting the position that the world did not begin with the order that one would expect from a creator or 'Grand Designer" God, physicist Victor Stenger has explained that the Big Bang actually produced total chaos and maximal disorder with no structure at all. Without such initial order, there is no reason to believe there was a conscious creator such as God. Stenger elucidates as follows:

> If the universe were created, then it should have possessed some degree of order at the creation—the design that was inserted at that point by the Grand Designer… [However], the universe began with no structure. It has structure today consistent with the fact that its entropy is no longer maximal. In short, according to our best current cosmological understanding, our universe began with no structure or organization, designed or otherwise. It was a state

[21]See, for example, Gelfert & Motter, 2010, Yanofsky: 2017, Atkins, 2018: p. 83, and Stewart, 1992.

of chaos. (Stenger, 2008: pp. 117, 121)

It is important to notice, however, that once objects were formed, what I call Ramseyian Order would be present even in the initial disordered universe. That patterns cannot help but emanate or develop from or as a part of disorder was previously demonstrated by mathematician Frank Ramsey. In fact, Ramsey mathematically proved that patterns will necessarily emerge when there are enough numbers or things being considered. For example, at any given party with at least six people, there are three people who are all either mutual acquaintances (each one knows the other two) or mutual strangers (each one does not know either of the other two). This would be true in any world which had conscious beings who could know each other, and a god or creator could not design a universe where this pattern was not true. These types of patterns are a result of randomness, are inevitable, and are not the result of conscious design. They are not order as the term is normally used.[22]

5.5. The Natural Scientific Laws of the Universe Are Not Truly Ordered, and, at Best, Exhibit Either Ramseyian Order or Purposeless Order

Even if the universe started with disorder, one could argue that it quickly manifested order with the formation of the natural or scientific laws of nature, which then led to the further omnipresent order we find in the universe today. However, the natural laws do not display order at all. Why not?

All things that exist have attributes or characteristics. If they did not have any attributes, then it is difficult to imagine how they could be anything. The things in the universe, which include both matter/objects and energy, interact with each other. In any universe the way that things behave, and, due to their attributes, interact with other things, constitute the natural or scientific laws of that universe.

As such, the scientific laws consist not only of a description of the make-up and behaviors of things, but also of the attendant causes and effects of each thing when it interacts with other things.[23] This does not mean that any universes are ordered or organized by a conscious organizer. It only means that the scientific laws work in a certain way—that there are facts of the matter about each thing's attributes and the way those attributes interact with other things and their attributes. Ohm's law, for example, merely describes the relationship between voltage, current, and resistance.[24]

Indeed, the natural laws of science are simply the expression of the way things

[22]Mathematicians Ronald Graham and Joel Spencer give a clear explanation of what is now known as Ramsey Theory. (Graham & Spencer, 1990: p. 112)

[23]Anne Marie Helmenstine explains the natural laws and their causal character in a similar way: "Scientific laws (also known as natural laws) imply a *cause and effect* between the observed elements and must always apply under the same conditions." (Italics added) (Helmenstine, 2019)

[24]Nietzsche possibly made a similar point when he wrote "but 'nature's conformity to law,' of which you physicists talk so proudly… exists only owing to your interpretation and bad 'philology.'" (Nietzsche, 1887, BG & E 22: p. 220) In other words, nature does not conform to law; rather, laws are the inevitable regularities which emerge from the basic nature of things (since things must have attributes and those attributes will encounter other things with other attributes which will then form the natural laws).

work. Newton's law of universal gravitation describes the attractive force between two masses; the law of conservation states that matter/energy can neither be created nor destroyed; and Mendel's law of segregation explains how physical traits are passed from one generation to another. These laws describe how matter and energy behave and interact in our universe, and these laws flow from the fact that our universe has things, and things have attributes or characteristics. The same would be true in any universe which had things. This does not mean that the natural laws display true order; rather, it means that a universe with things in it will necessarily have things which behave in a certain way due to the attributes of those things.[25]

5.6. The First True Order in the Universe Was Purposeless Order as the Result of Natural Self-Organization

We have seen that the natural laws are not really ordered at all. They are a result of the fact that our universe is not empty, and a universe with things in it means that the attributes of the things and their interactions with other things will form the natural or scientific laws of that universe. These scientific laws, in turn, give rise, through a process that scientists call self-organization, to the many limited and local instances of pattern or order found in the universe. Self-organization is a natural process that can be explained fully without the consideration of an external creator. Moreover, these self-organized patterns display no purpose if we mean by purpose a goal by an external conscious creator. As such, these patterns are instances of order without purpose, or what I am calling Purposeless Order, and not the type of order created by a conscious entity, Intentional Order.

Philosopher of science Niall Shanks and evolutionary biologist Istvan Karsai make it abundantly clear that self-organization is a natural process that does not require the introduction of a conscious creator such as God:

> Ordered, organized, complex states of matter abound in the world around us. How are we to explain this complexity? Our current best account of these types of phenomena is given by dynamical systems theory, a branch of natural science that explains the existence of complex, organized systems in terms of self-organization… *Hence*, *self-organization* is evidently a pathway to irreducible complexity and one *that involves no intelligent design*, *supernatural or otherwise*… The orderly, complex structures emerge as the consequence of the *operation of blind*, *unintelligent*, *natural mechanisms* operating in response to chancy, contingent, and unpredictable environments. (Italics added) (Shanks & Karsai, 2005: pp. 85, 99, 106)[26]

[25]Philosopher Nicholas Everett appears to make a quite similar argument to my own. (See Everitt, 2004: p. 89.)

[26]Francis Heylighen, a Belgian cyberneticist specializing in the investigation of the emergence and evolution of intelligent organization, likewise concludes that there are many instances of apparent order, such as crystallization, which can be accounted for by self-organization, a process of nature not requiring an external conscious agent or creator. (Heylighen, 1999: p. 2). Additionally, A recent 2018 paper by Markus Aschwanden, et al., indicates how common self-organization is in the field of astrophysics (Aschwanden, 2018: p. 1).

More than two centuries ago, Hume anticipated this type of naturalistic order. He described this possibility as follows:

> For aught we can know *a priori*, *matter may contain the source or spring of order originally*, *within itself*, as well as mind does; and there is no more difficulty in conceiving, that the several elements, from an internal unknown cause, may fall into the *most exquisite arrangement*… (Italics added) (Hume, 1779: Part II, pp. 20-21)

What is this self-organization? It seems to me that all it is are the results of the natural laws interacting on and with the objects in the universe. This self-organization causes formations or patterns and could not avoid doing so. Purpose is absent.

5.7. Evolution Demonstrates Functional Order, Not Intentional Order

Paley believed that the human body provided the strongest example and support for his position that the universe was ordered in way that that it must have been created by a conscious designer.[27] However we can now explain the order and complexity of the human body by the naturalistic process we call evolution. Evolution is a self-organizing principle that has produced the myriad of life forms on earth. It is the process which describes how living things respond to their environment in order to survive. Evolution is an example of what I have referred to as Functional Order, order which can be fully explained by natural properties, forces, and/or laws, and not of Intentional Order, order which requires a conscious creator.

Evolutionary biologist Richard Dawkins describes the success of evolution in explaining the world we see: "The theory of evolution by cumulative natural selection is the only theory we know of that is in principle capable of explaining the existence of organized complexity." (Dawkins, 1986: p. 452) Additionally, Dawkins explains that the apparent design found in nature has occurred naturally and without the requirement of positing a conscious creator, similar to the self-organization of non-living things.

> The natural temptation is to attribute the appearance of design to actual design itself. In the case of a man-made artefact such as a watch, the designer really was an intelligent engineer. It is tempting to apply the same logic to an eye or a wing, a spider or a person… The temptation is a false one, because the designer hypothesis immediately raises the larger problem of who designed the designer… Darwin and his successors have shown how living creatures, with their spectacular statistical improbability and appearance of design, have evolved by slow, gradual degrees from simple beginnings. We can now safely say that *the illusion of design in living creatures* is just that—

[27]Paley stated as follows: "… to the proof of an intelligent Creator. For my part, I take my stand in human anatomy." (Paley, 1809: p. 536)

an illusion. (italics added) (Dawkins, 2006: p. 188)[28]

Moreover, we can better explain the world of living organisms by the natural processes of natural selection and self-organization than by a conscious creator. For example, the many parts of the human body which serve important and identifiable purposes are not crafted in a way that is consistent with a conscious designer. Specifically, mutations that help us survive often have other poor consequences or side-effects for us: the development of a big brain took away the room needed for our wisdom teeth to grow and also made childbirth both extremely painful and riskier than it had been; the development of walking upright offered some advantages but also created back and foot problems; and the development of genetic mutations helped Africans better resist malaria but also made them more susceptible to getting sickle cell anemia. A designer, unless the designer were cruel, would not be expected to have intentionally designed things this way, and in any event, evolution is certainly a much better explanation because each of these changes offered substantial survival advantages even with the accompanying disadvantages or side-effects.

Stenger explains this by emphasizing how the human body is not ordered in such a way that it maximizes well-being for individual human beings, and further points out that most living beings on earth are not advantageously designed for long and enjoyable lives:

> The parts of the human body hardly resemble a watch. In an article in *Scientific American* [March 2001] titled: "If Humans Were Built to Last," S. Jay Olshansky, Bruce Carnes, and Robert N. Butler have looked at flaws in the human body and shown how an engineer might have fixed them to enable us to live a hundred years or more in better health… The other place where evidence for the absence of beneficent design can be found is in the short, brutal existences of most life-forms… Indeed, Earth and life look just as they can be expected to look if there is no designer God. (Stenger, 2008: pp. 69-71)

We see that naturalistic processes such as evolution produce order that is nothing like the order found in a watch. Moreover, evolution has serious design flaws which an intelligent (and certainly an omnipotent and all-good) designer would never create.

5.8. Conclusion

Indeed, there is no order manifested in our universe which resembles the conscious and intentional order for a purpose that we find in a watch. Our entire universe, with its pervasive disorder, chaos, and destruction, is inconsistent with what we would expect from an intelligent designer. Moreover, what order we find

[28]Daniel Dennett, in his award-winning book *Darwin's Dangerous Idea*, explains how evolution is the result of several natural algorithmic processes that involve "mindless steps succeeding each other without the help of any intelligent supervision…" (Dennett, 1995: p. 59.)

can be explained in naturalistic terms without an appeal to a conscious designer.

Certainly, a watch requires a conscious creator because watches are not a part of nature, or as the saying goes, do not grow on trees. The universe, on the other hand, is nature, so it may well not require a conscious creator. As discussed, the pockets of order we find in nature are not only coexisting with disorder, which predominates, but also can be explained naturalistically without a need to appeal to a God or other intentional conscious creator.

As such, Paley's famous version of the teleological argument fails. It fails, in part, due to being guilty of an equivocation fallacy dealing with the word "order," as Paley mistook disorder and Ramseyian Order for true order, and further mistakenly equated Purposeless and Functional Order with Intentional Order. Only Intentional Order requires a conscious creator or God.

6. Sartre's Confusion about "Essence" When Asserting That There Are Two Kinds of Existentialists, Christian and Atheistic

6.1. The Problem

Sartre mistakenly argues that there are two types of Existentialists whose views fundamentally differ. He bases his dichotomy, in substantial part, on his analysis of the word "essence." Sartre argues that Christians, but not atheists, believe in what I call innate essence, while he asserts that only atheists believe in what I call character essence. What Sartre fails to see is that both types of existentialists agree that they form their character essence by their choices and are therefore responsible for their decisions. Moreover, existentialism is only concerned with character essence, so his discussion of the Christian belief in innate essence is irrelevant. If it were not for Sartre's mistake regarding the word essence, he would not have a valid basis to distinguish the Christian existentialist and the atheistic existentialist regarding their existentialist views.

6.2. Sartre's Distinction between Christian and Atheistic Existentialists

In Jean-Paul Sartre's 1946 article "The Humanism of Existentialism", which was based on a speech he gave in 1945, Sartre provides us with what has become the leading paper in explaining the fundamental concepts and attitudes of Existentialism.

In that article, Sartre goes to great lengths to distinguish existentialists who are Christian from those who are atheists, and makes it clear that he believes that existentialism works differently for each group.

> What complicates matters is that there are two kinds of existentialist; first, those who are Christian, among whom I would include Jaspers and Gabriel Marcel, both Catholic; and on the other hand the atheistic existentialists, among whom I class Heidegger, and then the French existentialists and myself. (Sartre, 1946: pp. 291-292)

Later in his essay Sartre implies that it is only the atheistic existentialist who feels forlorn or abandoned in the world because they must make choices for which they are fully responsible but have no God to turn to who can validate whether their choices are moral or beneficial.

> When we speak of forlornness, a term Heidegger was fond of, we mean only that God does not exist and that we have to face all the consequences of this… Indeed, everything is permissible if God does not exist, and as a result man is forlorn, because neither within him nor without does he find anything to cling to. He can't start making excuses for himself. (Sartre, 1946: pp. 295, 296)

In the last paragraph of his paper, Sartre seems to suggest that religion runs counter to existentialism when he states that "Existentialism is nothing else than an attempt to draw all the consequences of a coherent atheistic position." (Sartre, 1946: p. 308) What Sartre seems to be articulating is that religious existentialists are jumping on board an inherently atheistic philosophy and perhaps are not really existentialists at all. Sartre concludes his article by not merely defending his existentialist beliefs, but by mocking the Christian:

> But if one calls every attitude of unbelief despair, like the Christians, then the word is not being used in its original sense… In this sense existentialism is optimistic, a doctrine of action, and it is plain dishonesty for Christians to make no distinction between their own despair and ours and then to call us despairing. (Sartre, 1946: p. 308)

That is how his article ends—with emphasis on a difference between the atheist and the theist, instead of the common beliefs they share in their existentialist views. Indeed, Sartre seems to be asserting that there are people who are Christian and claim to be existentialists, but in reality they are not true or comprehensive existentialists at all. So his dichotomy of two types of existentialists seems to be a division of Christians who claim to be existentialists but are not full-blown existentialists, and atheists who claim to be existentialists and are existentialists through and through. Indeed, Sartre seems to believe that if they are existentialists at all, religious existentialists are a deficient version of atheistic existentialists. This I believe is an error.

In a prior paper, I argued that Sartre was incorrect to think that the beliefs of existentialists who are theists in general, or Christians in particular, in any way run counter to the key ideas, principles, and themes of existentialism, including those existentialist themes which have been emphasized by the atheistic existentialists (Firestone, 2023a: pp. 342-371). My conclusion was that the disagreement between existentialists who are Christian and those who are atheist comes down to differences in their religious beliefs, not their existentialist views. In that paper I specifically explored six central existentialist themes to demonstrate that in their existentialist beliefs both the theist and the atheist agree. I also examined three examples in Sartre's article which undermine his distinction between Christian and atheistic existentialists. It is Sartre's first example that this paper will again

explore.

Specifically, I argued then and argue here that Sartre made a distinction between the Christian existentialist and the atheist existentialist based on a language error called an equivocation fallacy by conflating two different types of human essence, one's innate essence and one's character essence. We saw an equivocation fallacy in the last section where Paley confused different types of order. Sartre was likewise guilty, but here with the word "essence".

6.3. Sartre's Two Types of Human Essence for Two Types of Existentialists

At the outset of his essay, Sartre asserts that what the atheist existentialists "have in common is that they think that existence precedes essence" (Sartre, 1946: p. 292), while implying that this is not true about the religious existentialist. What Sartre means by this is that people are born and then create their character or essence through the choices they make and actions they take. Each person decides whether they will be a truth-teller or liar, generous or selfish, compassionate or uncaring. When you were born nobody knew, not even your parents, what actions you would choose to take.[29] But it is through these choices (and only through these choices) that we develop our character or essence. We can call this our character essence, and it is formed by our actions, which are based on the decisions we make.

Sartre's (mistaken) view is that Christian existentialists, on the contrary, do not believe that existence precedes essence because they believe that God knows our essence before we are born. But why is this important in differentiating their existentialist views from the existentialist views of atheists? Because if our existence precedes our essence, then, according to Sartre, we are responsible for what we do (our actions) and therefore who we are (our character), as who we are flows out of what we do. If we create who we are through our choices and actions, then who else could be responsible other than ourselves?

This point is the centerpiece of Sartre's philosophy—that we have full responsibility for who we are and what we do. He makes this abundantly clear in the following passage:

> But if existence really does precede essence, man is responsible for what he is. Thus, existentialism's first move is to make every man aware of what he is and to make the full responsibility of his existence on him. (Sartre, 1946: p. 293)

Sartre claims that the idea that human existence precedes human essence contrasts with the situations of a creator of a paper cutter or the author of a book who

[29]Of course, most people are not simply truth-tellers or liars. You can choose to sometimes lie and to sometimes tell the truth. My point is that your choices and actions will form your moral character. Your character might be mostly truthful, or mostly untruthful, not totally one or the other. Moreover, you can change your character by changing the choices you are making and the actions you are taking. Your character is not set in stone.

knows the essence of what they are creating before it is created. For example, the manufacturer of the paper cutter knows that they will be creating a paper cutter, the type of paper cutter it will be, the specific characteristics of the paper cutter, such as its size and shape, and the situations where this paper cutter would be most practical and useful. Sartre asserts that the Christian existentialist is in a similar situation because Christians believe that God knows your essence before you are created. But we need to notice that Sartre is no longer addressing character essence here but rather is addressing what we can call our innate essence.

> When we conceive God as the Creator, He is generally thought of as a superior sort of artisan… and that when God creates He knows exactly what He is creating. Thus, the concept of man in the mind of God is comparable to the concept of paper-cutter in the mind of the manufacturer, and, following certain techniques and a conception, God produces man, just as the artisan, following a definition and a technique, makes a paper-cutter. Thus the individual man is a realization of a certain concept in the divine intelligence… Thus, here too the *essence* of man precedes the historical existence we find in nature. (Italics added) (Sartre, 1946: p. 292)

In the above quotation, Sartre describes our innate essence as the "realization of a certain concept in the divine intelligence" and "precedes the historical existence" of the birth of each individual. What is our innate essence? It would be our genetics and the innate abilities and limitations that come along with our genetics, including our free will. This would include our natural or genetic dispositions and temperaments, such as being more drawn to introversion instead of extroversion. Many religious people believe that our innate essence is good in that we innately want to help others and cooperate with them—or at least have a predisposition to be good to others. If there were an all-knowing and perfect God who created us, Sartre asserts that such a God would know our innate essence.

6.4. Sartre's Language Error: He Committed the Fallacy of Equivocation Regarding the Word "Essence"

Now that we see the two types of essence that Sartre describes, let us formally set out Sartre's argument:

1) Atheistic existentialists believe that humans must create their *essence* after they are born.

2) If premise 1 is true, then according to the atheistic existentialist, a person is responsible for what they do (their actions) and who they are (their character).

3) Christian existentialists, on the other hand, believe that God knows your *essence* when you are born and before you have made any decisions or taken any actions.

4) If premise 3 is true, then Christians do not believe that a person is responsible for what they do (their actions) and who they are (their character).

5) 2 and 4 above lead us to the conclusion that atheistic existentialists and Christian existentialists fundamentally disagree on the important existentialist issue of

responsibility.

The problem is that "essence" in premise 1 refers to character essence, and "essence" in premise 3 refers to innate essence, but Sartre does not notice this and thereby commits an equivocation fallacy. His implied conclusion that the two types of existentialists disagree about responsibility is wrong.

What's the problem here? Sartre fails to acknowledge that Christian existentialists, and most Christians, agree with premise 1 that we create our character essence due to our free will choices and actions. If this were not true, then it would be unfair to hold people responsible for their actions, and the notions of rewarding or punishing people by having them go to heaven or hell would make little sense.

In other words, if I understand Sartre correctly, he commits an equivocation fallacy by using the word "essence" to mean something different for the theist than for the atheist by not distinguishing our innate essence from our character essence. When Sartre addresses the theist's beliefs about essence, he is referring to innate essence, not character essence, but when he addresses the atheist's position on essence, he is addressing character essence. More importantly, it is only our character essence that Sartre and existentialism are concerned about because it is our character essence which makes us responsible for our actions and character. Sartre's error is that he ignores that both the Christian existentialist and the atheistic existentialist agree that we must create our character essence and thus are responsible for our actions and character.

Certainly, human beings are not like books or paper-cutters. Our character essence will be created by us; we are not born with it. Unfortunately, Sartre made the mistake of distinguishing Christian existentialists from atheistic existentialists on the basis of a confusion between two different types of essences—innate essence and character essence. However, both types of existentialists agree that we must create our character essence by our decisions and actions. The existence of God is irrelevant here in that neither Christians nor atheists can escape the position of having to make decisions and take actions that thereby create their character essence and their responsibility for their actions. The religious view that God knows our innate essence before or when we are born is irrelevant, as it is our character essence, and not our innate essence, that makes us responsible for who we are and what we do.

7. Conclusion

We have seen that there has been a recurrent problem of language confusion in philosophy. This problem is not limited to confusion introduced by obscure or fringe philosophers, as we have seen language confusion introduced by the iconic philosophers David Hume and Jean-Paul Sartre. We specifically looked at language confusion by Hume in the 1700s, Paley in the 1800s, and Sartre in the 1900s. We have further explored the language confusion on the issue of free will and also the language confusion permeating the recent issue of computer thinking. Indeed, an important role of philosophy is to ensure that the terms we use in philosophical

and academic discussions are clearly defined, and further, that all of us are using the same definition so that we are not talking past each other. When we do so, we can make progress in dealing with important philosophical and societal issues.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

References

Aru, J., Larkum, M. E., & Shine, J. M. (2023). Feasibility of Artificial Consciousness through the Lens of Neuroscience. *Trends in Neurosciences, 46, 1*008-1017. https://doi.org/10.1016/j.tins.2023.09.009

Aschwanden, M. et al. (2018). Order Out of Randomness: Self-Organization Processes in Astrophysics. *Space Science Reviews, 214,* 55. https://doi.org/10.1007/s11214-018-0489-2

Atkins, P. (2018). *Conjuring the Universe: The Origins of the Laws of Nature*. Oxford University Press.

Balaguer, M. (2014). *Free Will*. The MIT Press.

Ball, P. (2023). *How Life Works: A User's Guide to the New Biology*. University of Chicago Press. https://doi.org/10.7208/chicago/9780226826691.001.0001

Baumeister (2015). No "I" and No Capacity for Malice. In J. Brockman. (Ed.), *What to Think about Machines That Think* (pp. 72-73). Harper Perennial.

Benford, G. (2015). Fear Not the AI. In J. Brockman (Ed.), *What to Think about Machines That Think* (pp. 168-170). Harper Perennial.

Brooks, R. (2015). Mistaking Performance for Competence. In J. Brockman (Ed.), *What to Think about Machines That Think* (pp. 108-111). Harper Perennial.

Butlin, P., Long, R. et al. (2023). *Consciousness in Artificial Intelligence: Insights from the Science of Consciousness*. https://doi.org/10.48550/arXiv.2308.08708

Chalupa, L. (2015). No Machine Thinks about Eternal Questions. In J. Brockman (Ed.), *What to Think about Machines That Think* (pp. 83-84). Harper Perennial.

Chittka, L. (2023). Do Insects Feel Joy and Pain? *Scientific American,* July 2023.

Dawkins, R. (1986). *The Blind Watchmaker*. W.W. Norton & Company.

Dawkins, R. (2006). *The God Delusion*. Mariner Books, Houghton Mifflin Company.

Dennett, D. (1987). *The Intentional Stance*. The MIT Press.

Dennett, D. (1995). *Darwin's Dangerous Idea*. Simon & Shuster Paperbacks.

Dennett, D. (2013). *Intuition Pumps and Other Tools for Thinking*. W. W. Norton & Company.

Enfield, N. J. (2015). Machines Aren't into Relationships. In J. Brockman (Ed.), *What to Think about Machines That Think* (p. 397). Harper Perennial.

Everitt, N. (2004). *The Non-Existence of God*. Routledge. https://doi.org/10.4324/9780203643785

Firestone, R. S. (2017). An Argument for Libertarian Free Will: Hard Choices Based on Either Incomparable or Equally Persuasive Reasons. *Open Journal of Philosophy, 7,* 64-93. https://doi.org/10.4236/ojpp.2017.71005

Firestone, R. S. (2020). Dismantling Paley's Watch: Equivocation Regarding the Word "Order" in the Teleological Argument. *Open Journal of Philosophy, 10,* 155-186.

https://doi.org/10.4236/ojpp.2020.101012

Firestone, R. S. (2023a). Who Is the Real Existentialist? Debunking Sartre's Distinction between Christian and Atheistic Existentialists. *Open Journal of Philosophy, 13,* 342-371. https://doi.org/10.4236/ojpp.2023.132024

Firestone, R. S. (2023b). Predisposed Agency: A New Term for Free Will Because Our Will Isn't So Free. *Open Journal of Philosophy, 13,* 621-645. https://doi.org/10.4236/ojpp.2023.134040

Gelfert, K., & Motter, A.E. (2010) (Non)Invariance of Dynamical Quantities for Orbit Equivalent Flows. *Communications in Mathematical Physics, 300,* 411-433. https://doi.org/10.1007/s00220-010-1120-x

Gopnik, A. (2009). Could David Hume Have Known about Buddhism? Charles Francois Dolu, the Royal College of La Fleche, and the Global Jesuit Intellectual Network. *Hume Studies, 35,* 5-28. https://doi.org/10.1353/hms.2009.a403830

Graham, R. L., & Spencer, J. H. (1990). Ramsey Theory. *Scientific American, 263,* 112-117. https://doi.org/10.1038/scientificamerican0790-112

Hannay, T. (2015). Witness to the Universe. In J. Brockman. (Ed.), *What to Think about Machines That Think* (pp. 40-42). Harper Perennial.

Helmenstine, A. M. (2019). *What Is a Scientific or Natural Law*? https://www.thoughtco.com/definition-of-scientific-law-605643

Heraclitus of Ephesus (6th-5th Century B.C.) In Philosophy Before Socrates. Richard McKirahan, Jr. (Ed.), Hackett Publishing Company, Inc.

Heylighen, F. (1999). The Science of Self-Organization and Adaptivity. In L. D. Kiel (Ed.), *Knowledge Management, Organizational Intelligence and Learning, and Complexity. Encyclopedia of Life Support Systems*. Eolss Publishers Co.

Hume, D. (1739). *A Treatise of Human Nature*. Oxford University Press.

Hume, D. (1779). *Dialogues Concerning Natural Religion*. Barnes and Noble Publishing, Inc.

Inwood, B. (2003). *The Cambridge Companion to the Stoics*. Cambridge University Press.

James, W. (1897). *The Will to Believe and Other Essays in Popular Philosophy* (p. 149). Longmans, Green, and Co.

Krauss, L. (2015). What, Me Worry? In J. Brockman (Ed.), *What to Think about Machines That Think* (pp. 171-174). Harper Perennial.

Long, R., Sebo, J., Butlin, P., Finlinson, K., Fish, K., Harding, J., Pfau, J., Sims, T., Birch, J., & Chalmers, D. (2024). *Taking AI Welfare Seriously*. https://doi.org/10.48550/arXiv.2411.00986

Miller, W. B., Baluška, F., Reber, A. S., & Slijepčević, P. (2025). Biological Mechanisms Contradict AI Consciousness: The Spaces between the Notes. *BioSystems, 247,* Article ID: 105387. https://doi.org/10.1016/j.biosystems.2024.105387

Nahmias, E. (2018). Your Brain as the Source of Free Will Wanting: Understanding Free Will in the Age of Neuroscience. In G. Caruso, & O. Flanagan (Eds.), *Neuroexistentialism: Meaning, Morals, and Purpose in the Age of Neuroscience* (pp. 251-268). Oxford University Press. https://philarchive.org/rec/NAHYBA

Natsoulas T (1997). Consciousness and Self-Awareness. *The Journal of Mind and Behavior, 18,* 53-74. http://www.jstor.org/stable/43853809

Nietzsche, F. (1887). Beyond Good and Evil. In *Basic Writings of Nietzsche* (Kaufman, W., Trans., pp. 179-435). The Modern Library/Random House, 1992.

Norvig, P. (2015). Design Machines to Deal with the World's Complexity. In J. Brockman

(Ed.) *What to Think about Machines That Think* (p. 176). Harper Perennial.

Novak, P. (1995). *The World's Wisdom: Sacred Texts of the World's Religions*. Harper-Collins Publishers.

O'Donnell, J. (2015). Tangled Up in the Questio. In J. Brockman (Ed.), *What to Think about Machines That Think* (pp. 106-107). Harper Perennial.

Paley, W. (1809). *Natural Theology: Or, Evidences of the Existence and Attributes of the Deity* (12th ed.). Printed for J. Faulder. http://darwin-online.org.uk/content/search-results?freetext=Paley

Rafaeli, S. (2015). The Moving Goalposts. In J. Brockman (Ed.), *What to Think about Machines That Think* (p. 343). Harper Perennial.

Roemer, A. (2015). Tulips on My Robots Tomb. In J. Brockman (Ed.), *What to Think about Machines That Think* (p. 502). Harper Perennial.

Russell, B. (1967). *Bertrand Russell Autobiography*. Routledge.

Ryle, G. (1949) The Concept of Mind. In L. Pojman (Ed.), *Classics of Philosophy, Volume III: The Twentieth Century* (pp. 352-359). Oxford University Press.

Sartre, J. P. (1943). *Being and Nothingness*. Washington Square Press.

Sartre, J. P. (1946). The Humanism of Existentialism. From Existentialism and Human Emotion. In C. Guignon, & D. Pereboom (Eds.), *Existentialism Basic Writings* (2nd ed., pp. 290-308, Frechtman, B. Trans.). Hackett Publishing Company, Inc.

Searle, J. (1984). *Minds, Brains, and Science*. Harvard University Press.

Shanahan, M. (2015). Consciousness in Human-Level AI. In J. Brockman (Ed.), *What to Think about Machines That Think* (pp. 1-4). Harper Perennial.

Shanks, N., & Karsai, I. (2005). Self-Organization and the Origin of Complexity. In M. Young, & T. Edis (Eds.), *Why Intelligent Design Fails* (pp. 85-106). Rutgers University Press.

Smallberg, G. (2015). No Shared Theory of Mind. In J. Brockman (Ed.), *What to Think about Machines That Think* (pp. 297-299). Harper Perennial.

Spichak, S. (2024). *Why Scientists Are Merging Brain Organoids with AI: Living Computers Could Provide Scientists with an Energy-Efficient Alternative to Traditional AI.* https://www.growbyginkgo.com/2024/08/30/why-scientists-are-merging-brain-organoids-with-ai/

Stanford Online Encyclopedia of Philosophy (2023) Compatibilism: 2.1-2.2.

Stenger, V. (2008). *God: The Failed Hypothesis—How Science Shows That God Does Not Exist*. Prometheus Books.

Stewart, I. (1992). Does Chaos Rule the Cosmos? *Discover Magazine*. https://www.discovermagazine.com/does-chaos-rule-the-cosmos-2446

Wittgenstein, L. (1953) Philosophical Investigations. In L. Pojman (Ed.), *Classics of Philosophy, Vol. II: Modern and Contemporary* (p. 1162), Oxford University Press.

Yanofsky, N. (2017). *Chaos Makes the Multiverse Unnecessary*. Nautilus, Issue 49, June 22, 2017. http://nautil.us/issue/49/the-absurd/chaos-makes-the-multiverse-unnecessary