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Real Possibility: Modality and Responsibility

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Table of Contents:

1. An Introduction to Modality

1.1 Introduction

Imagine you are driving through a parking lot at an appropriate speed and suddenly another person backs out of a parking spot without looking. Through their negligence, they hit your car. Legally they would be held responsible for the accident. Had they checked their mirrors they would have avoided the accident entirely. Now, note that we could also argue that had the guilty driver stuck their foot out of the window, began singing *La Marseillaise,* and doing an interpretive dance, they would not have hit your car. Yet, if someone were to make that argument, whether it be in casual conversation or in a court of law, it would seem to be completely irrelevant and outlandish. There seems to be an intuitive distinction between the two cases. One possibility is that they could have looked in their mirror. This would be a typical and expected line of defense - that is, we can ascribe some type of responsibility here. The other possibility in this example is: they could have sung *La Marseillaise, etc.* Yet, for this, there seems to be something outlandish about it. There is a crucial difference: the first possibility grounds an ascription of responsibility, the second possibility does not. Thus, we cannot ascribe responsibility via the second possibility. So, I'm interested in what makes one possibility but not the other a ground for a responsibility claim?

The intuition that there is a distinction here between kinds of possibility holds fast for other cases as well. Imagine you were asked to wash the dishes. There are countless possibilities related to washing dishes: you could be careless with the dishes, you could pick up the dishes, you could put the dishes in soap and hot water, etc. Now, if you dropped one of the dishes because you were tossing them up in the air, it seems reasonable that you could be held responsible. In contrast, here's an *outlandish*

possibility: you were carefully washing the dishes and happened to drop one. The dish shatters and someone comes up to you and claims that had you been doing the macarena on top of the kitchen counter, you would not have shattered the dish. The possibility that successfully grounds a responsibility claim is simply: you had placed the dish straight into the rack and refrained from throwing it in the air. The possibility that fails to ground a responsibility claim is: you had been on the kitchen counter dancing the Macarena. Once again, the former seems to be an instance of where the claim of responsibility holds fast. Meaning, if someone walked into the room and asked "How did the dish shatter?", it is perfectly reasonable that they hold you responsible via the first possibility but not the second.

I am interested in exploring why certain possibilities seem to be intuitively classified as *real*, whereas others are *outlandish,* with respect to responsibility. That is to say, on what basis are we to characterize real possibilities versus outlandish? When does a possibility ground a claim of responsibility? What are the constraints on such a possibility?

1.2 Possibility

With the notion of possibility being so wide-ranging and potentially slippery, and so pervasive in everyday talk, we should take care to distinguish its various senses. When a person verbalizes or forms a cohesive thought using 'can', 'could', 'would' or 'should,' they are expressing a modal claim. Modality is simply concerned with what is necessary, what is contingent, what is accidental, what is essential and what is possible. Take the following sentence, for instance: *I could have had a salad for dinner last night*. Surely it seems intuitive that the statement is true.

However, there may be some concerns about how to justify or explore a modal statement's truth value. When I say, "I could have had a salad for dinner last night," there are sets of conditions that would either allow for the statement to be true, or false. These conditions can be explored via possible worlds. Note, that in this context, a possible world simply means a set of imagined conditions. The degree to which these conditions are fleshed out is entirely dependent upon the assertion made. I might examine the available resources – namely, did I have any materials to make a salad, and if not was I in a position to acquire said materials. I could also look at the less tangible elements, such as, would I have wanted to eat a salad? Was I home from work in time to want dinner? Did I even think that having a salad was a viable option?

Now, obviously, this hypothetical situation is a true contingent statement. That is, it is not necessarily true, nor necessarily false. That is to say, we can imagine several possible worlds in which I had a salad for dinner, and where I did not have a salad for dinner. Consider possible world one – I have complete access to a full range of salad constructing materials. I am even on a health kick and just so happen to love salads. It is quite easy to imagine that I had a salad for dinner last night.

In contrast, a necessarily true statement is something that is true across all possible worlds. For instance, the assertion that a square is a four sided figure in which all sides are the same length, with four right angles. In any possible world, a square will fit this definition. One kind of necessarily false statement is a logical contradiction. It could be something along the lines of: it is both raining and not raining, I like cheese and I do not like cheese, essentially anything of the logical form *p and not p.*

1.3 Types of Possibilities

I am after a characterization of what I have called *real* possibility. This requires locating it in relation to the various types of possibility that we can already distinguish. Thus, we next need to provide a taxonomy of types of possibility. Now, I am going to specifically consider the different types of possibility that there are - starting with logical. Logical possibility only concerns avoiding logical contradictions. It is simply a possibility one can describe without a formal contradiction. For example, David Lewis, in *The Paradoxes of Time Travel*, seeks to establish a logical possibility. More specifically, he attempts to prove that time travel is logically possible. So the concern is whether a logical contradiction will arise. The example shows Lewis claiming that no logical contradiction arises (despite initial appearances).

He systematically addresses the contradictions that might seem to arise in the case of time travel. For instance, suppose someone were to travel 954 years into the past. Now imagine you were asked, how long did your time travel journey take? Say you watched a movie, read a couple chapters of a book, looked at your watch, and realized that about two hours have passed. Now, someone may be tempted to equate 954 years to two hours. Obviously that identity statement forms a contradiction, as two hours is not quantitatively equal to 954 years. Lewis wants to eliminate the contradiction. So, he then introduces the phenomenon of being able to measure personal time by personal experience. Maybe you have gotten a bit hungrier, a little more tired, a little more restless or bored, etc. He then explains that there is a concept of external time – in this case, the external time would refer to the 954 years. However, you were subjected personally to two hours measured by personal experience within the time machine. For

Lewis, only external time is genuine time. So, we have 954 years in objective time, 2 hours in personal time – and no contradiction.

Lewis continues to discuss potential contradictions and lands on what he calls, the "Grandfather Paradox." The character in Lewis' piece, Tim, is used here. The paradox is generated by the claim that, "Tim can go back [in time] and kill his own grandfather." Yet, Lewis is able to dissolve the paradox by claiming that there are two separate meanings for "can." For instance, he claims that he *can* speak Finnish and that he cannot speak Finnish. While it might seem like there is a contradiction here, there is not. The statement highlights a physical capability with the first "can," (involving the larynx, etc) and the fact that Lewis does not know a word of Finnish in the latter "can" (involving his linguistic training). So, there is a simple fallacy of equivocation with the word "can." Tim can kill Grandfather – relative to a set of facts that he has the opportunity, the means, the will, etc. And Tim cannot kill Grandfather – but relative to a different set of facts, including that Grandfather had Father, and Father had Tim. For now, Lewis has maintained the idea of time travel being logically possible. That is, he has shown that establishing a logical possibility is to show that no logical contradiction arises. It does not matter if time travel is physically or metaphysically impossible when the aim of the project is to establish logical possibility.

This notion of logical possibility brings up an important point, time travel aside, – there are different classifications of possibilities. Logical possibility is perhaps the largest category that envelops the rest. For instance, the suspension of all natural laws with the continuation of life as we know it does not seem to be a physical possibility. Yet there are no inherently obvious contradictions, meaning no explicit instances of *p and not p*.

The next largest category of possibility that exists within logical possibility is conceptual possibility. That is, there are cases of logical possibility that are not conceptually possible, but all conceptually possible instances are logically possible. Conceptual possibility is constrained and limited by our concepts. Take the concept of the color red – there are certain things we automatically associate with it. Perhaps "red" refers to a red apple, red lipstick, blood, roses, etcetera. Now, there is also the concept of 'all over.' When an object P has X property 'covered all over,' P is subsequently covered entirely in X. There is no spot that is not X on P. So if someone were to claim that P is red all over, that would simply mean the object is covered all over red. Yet, the sentence, "red and green all over" is not a logical contradiction, but forms a conceptual impasse. We cannot close our eyes and visualize an object, say a ball, that is both red and green all over. Our concepts do not allow for something to be both red and green all over. Notice, also, that we do not understand "red," or any color, as "not-green," "not-blue," "not-purple," etc. Instead, we understand colors for what they are, not for what they are not. We understand the concept of green in a positive way. Thus, there is no logical contradiction, but there is a conceptual impasse

From conceptual possibility, the scope narrows to what is referred to as metaphysical necessity. Some would argue that it is metaphysically possible for a person to have had a different set of parents and still be who they are today. Others would claim that having the parents that one has in the actual world is a metaphysical necessity. They would argue that there are no possible worlds in which a person could have different parents. Metaphysical possibility concerns *the essence* of things. Note, it could also be argued that the notion of metaphysical essence is separable from that of a

physical law. Though these notions of possibility are closely connected, they are nevertheless distinct.

Saul Kripke, in *Naming and Necessity,* explores these notions of metaphysical possibility and physical possibility - he asked if they are any different from one another (p163-164 *Naming and Necessity* Appendix). Yet, it is generally accepted that physical possibility exists within the confines of logical possibility, conceptual possibility, and metaphysical possibility. It is the most restricted. Something is considered a physical possibility if it is consistent with the way in which the universe operates here and now. It should be consistent with the natural laws that govern our world. For instance, it is a physical possibility that I could have worn a different blouse out for dinner last night. However, it is not a physical possibility that the laws of gravity could have been instantaneously suspended within the confines of a classroom and everyone in it had flown to the ceiling.

To briefly summarize - the type of possibility that is least restrictive is logical possibility. It can be seen in the diagram below as the largest circle that envelops the other types. Recall that the standards for a logical possibility are: there are no formal logical contradictions. That is, there are no instances of p and not-p; it is raining and not raining, for example, is not a logical possibility. The next possibility that fits within the scope of logical possibility is conceptual possibility. Conceptual possibility is constrained and limited by our concepts. Recall that our concepts do not allow for an object to be both red and green all over. From conceptual possibility the scope narrows to metaphysical possibility. Metaphysical possibility is concerned with *the essence* of things - e.g. could you be the exact person you are today had you been born of different biological parents. Within metaphysical possibility lies physical possibility. Physical

possibility is the most restricted type of possibility within this framework. It demands that things be consistent with the way in which the universe operates here and now and adhere to the natural laws that govern our world. For example, suddenly flying unassisted by any equipment to the moon is physically impossible. An example of physical possibility is this: I could have had cereal for breakfast this morning.
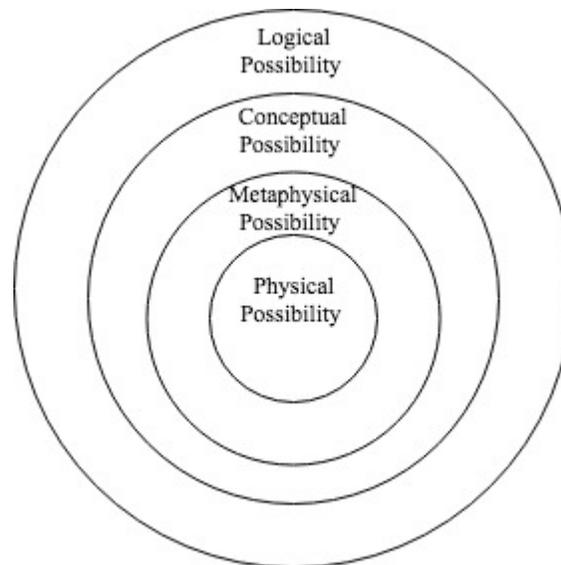
Figure 1: the diagram above highlights the concentric model of possibility.

While I described logical possibility, conceptual possibility, metaphysical, and physical possibility as existing within a shrinking series of concentric circles, there exists another type of possibility - epistemic possibility. It is important to note that there are physical possibilities that are epistemically possible and physical possibilities that are not (epistemically possible). Epistemic possibility is concerned with the boundaries of an individual's knowledge of the present actual world. Within the concentric model of possibility that I have described, epistemic possibility essentially takes a cross section, like a slice of cake, out of the above types of possibilities.

For instance, today we know that certain diseases are caused by microscopic organisms that infiltrate our immune system. Yet, let's consider the London cholera

outbreak of 1854. The city's health executives were absolutely certain that the outbreak was caused by foul smells. They cited higher instances of the outbreak close to garbage and refuse sites. The health officials and head doctors also used the higher instances in lower income families who lived 15 people to a one-bedroom apartment as evidence. A young doctor, John Snow, would argue to the medical board that there were tiny 'things' in the water causing the cholera to spread. He was ridiculed and dismissed. However, after Snow passed away, people began to accept his proposed theories. He would later be deemed the father of modern epidemiology.

For the Londoners of 1854, it was not an epistemic possibility that germs were the cause of cholera, because they simply had no knowledge of germs. Thus, they could not even entertain that possibility. It is, of course, a physical possibility that germs cause cholera (it is the truth), so the two types of possibility can pull apart from one another. Conversely, here in 21st century America, germs as the cause of a disease is an epistemic possibility for all of us. We understand that one should cover their sneezes and coughs, stay home if one has a fever, etc. because of the contagious nature of germs. So, epistemic possibilities are unstable in the following sense. They vary from person to person – while here in America we can claim that the public has general knowledge about germs, we might not be able to say the same about a rural community with limited access to education, health care, etc. There is a relationship between ignorance and epistemic possibility. What is epistemically possible for a person or a community will depend on their own specific epistemic situation.

While the cholera outbreak deals with a physical possibility (and reality) that experienced a change in epistemic accessibility, there are epistemic possibilities that are logical impossibilities. Take the following simple identity statement: Marilyn Monroe is

Norma Jeane Baker. Before Monroe chose her stage name, she went by her birth name -

Norma Jeane Baker. Now let's imagine that you were close friends with Baker in high

school. After high school you lost contact and had no idea that Norma Jeane Baker had

transformed into the iconic Marilyn Monroe. You hear about Monroe's tragically lethal

barbiturate overdose but you fail to realize that her death also signifies that Norma

Jeane Baker from high school is dead. For all you know, Norma Jeane Baker is alive and

well. Yet, to say that Marilyn Monroe is dead and Norma Jeane Baker is alive is a

metaphysical and a logical impossibility; it's both metaphysically and logically

impossible for something to be non-self-identical. They are the same person, just under

two different names. But for you, Norma Jeane Baker's high school acquaintance, it is a

straightforward epistemic possibility.

Another much-discussed example refers to the ancient Babylonian conception of

Hesperus, the evening star, and Phosphorus, the morning star. The ancient Babylonian's

saw Hesperus and Phosphorus as two separate and distinct entities. That is to say, they

could have claimed that Hesperus exists without Phosphorus - for them it was an

epistemic possibility. What they did not know was that both the evening star and

morning star were Venus – a single entity that is visible at different times of the day

because of its orbit. For them, Hesperus and Phosphorus were necessarily different

stars. It would be an epistemic possibility for the ancient Babylonian that Hesperus

exists without Phosphorus. Yet that is a logical contradiction. Note that we can work this

into a contradiction by adopting the idea of "identity" as a part of logic: meaning,

something cannot be non-identical to itself. So, Hesperus and Phosphorus are

necessarily the same star, Venus. To put it generally, there are certain properties that

can go beyond a person/cohort's epistemic scope. Their scope limits what is

epistemically possible *to them* in the current state of affairs of the actual world. Below is the narrowing circle model of possibility with epistemic possibility added in it. Note, that epistemic possibility acts as a cross section here - that is, there are epistemic possibilities that are excluded from the narrowing circle model of possibility. However, there are also epistemic possibilities that are logical, conceptual, metaphysical, and physical possibilities.
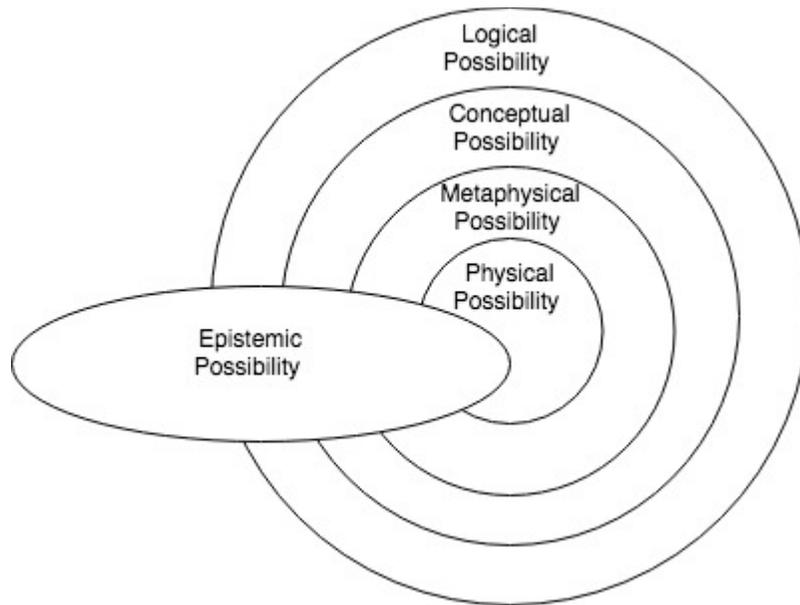
Figure 2: Here is the concentric model of possibility with epistemic possibility acting as a cross section.

When talking about possibility, it is imperative that we are cognizant of what specific type we are referring to. As we have seen, there are important distinguishing factors and implications for each type of possibility. Recall that when we claim something is physically impossible, that doesn't mean it is metaphysically, epistemically, conceptually, or logically impossible. These distinctions are vital in ensuring that there is a sense of clarity and that there are no false equivocations or other fallacies related to the nomenclature. To anticipate: epistemic possibility will later figure crucially in my account of real possibility.

2. Real Possibility

2.1 *Real Possibility* and Responsibility

In the last section, I have introduced different types of possibility. Although these different types might seem to be exhaustive, I argue that there is a new and distinct class, which I will refer to as *real possibility*. I assert that this notion of real possibility is concerned with the ascription of responsibility. I contend that it has a sense of realness to it, in the way that it is a 'realistic' possibility for the actual world, and it also relates to both legal and moral responsibility. For example, let us revisit the very first example I introduced. If you were driving through a parking lot and were suddenly hit by a person backing out of a parking spot, who would be held responsible? The person that hit you, of course, (provided that you were sober, were not speeding, etc.). Now let us imagine that you are trying to settle the dispute in a legal setting. Your lawyer could argue that had the defendant looked in their rear view mirror, they would not have hit you. Namely, they could have simply looked in the mirror before backing out. That is, the claim of responsibility is tied to the possibility that they could have looked in the mirror. One could easily reason that if the defendant had seen your oncoming car, as a rational agent, they would not back out into you. Rather, they would have avoided the accident entirely. Note, there is another possible argument – that is, an attorney could argue that if the defendant had stuck their foot out of the window, began singing *La Marseillaise,* and doing an interpretive dance, they would not have hit your car. A third argument could potentially be that the defendant could have punched a hole through the steel roof of the car and consequently would not have hit your car.

What defense seems that it would be the most effective? Obviously the first. I argue that this is an instance of a *real* or *relevant possibility*. Sure, the defendant could

have done some outlandish act that would have delayed their careless backing out, so that they missed your car. Yet this does not seem to be relevant to establishing responsibility – if your lawyer were to choose this line of argument, then you might want to find another lawyer. We, as a society, would not hold someone responsible for hitting your car because they failed to: stick their foot out of the window, do an interpretive dance, sing the French national anthem, or punch a hole through the steel roof of the vehicle.

The three arguments just introduced differ in various ways. When we compare the first possibility, that the defendant could have looked in the mirror, to the second, that they could have stuck their feet, sang, and danced, we see that the latter is outlandish. The former expresses the importance of relevance. Yet, when we compare the second possibility to the third, that they could have punched through the roof of the car, we see that they are both outlandish. Now, the second possibility expresses something that is physically possible, whereas the third does not. Meaning, a regular human being is not typically able to punch through a solid sheet of metal. Perhaps the strength of the metal was momentarily weakened by the breakdown of some natural law, or perhaps the defendant was granted super-human strength for an instant.

Here, we can distinguish three different kinds of possible actions. In the case of a person checking their mirrors before exiting the parking space - we see an action that can be physically carried out and is a basis for a responsibility claim. Now, it is also physically possible, in this example, that someone could have stuck their feet out of the window, sang the French national anthem, and danced. This act can be carried out, much like the first, but is irrelevant to producing any sort of responsibility claim. You would *not* be held responsible for your failure to appropriately carry out these acts.

Unlike the prior two acts, the third example - where someone punches through a sheet of solid steel, cannot be carried out under normal circumstances. Someone cannot be held responsible, in our society, for failing to do the physically impossible. Note that ought implies can; thus, the first constraint on *real possibility* is - *it has to be a physical possibility*.

2.2 Closeness and CounterFactuals:

The first constraint - that a real possibility must be a physical possibility - rules out the third possibility. Meaning, it's physically impossible to punch through a sheet of solid steel under normal conditions in the actual world. However, this constraint of physical possibility does not rule out the second possibility - that they could have stuck their feet out of the window, sang the French national anthem, etc. So what distinguishes the first two possibilities? Intuitively, the first possibility - that they could have checked their mirror, is much *closer* to the actual world than the second possibility. So, we must investigate this notion of closeness for a fuller characterization of real possibility.

In order to classify the relationship between these possibilities and their respective possible worlds, the notion of closeness is essential. David Lewis, in *Counterfactuals*, argues for a notion of *comparative similarity*. With comparative similarity, Lewis argues that *one world is said to be closer to actuality than another if the first world resembles the actual world more than the second*. The notion of similarity is rather ambiguous and slippery, and is thus continuously discussed and worked on for clarity.

An important use of the notions of possible worlds and closeness is to provide an account of counterfactual conditionals. One may be tempted to question the usefulness of possible worlds, as they may seem initially useless. But, they provide us with the ability to capture the truth condition of certain counterfactuals. To put it formally, Lewis in *On the Plurality of Worlds,* claims that the truth condition of a counterfactual is as follows:

""If *A* were the case, *C* would be the case" is *true* in the actual world if and only if either (i) there are no possible *A*-worlds; or (ii) some *A*-world where *C* holds is closer to the actual world than is any *A*-world where *C* does not hold." (Lewis, p21).

Lewis asserts in *On the Plurality of Worlds* that, "Closeness of worlds can also help us to say what it means for a false theory of nature to be close to the truth. False is false - and it takes only a trace of error to make a theory false - but false theories are not all on a par. We may reasonably think that present-day scientific theories, if not entirely free of error, are at any rate closer to the truth than previous theories were. We may hope that future theories will be closer still." (Lewis, p24). Here, we can appreciate Lewis' understanding of his own proposition, as well as the possibility that current scientific theories might be proven false. He notes that though there is a chance of this happening, we are still closer to the truth than we were previously. While this can be seen as a positive aspect of Lewis' work, there are still many issues surrounding the notion of closeness. I will now go on to discuss three of the most pertinent issues with respect to *real possibility*.

Now, recall that to say there is a possible world simply means there is a relatively comprehensive description in which a possibility is "occurring." This idea of comparative similarity exists within two constraints. The first being that there is a weak

ordering of worlds. Meaning, any two possible worlds can be ordered with respect to the actual world. They are relative to the actual world. The second being that the actual world, the one in which we live right now, is closest to actuality. That is to say, no other world can be closer to the actual world than the actual world itself.

As previously mentioned, the notion of similarity is ambiguous and slippery. This notion of similarity is also the first of the three issues I will discuss surrounding the notion of closeness. Now, two views on similarity are discussed in Lewis: anti-resemblism and resemblism. Anti-resemblism asserts that similarity is context sensitive. It depends on how one is measuring similarity.[1] For example, imagine you had three books in front of you. The first book has a blue cover, is around 500 pages, and contains information on the taxonomy of plants. The second book is also blue and around 500 pages, though it is concerned with an analysis of the Bolshoi Ballet's production of *The Master and Margarita*. The third book is black, around 300 pages, but concerned with the taxonomy of plants. If someone was to ask which two books are most similar, there are several possible correct responses. Someone could reply by claiming the first and the second books were the most similar - based on their appearance and length. Someone could also claim that the first and third books were the most similar, based on the book's content.

Lewis once held this view but then shifted to resemblism. According to resemblism, similarity is much more objective. It argues that there are certain natural properties. Thus, similarity depends on the degree of sameness of these natural properties - it is substantially more objective. However, resemblism cites "natural

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[1] Jared Henderson, in *Degrees and Deflationsim,* works to define and clarify these notions of *resmblism* and *anti-resemblism* in section 5.53 pages 110-113.

properties" as grounds for evaluating similarity. For instance, someone can easily assert that a natural property of water is that it is H2O. There can also be weaker properties - take: water being my favorite liquid. Now, the thought with resemblism is that we are to compare worlds based on their shared natural properties. So, in this case, a world where water is not H2O would be more remote from the actual world than a world in which I prefer beer to water.

Now, the second issue surrounding closeness will be the discussion of how to compare different counterfactuals. We can now take a look at the following claim, with this in mind: if Hillary Clinton had been elected, then Trump would have been disappointed. To treat this as a material conditional will not do. We need some other account of what is going to make this counterfactual true. A solution is to look at the possible worlds in which Hillary was elected – in those worlds, we can ask if it so happens that Trump is disappointed. This proves to be a relatively simple intuition. That is to say, we can easily imagine the 2016 election cycle as such: perhaps Hillary won more electoral college votes in whatever state/states it may be. We can then imagine Trump's personal reaction to learning that he had lost - we can also imagine his televised response, both of which would seem to be disappointment.

However, there are obviously going to be worlds where Hillary was elected and Trump did not even exist. Then, we would not be able to say that Trump was not disappointed because he would not be there to have any form of emotion. That is to say you need to exist within a possible world to exhibit some form of characteristic in said possible world. A less interesting case that is vacuously true are the worlds in which Hillary is not even elected. Meaning, the antecedent in the conditional statement: if

Hillary won, then Trump would be disappointed, is rendered false. Thus, the conditional is vacuously true.

Lewis also discusses a thought experiment in his piece, *CounterFactual Dependence and Time's Arrow*. When speaking about closeness, it is generally assumed, per Lewis, that if there are two possible worlds, X and Y, and in X there is some breakdown of a natural law (e.g. gravity), and there is no breakdown of any natural law in Y, then Y is closer to the actual world than X. Yet, Lewis is criticized in the following thought experiment, as it appears to be an instance in which this might not necessarily be the case. We are asked to imagine that President Nixon presses or does not press a button. There are four outcomes Lewis entertains:

W_0: Nixon does not press the button at time-t and no nuclear holocaust happens.

W_1: Is exactly identical to W_0 until time-t, where a "tiny miracle" (Lewis p469) occurs within Nixon's brain. Because of this miracle, Nixon presses the button. The holocaust happens.

W_2: There are no miracles of any sort that happen here. However, W_2 differs from W_0 in the sense that Nixon does press the button and the holocaust does happen.

W_3: This world is almost identical to W_0. However, Nixon presses the button at time-t, but there is a tiny electrical glitch that subsequently prevents the holocaust from happening.[2]

Now, recall the general claim that a possible world containing the breakdown of a natural law is farther from the actual world than a world that does not contain a suspension of natural law. In accordance with this generalization, in one case, the

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possible world in which all of humanity was extinguished would be considered closer than the world in which there was a small "glitch."

In terms of closeness, it definitely seems as though a small glitch in the natural laws would be closer to the actual world than a possible world containing the extermination of humanity. Recall that we are comparing these worlds to the state of the actual world. When we compare this to a momentary glitch in some natural law that only affected the wiring of the button, it should be obvious, intuitively speaking, what possible world is closer. The world in which there is a glitch, or as Lewis puts it, a "miracle," appears to be more similar to the actual world than a world in which humanity is completely extinguished. Lewis also prompts us to examine the potential differences between the worlds in which the button was never pressed, and the button pressing didn't work. Humanity still exists - but surely there are some differences. Namely, that Nixon's fingerprint would be on the button. Would people know that he attempted to extinguish all of humanity?

With these possibilities in mind, Lewis arrives at an algorithm that details a four-stage ranking system.[3]The ranking system is context sensitive and starts as such: "1. It is of the first importance to avoid big, widespread, diverse violations of law." (Lewis, p472).

When reflecting on the Nixon-case, we can see that the "glitch" is not a widespread diverse violation of law. Rather, it is a momentary suspension. The ranking system continues:

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[3] Explanation of this four-stage ranking system is further discussed in section 3.3 *Similarity* – entry on *David Lewis* – in the Stanford Encyclopedia of Philosophy. https://plato.stanford.edu/entries/david-lewis/ The section cited is also explored within Lewis' *Counterfactual Dependence and Time's Arrow*

 "2. It is of the second importance to maximize the spatio-temporal region throughout which perfect match of particular fact prevails.

3. It is of the third importance to avoid even small, localized, simple violations of law.

4. It is of little or no importance to secure approximate similarity of particular fact, even in matters that concern us greatly." (Lewis, p472).

Lewis also spends a considerable amount of time introducing and discussing the issues of weighing certain questions and properties more when discussing possible worlds. He gives the metaphor of a selective quiz, and claims that there will always be questions that are disputed and refuted - and thus the quiz is revised. The "score" is pertinent to how closely the possible world resembles the actual world. Lewis recommends a similar approach with analyzing closeness with possible worlds, saying that,

"I suggest that the best intuitive guide to what makes a quiz suitable is exactly that we want score on it to be a good measure of how closely our world resembles any of the worlds that conform to the theory under test. If so, there is no way to get out of judging which respects of comparison are the important ones - not unless…we junk the very idea of closeness to the truth." (Lewis, p25). He then compares this quiz and potential challenges to it, to how people in the actual world go about challenging theories. He claims that, "When theories give the wrong answer to a question on the quiz, false is false" (Lewis, p25). Yet he is careful to note that there are varying degrees of rightness and wrongness - it is not a binary result. He cites that there could be a quiz with the question: does anything move faster than light? To which he explicates three options. Option one has the answer of : no, which he asks us to assume as the truth. Option two claims: yes, there are a few select and rare particles that do so - this theory

proves to be a better one. And the third option is: yes, planes and birds move faster than light - which is obviously the worst of the three and clearly false. The nature of this quiz-like process can be applied to distinguishing closeness between possible worlds.

The third issue surrounding closeness concerns the model that Lewis has developed. It seems to me that there are two ways to model the closeness of possible worlds - a linear model and an orbital ring model. Lewis' notions of similarity and closeness can be used to develop a model to measure, in a sense, the distance between the actual world and possible worlds. The model functions on a linear structure - where the actual world is a point on the line, and possible worlds are other points on the same line. It adheres to the assertion that the closest world to the actual world is simply the actual world itself. As one moves outwards on the line, one becomes further and further away from the actual world. That is to say, that the possible worlds further away from the actual world on the line (though, it is important to note that they extend infinitely), are less similar to those that exist closer on the line.

However, I much prefer the orbital ring structure where the actual world functions as the nucleus. It also adheres to the assertion that the closest world to the actual world is simply the actual world itself. The further the rings become from the nucleus, the further one becomes from the actual world. The possible worlds in the outermost rings (which also extend indefinitely), are less similar to those within the innermost rings.
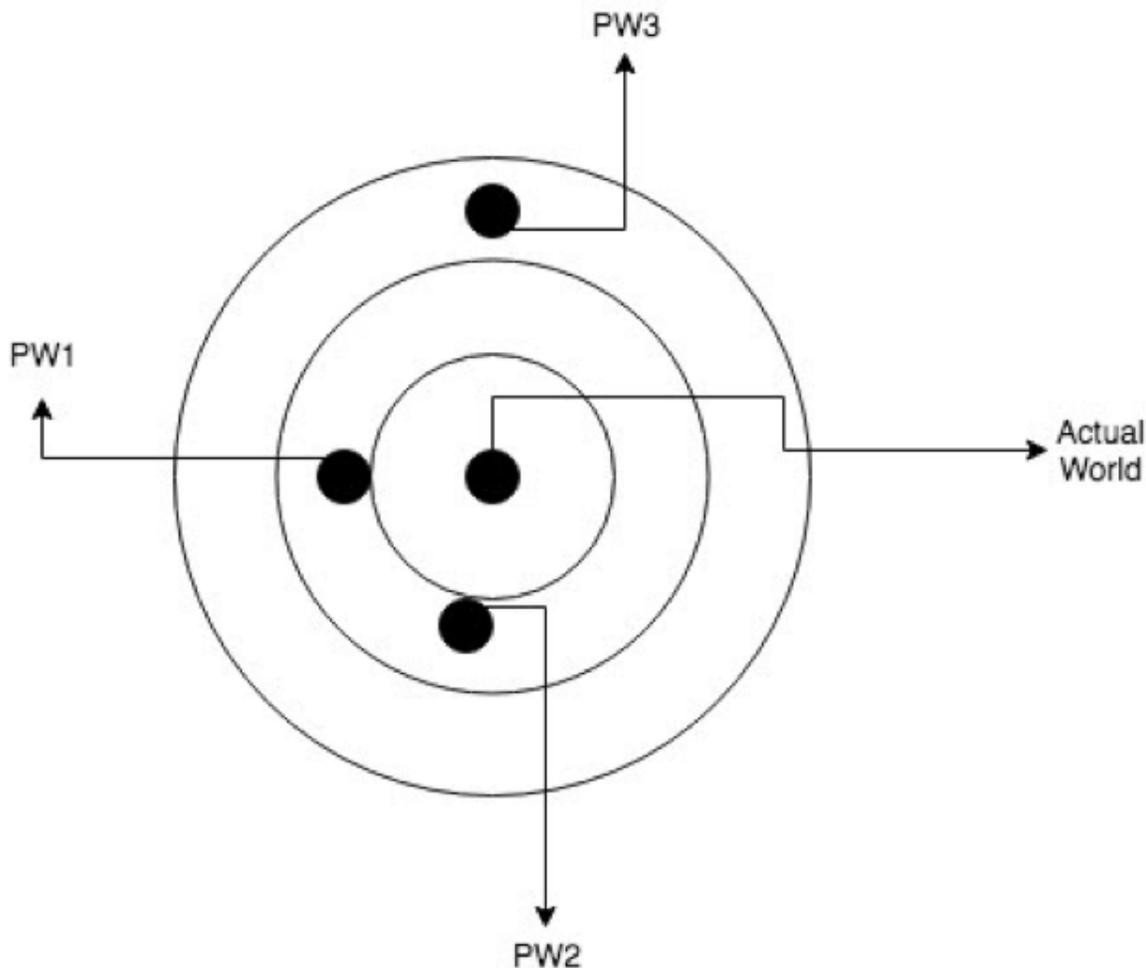
Figure 3: The orbital ring model of possible worlds.

In the diagram above, let PW stand for possible world x. We are able to see that both possible worlds one and two are further away from the actual world than the actual world itself. It is also evident that possible world three is further away from the actual world than both possible worlds one and two. However, intuitively one might assume that possible world one and possible world two are equidistant from one another. While Lewis' suggested model might seem to suggest this, it certainly is not the case. In fact, the relationship between possible world one and possible world two is indeterminate. That is, we cannot determine the distance between the two. If they exist within the same orbital ring the worlds are simply relatively similar. A generalization can also be made

here - we can only determine the distance of a possible world relative to its location of the actual world. Note, I am not challenging Lewis' "linear" ordering of worlds. In fact, I am accepting that into my model as well. I am attempting to provide a modification of a certain aspect of the model. Lewis' linear ordering is also relative to the actual world - see the diagram below.
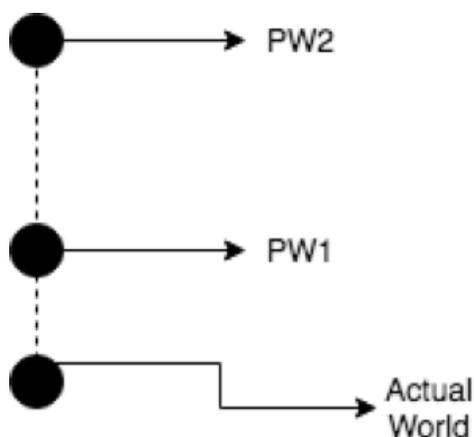

Figure 4: Lewis' linear model of possible worlds.

The orbital model is preferable, as it makes clear that there is the following question that needs to be answered: consider 2 worlds equidistant from the actual world – how distant are they from each other? Here, in the linear diagram we know that possible world 1 is closer to the actual world than possible world two. We also know that possible world two is further from the actual world than possible world 1. The diagram and Lewis' linear model are not able to say anything about the distance between possible world 1 and possible world 2. Lewis acknowledges that the idea of closeness is tough to pin down. There are a lot of moving parts that can be vague. Moreover, for my purposes, we have a pretty clear sense that in various examples that some worlds are going to be closer (to the actual world, or perhaps other worlds) than other worlds.

However, I would like to explore a circumstance that might mitigate the indeterminate line between possible worlds. Perhaps we can look at the contextual relevance of the situations in each world. Obviously, this measure is still relative to other possible worlds. That is to say, the distance between possible worlds can only be measured on a case by case instance. In the model above, let's say that in possible world one, a subject S is a half an inch shorter than they are in the actual world. Now, let's say that in possible world two, S is a half in taller than they are in the actual world. We can investigate the outcomes of the addition or subtraction of half of an inch by further fleshing out the details of each possible world, we can envision how S's life might vary. For instance, perhaps if S is half an inch taller in possible world 1, they are granted more athletic capabilities. However, in possible world 2, where they are half an inch shorter, perhaps they are forced to work harder to develop those athletic capabilities (as they are at a height-based disadvantage). Note, that here I am concerned with a qualitative analysis that leads to a measure of distance.

In fleshing out the details, one could then qualitatively compare the two. Perhaps it would be too arduous, time consuming, and difficult. Though, that is beside the point. The idea is that the distance between possible worlds can be qualitatively analyzed. Meaning, we can explore the different outcomes that may arise by being a different height in each possible world - this might take a considerable amount of time, but I argue that it can be done. The previously indeterminate line between the worlds is now "measurable;" however, the measuring itself is relative to the contextual setting. Our notions of similarity also aid in discussing qualitative differences. And though it is evidently important, the concept of similarity is hard to pin down.

There are two ways of looking at possible worlds and similarity discussed here. In terms of possible worlds, Lewis proposes a linear figure. However, I propose a ring-like figure. Yet, Lewis acknowledges how tricky these notions are. It's incredibly difficult to have a definitive firm grasp on them with explicit definitions. With similarity, we see anti-resemblism versus resemblism. This notion of similarity is just as slippery as closeness. In general I want to know how to gauge how close possible worlds one and two are, when they are equidistant from the actual world. I've argued that we can do so with respect to context and thought experiments. The discussion around closeness and similarity is so bountiful and vast, that we can just conclude that there's enough intuitive content to understand the premises of each.

This is not the place for me to decide or debate these issues I have raised here. However, for my purposes and in relation to my examples as well as *real possibility*, the notion of closeness is serviceable and useful. For example, let's revisit the case where person A backs out of a parking space without looking and hits person B's car. It's clear enough that the world in which person A looks in a mirror is closer to the actual world than a world where person A sings *La Marseillaise,* etc. And, the world where person A sings *La Marseillaise* is closer to the actual world than a world where person A punches through the solid steel roof of the car.

3. Closeness and Context

3.1 Is Closeness Sufficient?

In trying to discover what makes a real possibility a real possibility, I first argued that it had to be a physical possibility, and then I turned to closeness. It seemed reasonable to think that if a possible world were suitably close, a real possibility should

lay within. Now, let us revisit the car-backing out- accident example. If person A were to have backed out without looking and subsequently hit person B's vehicle, we can examine possible worlds that are, as previously mentioned, suitably close. This factor of closeness seeks to constrain the possible outlandish cases, such as: sticking their feet out the window and screaming *La Marseillaise*, punching through their car's steel roof, or experiencing a hallucination of a fairy that demands they immediately take a nap.

By implementing this demand of suitable closeness, real possibilities do emerge. It seems like it was perfectly possible for person A to have checked their mirror - and it is intuitively suitably close. Yet, there are also possibilities, some of which are equally close, and yet fail to provide a concrete example of a real possibility. That is, there are equally close possibilities that we cannot use to ascribe moral or legal responsibility. For instance, taking a sip of a beverage is about on the same physical par/demanding level as checking one's mirrors. Yet, a lawyer would not make a case that there was the possibility of the defendant taking a sip of a beverage before backing out, as to prevent the accident. Now, we can swap out any equidistant (to checking one's mirrors) possibility for another and have a similar case produced. Take fastening your seatbelt, switching on the radio, adjusting one's seat, turning on the headlights, etc. And yet, none of these seem to be *real possibilities,* that is, possibilities relevant to the ascription of responsibility. Thus, it seems as though closeness on its own is not sufficient in producing this real possibility. So, we need a further constraint on real possibility.

3.2 Context

If one were to make closeness the only restraint for a real possibility, it seems as though we would obtain possibilities that are not relevant (and thus not truly "real").

This contextual reality involves normative structures and social practices - all of which are objectively relevant to the occurrence at hand. Note that when I say "context" I mean something slightly more specific than just the situation surrounding a happening. I am referring to the normative structures of society (whether it be our society or a completely different one) and practices of good 'x,' where 'x' is any act. In this case, 'x' can be driving. So *context* will include the practices of good and safe driving. *Context*, in this sense, has to be sensitive to these normative societal structures. For instance, if someone is applying to receive unemployment benefits - the context surrounding them and their situation includes: the circumstances of their lost job, their daily life, the process of applying for unemployment, the law concerning filing for unemployment benefits, etc. It is not just their personal account of their situation, but rather their personal account combined with the objective happenings and structures surrounding it. Note, I will use the shorthand 'context' to cover these social normative structures and normative governed practices.

Yet, is context enough to produce a real possibility? It seems like it certainly can. Let us revisit the careless-backing-out accident. If person A did not look in their rearview mirror and subsequently hit person B, person A would be held morally and legally responsible. Now, what might be a real possibility, that a lawyer would argue? That person A could have simply just looked in their mirrors. Now this is relevant to the practice of safe driving and safe-backing out. So, it might seem as if we only have to look to the practice of safe driving, and closeness is not needed here. However, without closeness as a further restraint, certain outlandish possibilities can make their way in. For example, if context was the only constraint, one could claim that person A should have checked their mirrors rear view and side view mirrors twice, properly adjusted

their seat position, checked their tire pressure, and made sure their car had enough oil, washer fluid, and gas.

Though, this is assuming the context is general in the sense of one's "safe driving practices." Someone could claim that the scope of this contextual setting is too broad -- perhaps if we narrow it, we will be restricted to only real possibilities. However, let's say that we make the new contextual setting, "safe driving practices with respect to backing out of a parking lot space." Sure, this narrows our ability to come up with inappropriate responses. Yet, it still fails. One could argue that person A should still check all of their mirrors, perhaps clean them in case they're dirty or foggy, put their head out of the window and look around, turn around to check your surroundings. This would, in effect, still be asking too much. So context alone (here, safe driving practice when backing out) is not enough. But notice that a world in which person A checks all of their mirrors, cleans them, puts their head out of the window and looks around, and turns around to check their surroundings, is without a doubt further from the actual world, than a possible world in which person A simply checks their rearview mirror. So closeness is crucial here. We need closeness and context as companion constraints

However, the constraints imposed by the normative structures of our society seem to be relevant and important to characterizing what constitutes real possibility. Context also serves to make important real possibilities "real" with respect to other communities and cultures. Take for instance, the Aghori. They are a sect of Hinduism whose sadhus, or holy men, practice cannibalism. They do so in efforts to prevent aging and to obtain special powers - such as levitating or controlling the weather. Now, imagine you are one of them. If one of the sadhus said to you, "if you had eaten the flesh off of the elbow of that corpse last night, then you would have been able to make it

sunny today," it seems perfectly reasonable to accept that. Perhaps the other sadhus even grow annoyed with you for your failure to make it sunny (because you did not consume flesh off of a human corpse). However, if you are a 20 year old biology student at the University of Connecticut and another classmate was to say that to a professor, there would be some serious confusion. That is, surely a professor at UConn would not hold you, their student, responsible for failing to make it a sunny day on campus by way of cannibalism. However, it seems that within the Aghori community, one could be held responsible for such. Thus, context is necessary, but it is not sufficient. One might be asking then what is?

4. A Model of Real Possibility

4.1 Closeness and Context:

As we have seen, neither physical possibility, nor closeness, nor context are sufficient, by themselves, in producing real possibilities. However, all seem to offer a valuable contribution. Thus, I would like to argue that we should present them together as a conjunction. This conjunction helps us move towards an adequate characterization of real possibility.

Consider the following schema of possibilities. It illustrates why it is necessary to have physical possibility, closeness, and context as constraints:

i) There is an X_1 which grounds strong responsibility.

ii) There is an equally close X_2 that does not ground a strong responsibility claim.

iii) There is a less close X_3 that is contextually relevant and does not ground a strong responsibility claim.

Now, let's revisit the car accident example within the frame of this schema. The circumstances around the example are the same: person A carelessly backs out of a parking space and subsequently backs into person B's car.

X1: Person A checked their rearview mirrors.

X2: Person A sang *La Marseillaise,* etc.

X3: Person A checked all of their mirrors twice, cleaned them, stuck their head out of the window and looked around, and adjusted their seat.

It's important to note that in these circumstances, we are assuming that the people in question have all of the relevant knowledge necessary to act as a rational agent. Now, perhaps someone might argue that they could easily see a lawyer attempting to use X3 as a basis for their attack on the defendant. That is, perhaps someone is claiming that had person A done all of this they would have been acting responsibly. However, the argument would probably be thrown out as no one would be held responsible for failing to do all of those things. Generally speaking, people fail to perform all of these safety acts every day. The standard is too high. That is, the demand goes too far for one to be held responsible. This further illustrates why closeness is relevant when it comes to establishing a responsibility claim. X3 only satisfies context – unlike X1, it's not close enough to the actual world.

Now, let's visit a different example but under the same schema. Imagine if someone is 15 minutes late for a meeting. Let's also assume that they drove. Nothing strange or abnormal occurred - they were just late because of their own actions.

X1: They left 15 minutes earlier.

X2: They took two wrong turns that led to a shortcut.

X3: They checked their GPS once the night before and once the morning of the meeting, left 15 minutes earlier, and planned out where to park ahead of time.

Here, we can also witness, much like with the car accident example, why it is needed to have both context and closeness to ground responsibility. With respect to X2, obviously one cannot be held responsible for failing to accidentally find a shortcut through two-wrong turns. That is simply absurd. With respect to X3, perhaps an overbearing tyrannical boss might chastise an employee for failing to act as such. However, they would obviously appear to be incredibly demanding and inappropriate. This is especially so, given that someone's lateness is typically just a social responsibility, not a moral or legal one

Let's continue to examine cases of moral responsibility with another example. Imagine if a person failed to contact their mother via Skype - or any other video-telecommunication platform. Once again, we are assuming that the subjects are completely versed and capable in the circumstances.

X1: The person Skyped their mother.

X2: The person accidentally dialed their mother's phone number.

X3: The person had flowers and chocolate sent to the mother's house, and called their mother.

We can even apply this schema to something as simple as washing a mug. Imagine if someone was being particularly reckless while washing a mug and proceeded to drop it.

X1: The person carefully placed the mug in the rack.

X2: The person tied their shoes instead of washing the mug.

X3: The person had worn non-slip gloves, was washing the mug ½" off of the surface of the sink, and worn non-slip shoes.

4.2 An Epistemic Constraint

In each case:

X1 is a real possibility that grounds a responsibility claim

X2 is equally close, but doesn't ground a resp claim because it's not contextually relevant.

X3 is contextually relevant, but not close enough.

Now, though all of these examples differ, we can examine one common similarity shared. When we look at each independent X1: person A checking their rearview mirrors, leaving 15 minutes earlier, if the person had Skyped their mother, their mother would have been happy, and if the person were more careful with the mug, then they wouldn't have broken it - we notice that X1 would fail to ground strong responsibility if they did not know how to drive, how to access the meeting, how to Skype, how to safely wash a mug. Thus, there is a need for an epistemic availability.

Recalling the above schema and comparing the varying X1s - it becomes evident that responsibility is absolved when there is an epistemic impasse. Also recall that ought implies can. There is a need for epistemic availability. In fact, this epistemic requirement seems to be rather deeply ingrained in our society. We can easily bring to mind circumstances in which someone has said, "had I known 'x', I would have done otherwise." Here, 'x' is typically referring to some integral part of the incident that is being discussed. For instance, imagine that Sarah forgot her glasses and is walking down the sidewalk. Her friend, Molly, is walking on the opposite side of the street. Molly

waves at Sarah, but Sarah doesn't wave back. Molly becomes upset and thinks that

Sarah might be mad at her. Molly then confronts Sarah on her lack of a wave - only to

find out that Sarah wears glasses and physically could not see her. Now, Molly might be

tempted to say, "Had I known you couldn't see me, I wouldn't have gotten upset!" Or,

Sarah could even say, "Had I known you waved at me, I would have absolutely waved

back!"

  This epistemic constraint can also be illustrated within our previous concentric
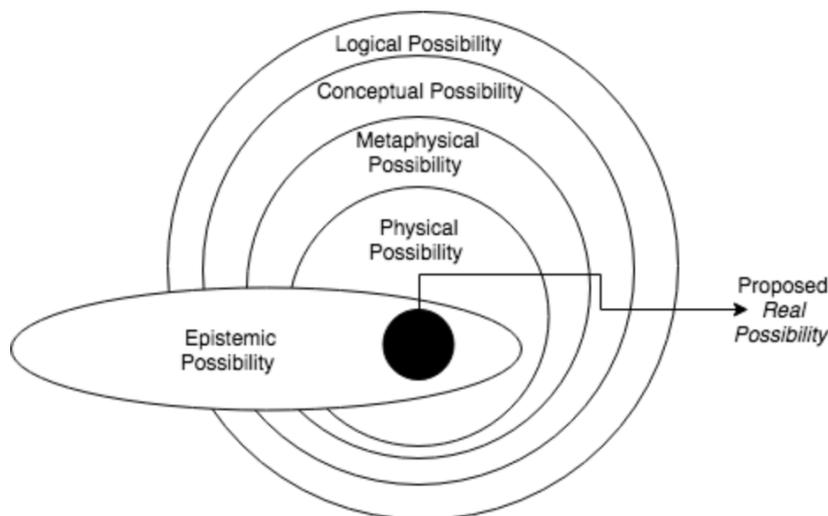
model of possibility.

Figure 5: Here is the concentric model of possibility, including epistemic possibility, and where I propose *real possibility* lies. Note here that *real possibility* exists within both physical possibility and epistemic possibility.

  Here, we can see that my proposed *real possibility* is situated within physical

possibility, and also entirely within epistemic possibility. It is the most restricted form of

possibility as it demands quite a lot. When we reflect upon the idea that *ought implies*

can - we can see that this slogan applies at the epistemic level, not just at the level of physical possibility

 In his book, *Real Conditionals*, Lycan provides an analysis of conditionals that also emphasizes the importance of the epistemic state of the utterer. He writes: "For a possibility to be 'real', the utterer must have it at least tacitly in mind as a live prospect" (p19). Then, as Lyican points out, we will have to rule out "irrelevant possibilities" that, though the utterer happens to regard them as real possibilities and does not believe them to have materialized, have nothing to do with the speaker's subject-matter or deliberations.

 Lycan spends a considerable amount of time exploring the following objections: that perhaps the utterer never takes into account the actual happening and perhaps the utterer is unjustified. While I see these objections as clearly pertinent, I think the solution is rather simple. I argue that we need to include both an objective contextual element, as well as the epistemic perspective of the utterer. That is, what is contextually relevant is separate from the epistemic perspective of the person who is speaking and or experiencing the instant. It is important to note that both the status of a possibility as a physical possibility and the sense of being suitably close, are also separate from the person's epistemic perspective. The irrelevant epistemic possibilities are thus ruled out by these other objective constraints: context, along with the need for physical possibility and suitable closeness.

 I also see Lycan's discussion of an epistemic perspective extremely pertinent as to why this epistemic constraint is so important. Note that the open possibilities to the individual do not exhaust the possibilities relevant to the individual - the objective sense of context is not sufficient on its own, nor is the subjective epistemic experience of the

utterer. Take, for example, the following: Sydney was running late for a book club meeting downtown. She does not have a car, has no access to public transportation, and therefore, must walk. However, her family owns several bicycles that are completely functional - it also happens to be a rather pleasant day for a bike ride. However, Sydney does not know how to ride a bicycle. Thus, she cannot ride one of the bikes to the meeting to avoid being late. But notice here that if we were just adhering to context, one might be tempted to claim that Sydney, could in fact, have ridden the bike to avoid being tardy. Yet, we know that had she taken the bicycle, perhaps she would have crashed, injured herself, etc. However, also note that if we were just taking care to adhere to Sydney's epistemic perspective, the notion of taking the bicycle would be completely unrealistic, even though it could be seen as a physical possibility (meaning, there would be no natural laws violated had she taken the bike). Yet, when we pair both Sydney's epistemic perspective with the objective context in her situation, we can understand that her tardiness could have been avoided by taking the family's bicycle.

4.3 *Real Possibility* Summarized

Recall that a positive account of *real possibility includes* : a suitable degree of closeness, appropriate context relating to best practices, an element of physical possibility, and an element of epistemic possibility. These elements are jointly sufficient and individually necessary. We can explore this through the following example: imagine Ronald spilled water on Bernadette. If the only constraint was suitable closeness, there would be no constraints on the contextual setting, the epistemic possibility, or the facet of physical possibility on the potential possibilities. So, we could then say things such as: Ronald could have carried the water in a tupperware container with a lid on, and thus

avoided spilling the water on Bernadette (which would violate the contextual constraint - in a standard everyday situation, no one really drinks out of containers meant for storing left-over food). Perhaps we can even go as far to violate the epistemic constraint by claiming that Ronald did not know water was wet, and thus by spilling it he did not know that he would cause Bernadette some type of inconvenience and discomfort. As a human-being who is a frequent consumer of water and old enough to fetch themselves a glass of the liquid, one should know that water is wet - and the ramifications of spilling it on someone. This discussion is a result of only implementing the constraint of closeness. If we were to single out each constraint, similar results would ensue. They all work cohesively to reign one another in - in producing *real possibilities.*

Now, let's revisit Ronald and the water once more. A *real possibility* is the following claim: Ronald could have walked slower and more carefully - which would have prevented the water from spilling on Bernadette. This possibility is suitably close to the actual world, there are no violation of physical possibility, Ronald, as a physically and mentally capable adult, should understand that water can spill out of containers and that he should walk carefully when he has a container full of it - which includes both the constraints of appropriate context relating to the best practices and epistemic possibility.

4.4 Objections

An objector could refute each element of my positive account of *real possibility* - closeness, context, epistemic and physical possibilities. Thus, I will go on to explore the outcome of refuting each required element.

4.4.1 Objection 1: All You Need is Closeness

Objection one can be seen as a case where closeness is enough to ground a strong claim of responsibility.

In order to do so, let us imagine a society of whom I will refer to as the "physical impossibilists." The society of physical impossibilists operates on the notion that people are only held responsible for the physically impossible. Recall that each breakdown of a natural law is equidistant from the actual world. For example - the possibility that a person could be instantaneously granted the ability to fly and the possibility that a bookcase could suddenly levitate are equally far from the actual world.

Now with this society of physical impossibilities in mind, imagine Linda is walking down the street. She trips into another person, Arnold, and subsequently hurts him. Arnold is startled and angry - he then claims that she should have just levitated as she was falling to avoid hurting him. Note, that in this society people do not hold any type of special powers. No person can truly levitate, fly, become invisible, etc. Now, let's revisit the car accident. In the schema below, I'm solely focusing on closeness on its own and how it can ground a strong responsibility claim for the physical impossibilists. Take the following schema, with the societal structure of the physical impossibilists applied:

X1: Person A's car levitated.

X2: Person A squared a circle.

X3: Person A look in their rearview mirror.

Recall that X2 is supposed to be equally close to the actual world as X1, but fail to ground strong responsibility. X3 fails here because looking in the mirror is physically possible. However, here, an equally close instance does in fact ground strong responsibility (because any physically impossible action will ground a responsibility

claim). Also recall that this happens because, generally speaking, physical impossibilities are all equal in distance from the actual world. In this warped society, everyone would be held responsible all of the time for their actions. There would be no excuses or exceptions for things that here, in our actual and present day society, happen. While this might appear to be extreme, it is a true case of closeness being sufficient in grounding responsibility. Closeness becomes enough. This is a case where closeness is enough because context is not allowed in. Yet, something intuitively seems incredibly off as relevance to best practice is completely lacking here.

The point is that this is a great length to go to to prove that closeness can be enough. It is not realistic in any sense, nor is it relevant to the actual world. Think about the consequences that would ensue from this: how would interpersonal relationships work? There would be no sense of forgiveness - just blame. Our legal system would also be warped - imagine being prosecuted for a crime because you failed to do the physically impossible. One could always find equally close possibilities that are contextually irrelevant.

This society of physical impossibilists also highlights the importance of another aspect of *real possibility* - physical possibility. In today's society, we do not hold people accountable for failing to do the physically impossible. In fact, avoiding this application of responsibility appears to be an implicit rule. Think about if the car accident came to fruition - had a lawyer made a formal argument to the court that had the defendant's car levitated, the accident would not have happened, they would be laughed at.

4.4.2 Objection 2: All You Need is Context

Now, someone might claim that context is sufficient in producing *real possibility*. With context, the assumption of physical possibility is present - there are not real life

instances of where physical impossibilities would be contextually relevant. The goal of this second objection is to make closeness irrelevant and to make context sufficient. Let's examine the following example: Shawn is crossing the road. It is the middle of a sunny day, but not too sunny so his vision is impaired with a glare. There is only one-way traffic and there are no cars parked on the street. There is no crosswalk, nor is there a traffic light or stop sign on the block within sight. As he is crossing the street, Shawn is not distracted by anything, he isn't listening to music, he isn't looking at anything in the distance. He is walking at an average pace and is not under the influence of any substances. His eyes and head are faced forward and he forgets to look before crossing the street. He is subsequently hit by the car. Note, while here in America pedestrians almost always have the right of way, this is not a universal law. In Germany, for example, pedestrians do not have the right of way. In court, lawyers who are representing the driver, in this case, will attempt to put the fault on Shawn for being negligent, as he did not look before he crossed the street.

When this case is applied to the real possibility schema we see:

X1: Shawn looked both ways before he crossed the street.

X2: The driver accidentally took a wrong turn and did not drive down the street that Shawn was crossing.

X3: Shawn looked both ways twice before crossing the street.

Recall that X3 is concerned with context. It seems as though asking someone to look twice before crossing the street is not overly arduous or strenuous. In fact, perhaps some of us do that on a day to day basis already. However, let us examine the circumstances in which this seems to hold true. The street and situation as a whole is incredibly restricted. Traffic is only coming from one way, there is no crosswalk, the

weather is perfect for visual conditions, there are no auditory distractions - such as noisy construction work or loud music from a party, there are no visual obstructions - such as a large sign or cars parked on the street. Thus, it seems as though in this situation, there can only be one true "contextually relevant" solution to avoiding the accident. Perhaps someone could also argue that because of this single normative context, X3 cannot become too demanding, and thus the need for closeness dissipates.

However, if one were to claim that the only factor in preventing the accident was a failure to look before crossing the street - we can still strengthen X3 to the point of it becoming too demanding. Perhaps we can claim that for X3: Had Shawn looked twice before crossing the street, and then waited 30 seconds to ensure that no cars were coming... This seems to be slightly more demanding than the original X3 above. Yet, we can take it a step further and claim that, for X3: Had Shawn looked twice before crossing the street, looked incredibly hard and critically into the distance, and then waited 30 seconds to ensure that no cars were coming. It is still possible to strengthen X3 into becoming too rigorous, despite there allegedly being a single context norm.

In principle, though, if there was a true single norm that one had to follow, perhaps it would render context as sufficient. However, the lengths that someone would have to go through in order to make this realistic are extreme. Yet, even if this were the case in the actual world, there would still be ways in which one could enrich X3. Also, take care to note that this situation, with respect to context, can be looked at in terms of degree. The further the situation goes to meet this ideal, the ability to hold someone responsible falls substantially to a lesser degree.

4.4.3 Objection 3: You Don't Need Epistemic Possibility

Perhaps someone would try to dispute *real possibility's* need to be situated within epistemic possibility. However, this would mean that one would need to procure a case or thought experiment in which someone was held responsible for failing to do something that they genuinely did not know was epistemically available to them. To put it plainly - someone would have to be ignorant of something, yet could still be blamed.

It is quite difficult to think of a case in which this is absolutely true. However, let us walk through the following example in an attempt to explore this epistemic constraint: imagine there are two soldiers, X and Y. They are both fighting for the same side and are quite good friends. However, soldier Y is abruptly sent to spy for the opposing side - soldier X has no idea. There is a sudden outburst of a battle - soldier X sees an enemy combatant who is wounded. Soldier X has the chance to help the enemy, but does not go to help save their life. Bombs and bullets were flying everywhere - had soldier X even stepped one foot towards soldier Y, soldier X would likely have perished. However, it turns out that the "enemy" that was laying there wounded was actually soldier Y - who was sent to spy on the opposing side. This illustrates the idea that people can know something under one condition but not another. While it is true that soldier X might hold himself responsible or feel a burden of guilt for failing to help their friend, it does not seem reasonable. There is no way that soldier X could have known it was his friend.

I would like to introduce a principle that I will refer to as the *had I known...* principle. It reflects the importance of epistemic possibility. It is quite easy to imagine soldier X saying, "*Had I known* it was my friend, I would have saved them." Yet, perhaps someone would counter with there should be a higher moral standard.

However, that does not seem reasonable to ask of anyone. Sure, maybe that is a more virtuous way to live - but is it fair? Surely no one blames soldiers for not rescuing dying enemy combatants on a dangerous battlefield.

Now, let's visit another example. Say that there are two friends at a concert - Chris and Luke. Chris becomes increasingly annoyed with Luke throughout the night and refuses to give him any attention. Deeply hurt by his cousin's refusal to speak to him, Luke drives home without Chris and gets into a fatal car crash. Chris would be absolutely devastated and probably experience an immense amount of guilt - perhaps the *had I known* principle would come into play here. It is also quite easy to imagine anyone in this situation to say, "*Had I known* this would happen, I would have never been so rude/let him leave/etc."

Now, imagine that a parent took their child to the park to play. There is a deep lake with a strong current at this specific park. The parent thinks that their child is playing on the playground behind them - but sees a small child in distress in the lake. They are drowning. The parent sees other people rushing to the scene, so they go to the water's edge, but don't jump in as they cannot swim. The parent later finds out that the drowning infant was their own child. However, the parent cannot be blamed for not risking their own life to save their child - they genuinely had no idea. This ignorance is enough to excuse them of responsibility.

Perhaps the parent might claim, "Had I known it was my own child…" This *had I known* principle seems to be a key indicator of retrospective guilt because of a lack of epistemic possibility. Had there been this epistemic access, they would have acted differently. The same can be said about any of the above examples pertaining to epistemic possibility. This addition of epistemic access completely shifts the basis of

responsibility. For the parent, it was not epistemically possible for them to save their own child. They simply did not know it was them. Our society does not fault people, or rather hold them responsible, for failing to perform an action that they did not think was possible.

However, it is important to note that here in the United States, ignorance, or a failure to know a specific law, does not excuse one from being arrested and charged with a violation of that same law. Take the following example - perhaps Katie is driving down the road on a motorcycle. She changes lanes, but does not use her blinker. She is pulled over and subsequently given a ticket for failure to signal. Yet, perhaps she might try to make the argument that she genuinely did not that she had to signal before changing lanes on a motorcycle. This is obviously not the case. However, at least in the state of Connecticut, one must possess a motorcycle license to operate one. By obtaining this license, Katie would presumably have learned that she still needs to signal when she changes lanes. Thus, ignorance here is not an excuse. There are new structural rules assumed under each new contextual setting - what is expected from someone with a motorcycle license (with respect to operating a motorcycle) is different than, say an eight year old boy. If an eight year old boy was caught on a motorcycle, ignorance of the law here might be an excuse - yet, see how the contextual expectations have changed.

This "excusability" highlights the advantage in including an epistemic possibility, constraint within my view. Yet, it is also interesting to note how the epistemic possibility constraint (which is subjective) and the contextual dimension constraint (which is objective) have weights relative to the situation on hand. That is, no generality can be stated on which one will always be more important. The epistemic possibility constraint does not grant a free ride to an ignorant person, as the contextual dimension will help to

determine whether or not the person *should have known better*. Take the following example: Marcus is a newly hired intern and is on his way to a meeting at a new office building that he had never been in. He arrives at the building lobby on time, there is no one at the reception desk, and there is no one else in the lobby. Marcus knows that the meeting is being held on the fifth floor of the building, but the elevator is covered in caution tape that boldly exclaims it is out of service. He sees no other possible way of physically getting to the meeting. He leaves and then emails his boss, excusing his absence. What Marcus did not know was that there was an accessible fire escape that led to the fifth floor and the meeting. Yet, attending the meeting was not an epistemic possibility to Marcus because of his ignorance towards an alternate route. Note that while his boss might be annoyed, it does not seem as though we can hold Marcus responsible here. When we look at the contextual setting - he is a new hire, no one was around to offer help in finding an alternative route, he has never physically been in the building nor seen any maps of the building, etc. - we see that Marcus should not be held responsible. The contextual setting here excuses his ignorance.

However, note how the excusability shifts with a change in the context. If Marcus had been with the company for 10 years, had worked countless hours in the building that the meeting was being held in, had absolute knowledge of the accessible fire escape, and knew that the stairwell lead to the floor the meeting was being held on, it seems as though we can ascribe responsibility in his failure to show up at the meeting. The new hire is less constrained by the normative notions of knowing his way around the building than the 10-year-employee.

5. A Comprehensive Account

5.1 An Account of Real Possibility

I've argued that there is a type of possibility – real possibility – that serves as a ground for the ascription of responsibility, I argue that it consists of four key elements:

I) Epistemic Possibility

II) Physical Possibility

III) Suitable Closeness

IV) Appropriate Context Relating to Best Practices

These four elements must be used in conjunction with one another - they act as a system of checks and balances. I have shown how on their own, each element produces an overinclusive set of possibilities that will not all count as *real* "real," in the sense that they ground strong responsibility. Only taken together can these elements give us an account of real possibility.

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