Truthmakers and the Consequence Argument

In this paper, I intend to advance a very bold thesis: The most influential argument for the incompatibility of free will and determinism, the Consequence Argument, is built upon a deep misunderstanding that pollutes all of the various iterations on it. Indeed, this misunderstanding is even widely shared by the majority of those compatibilists who have criticized the argument (e.g., Lewis, 1981).  If I am correct, this entire style of argument for incompatibilism is misconceived.  If incompatibilists wish to advance the core insight of the Consequence Argument--that if determinism is true we are not free to act otherwise than we do, since everything we do is a consequence of what transpired long before we were born--they will have to do so in a fashion that is very different from how they have thus far advanced it in such highly influential papers as those by Carl Ginet (1966), David Wiggins (1973), and Peter van Inwagen (1975).

The root of the problem is that every rigorous formulation of the Consequence Argument relies upon the logic of truthbearers.  But truthbearers are semantical notions, and what the free will problem is about, as a distinctly metaphysical problem, concerns the truthmakers for pertinent propositions about the past and the laws of nature.  The trouble is, the logic of truthmakers diverges from that regarding the logic of truthbearers, and it diverges in ways that make trouble for the seemingly smooth valid inferences that are alleged to be at play in the Consequence Argument.  This is no small matter.  If I am correct, much of the free will debate that has unfolded since Ginet's 1966 formulation of the Consequence Argument needs to be revisited, and the apparent advantage that the Consequence Argument has seemed to afford incompatibilists will dissipate in the process of doing so.  Of course, this is not to say that there is no way at all to salvage the core intuitive insight that motivates the Consequence Argument.  There may well be.  But it will have to be fashioned with resources that are distinct from those that have dominated the literature for the last fifty years.

So, to begin, consider a lean formulation of the Consequence Argument. The Consequence Argument employs the following inference rules:

Rule α: □P entails NsP

Rule β: NsP and Ns (P entails Q) entails NsQ

Ns is interpreted as P is true and S cannot render P false, and □ represents broad logical necessity. The only premise required for the Consequence Argument is that nobody can render facts about the distant past or the laws of nature false. According to the semantic definition of determinism, a world is deterministic if and only if the (L) laws of nature and, (P0) a complete description of the world at any time, entail (P) any true proposition. Given those interpretations, the Consequence Argument claims:

1. □ (P0&L)⊃ P Definition of Determinism
2. Ns (P0&L)⊃P α, 1
3. Ns (P0&L) Premise
4. Ns P β 2,3

So, if nobody can render the laws of nature false nor render facts about the distant past false, and the inference rules are valid, it follows that nobody can render any true proposition false in a deterministic world. Part of the reason that the Consequence Argument has been so successful in rehabilitating incompatibilism is that there may well be sound variations of the argument. Nevertheless, sound arguments can still be highly problematic. One way in which a sound argument can be problematic is if the defenders of the argument employ it to support a position that differs from what the conclusion actually states. I shall show why the Consequence Argument does not provide support for incompatibilism even if we assume that there are sound versions of the argument.

The conclusion of the Consequence Argument states something significantly weaker than what incompatibilists suppose. While the Consequence Argument concludes that agents in a deterministic world cannot render any true proposition false, the argument is employed to demonstrate that agents cannot act in any other way than they actually do in deterministic worlds or that agents have no control over what they do in deterministic worlds. Even if the Consequence Argument is sound, it needs to further be demonstrated that the conclusion of the argument entails something interesting about agents and their relationship to the world.

1. Truth and Truthmaking

Prior to Kripke’s publication of Naming and Necessity, it was quite common for philosophers to interchange semantic, epistemic, and ontological concepts. Since it was commonly assumed that any necessary truth was also a priori knowable and analytic, there was little reason for philosophers to obsess about these distinctions. They appeared to be distinctions that made little real difference. Kripke’s demonstration that there are necessary truths that are only a posteriori knowable provided philosophers with the first indication that we ought to be cautious of the distinction between epistemic, ontological, and semantic issues. While Kripke has shown that it can be problematic to blur these distinctions, recent work has demonstrated that blurring these distinctions will usually be problematic.

Rule β attempts to transfer a lack of control over propositions to a lack of control over the propositions they entail. Yet, entailment is a semantic notion. Roughly, P entails Q iff it is not possible for P to be true and Q to be false. This definition can only succeed, however, if restrictions are placed on the category of entity that P and Q represent. It is not possible for my house to be true and the Eiffel Tower to be false. Nevertheless, the mere fact that my house cannot be true while the Eiffel Tower is false does not mean that they compose a valid argument. Instead, because neither are the sorts of things that can have truth values, it is not possible for them to possess those truth values. Instead, the standard definition of entailment requires that P and Q must be the sorts of things that can have truth values. So, entailment is a relation between the bearers of truth. These bearers of truth might be sentences, thoughts, utterances, or propositions. To remain neutral on this thorny metaphysical question, I shall call whatever entity it is that bears truth a ‘truthbearer’. When we study entailment, we are studying the relationship between these semantic entities.

 Yet, issues about free will and moral responsibility are about agents, their abilities, and the events that they bring about. Free will is primarily about the world, and not mere descriptions of the world. In other words, free will is not about truthbearers, but instead about those entities in the world that make truthbearers true. Since the free will debate is about those entities that make propositions true, concentrating on entailment relations in the free will debate would only be justifiable if the relation of truthmaking could be preserved through the same inferences that preserve truth.

 Conflating semantic issues with ontological issues is problematic because the logic of truthbearers is distinct from the logic of truthmakers. While most philosophers accept that classical logic preserves truth, there is a consensus in the truthmaker literature that classical logic does not preserve truthmaking (Rodriguez-Pereyra 2006, p. 187). The most common belief is that the logic of truthmaking is some form of relevant logic. There is, however, no consensus on exactly what the logic of truthmaking is.

The classical entailment thesis for truthmakers attempts to preserve truthmaking through the same inference rules that preserve truth. According to the classical entailment thesis if o is a truthmaker for P, and P classically entails Q, then o is a truthmaker for Q. Until very recently, almost everyone accepted the classical entailment thesis. If the classical entailment thesis were true, classical entailment relations could easily be employed both in semantics and for ontological issues. George Restall, however, began such a strong assault on the thesis that there is now a consensus that the thesis is false.

 The initial problem with the thesis is that it generates an explosion of truthmakers for any logically necessary truth. In other words, if the entailment thesis is true, every object is a truthmaker for every necessary truth. Consider an arbitrary object like this paper. This paper makes it true that “This paper exists.”

Any argument with a necessarily true conclusion, however, is a valid argument. After all, if the conclusion is necessarily true then it is not possible for the conclusion to be false. Certainly, if it is not possible for the conclusion to be false, then it is not possible for all the premises to be true and the conclusion to be false. For this reason, any proposition entails any necessarily true proposition.

 So, the proposition that “this paper exists” entails that “two plus two equals four.” Since this paper makes it true that “this paper exists” and “this paper exists” classically entails that “two plus two equals four,” according to the classical entailment thesis this paper makes it true that "two plus two equal four.” Nevertheless, while I believe that this paper produces some important results, I will not take credit for making two plus two equal four.

Biting this bullet, however, might not seem too difficult. Since necessary truths are true regardless of the way that the world is, one might think that any of the world’s furniture is sufficient for making them true. So, perhaps every object is trivially a truthmaker for every necessary proposition. Accepting that any object is a truthmaker for every necessary truth, however, creates more severe problems. Intuitively, John’s emotional states, and not Mary’s, makes it true that “John is happy or he is not.” If, however, every object is a truthmaker for every necessarily true proposition, then Mary’s mental states are just as responsible for making that proposition true as John's.

Yet, if John’s mental states are no more responsible than Mary's for making it the case that “John is happy or he is not," it is difficult to explain why this sentence is about John and not about Mary. Intuitively, it seems that if John is happy then the sentence is true because he is happy. On the other hand, if John is not happy, then the sentence is true because he is not happy. Regardless of whether John is happy or not, the sentence will be true. Yet, in either case, John’s mental states are what makes the sentence true. Yet, if the classical entailment thesis is true, Mary's mental states are just as responsible for making that proposition true as John's.

Certainly, however, it would be nice if classical logic could be employed to transfer truth and truthmaking. Perhaps we ought to accept the counterintuitive result that Mary’s emotional states are just as relevant for making the sentence true as John’s in order to employ classical logic for truthmaking. Sometimes bullets must be bit.

 Yet, the explosion of truthmakers for necessary truths is merely the first step in what has been a sustained assault against the classical entailment thesis. We can derive that any object is a truthmaker for any true proposition if we accept the entailment thesis and a plausible thesis about truthmakers for disjunctions. If the classical entailment thesis and the following Disjunction Principle for Truthmakers are both true, truthmaking becomes trivial.

(DPT) If something makes a disjunction true then it must make at least one of its disjuncts true.

As we have seen from the explosion problem, if the entailment thesis is true, this paper is a truthmaker for every necessary proposition. So, this paper is a turthmaker for the proposition that “Kennedy was shot or he was not.” Suppose, however, that DPT is true. In that case, any truthmaker for a disjunction must be a truthmaker for at least one of its disjuncts. Since this paper is a truthmaker for the proposition that “Kennedy was shot or he was not,” according to DPT, the paper must make one of the disjuncts true. Clearly, however, the paper did not make it true that Kennedy was not shot. Given that Kennedy was shot, nothing made it true that Kennedy was not shot. That proposition is, unfortunately, false. The remaining alternative is that this paper made it true that Kennedy was shot.

For legal and moral reasons, I hope it is obviously false that this paper made it true that Kennedy was shot. Nevertheless, there are even stronger reasons to believe that this conclusion is absurd. If this paper is a truthmaker for the proposition that “Kennedy was shot,” then that proposition would be true in any world in which the paper exists. After all, to be a truthmaker for a proposition means that the existence of the object suffices for making the proposition true. All that is required for a proposition to be true is that at least one of its truthmakers exists.

So, if this paper is a truthmaker for the proposition that Kennedy was shot, then any world in which this paper exists is a world in which it is true that Kennedy was shot. In a world where this paper exists, but Kennedy does not, it would still be true that “Kennedy was shot.” Certainly, however, any world in which Kennedy did not exist cannot be a world in which it is true that “Kennedy was shot.” One necessary condition for it to be true that Kennedy was shot is that he existed. So, while DPT and the classical entailment thesis are both plausible, they cannot both be true.

Since this paper is merely an arbitrary object, and the proposition that “Kennedy was shot” is an arbitrary true proposition, the problem generalizes. If DPT and the entailment thesis are both true, every existing object is a truthmaker for every true proposition. So, if DPT and the entailment thesis are both true, every existing object is a truthmaker for every true proposition. Every object is trivially a truthmaker for every true proposition.

It is contentious whether DPT is true. Nevertheless, even if DPT is false, classical logic would be inappropriate for ontological issues. After all, disjunct elimination tells us that if PvQ is true and P is false then Q must be true. Yet, if DPT is invalid, something can be a truthamker for a disjunction without being a truthmaker for either disjuunct. If DPT is false, the mere fact that O makes P v Q true and P is false does not entail that O makes Q true. Further, while Restall provides one of the earliest criticisms of the entailment thesis, the entailment thesis has undergone a sustained attack ever since. Taking the distinction between semantics and ontology seriously requires being skeptical of arguments that transfer ontological issues through classical entailment.

 While truth may be preserved through classical logic, truthmaking is not. Given that the logic of truthmaking is distinct from the standard classical logic of entailment, we must be extraordinarily careful when trying to transfer ontological issues like a lack of control through inference rules that were derived when considering semantics. Since the logics are distinct we ought to be wary of arguments that attempt to derive interesting ontological results when focusing purely on semantical concepts like entailment.

1. The Direct Argument

 Deterministic laws of nature might be incompatible with free will and moral responsibility. Nevertheless, the way in which we talk about deterministic laws cannot pose a legitimate threat to either. Any threat to freedom must stem from the way that the world is and not merely in the manner in which we describe it. Since the logic of truthmakers is distinct from classical logic, arguments that employ classical logic to transfer aspects of ontology should raise suspicion. Yet, two of the most important arguments for incompatibilism attempt to draw significant ontological implications while purely concentrating on semantics. The Consequence Argument and the Direct Argument both illicitly employ principles that transfer a lack of control, or a lack of responsibility, from a proposition to any proposition that it entails.

 While my primary concern in this paper is to demonstrate how the Consequence Argument fails, it is useful to first see how the truthmakers literature generates problems for the Direct Argument. Admittedly, it is significantly easier to show why the Direct Argument fails than it is to demonstrate that the Consequence argument is problematic. Formally, the Direct Argument can be captured in the exact same manner as the Consequence Argument. In order to do so, all that is required is to interpret ‘Ns P’ as P is true and S is not even partially morally responsible for P. Rule A differs from Rule α and Rule B differs from Rule β by transferring non-responsibility instead of transferring a lack of control. With those interpretations, the Direct Argument can be stated in the following manner.

1. □ (P0&L)⊃ P Definition of Determinism
2. Ns (P0&L)⊃P A, 1
3. Ns (P0&L) Premise
4. Ns P B 2,3

According to Rule B of the Direct Argument, if someone is not responsible for a proposition P being true, and not responsible for the fact that P entails Q, then she is not responsible for Q. Unfortunately, those of us working on free will have become too accustomed to the very specialized language that is employed in the literature. Consider the sentence “Kate was killed.” What would it take for someone to be morally responsible for that sentence being true? Being extraordinarily uncharitable to people who would ask such a question, it seems that nobody could be morally responsible for such a thing. We are never praised or blamed for true sentences. Kate’s family may be deeply distraught that Kate is no longer with them, but their concern is about the world and its constituents and not about semantics. It makes sense to blame someone for killing Kate. Although it would be odd, it may even make sense to blame someone for making the proposition “Kate was killed” true. It does not, however, make sense to blame someone for the fact that the sentence “Kate was killed” is true. Ethics is about the world. It is not about semantics. The only manner in which it would make sense to claim that someone is responsible for a proposition being true is if we misleadingly mean to be asking whether someone is responsible for the state of affairs that makes the proposition true.

Even defenders of the Direct Argument recognize this. The appeal of the Direct Argument does not stem from a crazy belief that praise and blame are primarily about sentences. Nobody has that belief. Instead, the appeal of the Direct Argument stems from the more plausible (yet still false) belief that rephrasing ontological issues as semantic issues is not problematic.

One of the first indications that the Direct Argument would fail, precisely where the logic of truthmakers diverges from the logic of truthbearers, occurred in a counterexample to B developed by Mark Ravizza (1994). Ravizza’s case is an instance of causal overdetermination. In overdetermination cases, two causal chains are both sufficient for bringing about an event. Overdetermination can be either symmetrical or asymmetrical. In a case of symmetrical overdetermination, both chains are actual causes of the event. In asymmetrical overdetermination, only one of the chains brings about the event. Asymmetrical overdetermination is often called ‘preemption’. Ravizza’s counterexample to B is an instance of preemption or asymmetrical overdetermination.

Ravizza has us suppose that Suzy caused an avalanche that destroyed an enemy base by detonating explosives high on a mountain. However, a second agent is prepared to detonate explosives lower on the mountain if Suzy fails in her mission. Notice that Suzy’s actions pre-empted the plans of the second agent. The second agent's plans would have caused the base's destruction had Suzy not already done so.

Since Suzy was not even aware of the second agent, Suzy is clearly not responsible for the fact that the second agent had those plans. Further, Suzy is not responsible for the fact that if the second agent has those plans, then the base will be destroyed. Instead, the reason that the second agent’s plans would lead to the base’s destruction has to do with how the explosives would affect the mountain and Suzy is clearly not responsible for that. Since Suzy is not responsible for a proposition that entails that the base will be destroyed, and she is not responsible for that entailment relation, according to Rule B she is not responsible for the base’s destruction. Yet Suzy, and not the second agent, made it true that the base was destroyed. So, despite the fact that Suzy could not have prevented the base from being destroyed, she is still responsible for its destruction.

The force behind Ravizza’s counterexample stems from the fact that while Suzy makes it true that the base is destroyed she lacks the capacity to render it false. After all, if Suzy did not make it true that the base was destroyed the second agent would have done so. Concentrating purely on the semantic level provides us with only two options. Either a proposition is true, or else it is false. Yet, when we move from semantics to ontology there are additional options. Suzy makes it the case that the base is destroyed, Suzy could have refrained from making it the case that the base is destroyed, but Suzy lacks the capacity to make it false that the base is destroyed. Truthmaking is a more complex relation than mere truth preserving.

While Ravizza’s counterexample provides an early indication that concentration on the semantic level causes problems for the Direct Argument, the lesson we ought to have learned from Ravizza was not fully appreciated because it was not made fully explicit. Not recognizing that Ravizza’s counterexample was merely a symptom of a more fundamental problem, Ted Warfield (1996) developed a replacement principle for B. B□ claims that NsP & Ns □(P⊃Q) Ⱶ NsQ where □ is interpreted as broad logical necessity. While Warfield's transfer principle escapes Ravizza's counterexample it fails to address the underlying problem that gave rise to Ravizza's example.

Warfield’s transfer principle is not threatened by Ravizza’s counterexample. While the plans of the second agent may make it causally necessary that the base is destroyed, they do not logically necessitate the base’s destruction. While Suzy is not responsible for the fact that the second agent had those plans and is not responsible for the fact that those plans causally necessitate the base’s destruction this provides no reason to reject B□. Instead, in order to reject B□ we would need an instance where Suzy is not responsible for a proposition that logically entails that the base will be destroyed. Also, note that the validity of B□ is sufficient for the Direct Argument. The laws and the past not only causally necessitate that the base will be destroyed, they logically necessitate it's destruction. Any world with the same laws and past will be a world in which the base is destroyed. So, Ravizza’s counterexample to B is not a counterexample to B□. The Direct Argument can be modified to escape the letter of Ravizza's challenge.

Nevertheless, the Direct Argument cannot be amended to escape the spirit of Ravizza’s challenge. Once we recognize that Ravizza’s case is merely an instance where an agent is responsible for an event because she made it occur, while lacking the ability to make it false that it occurred, it becomes clear that B□ is as problematic as B. While Ravizza’s case is generated by causal overdetermination, cases of logical overdetermination demonstrate that similar problems occur for B□.

There are also cases of logical overdetermination. Consider disjunctions and existentially quantified sentences. Both of these can be logically overdetermined. It is logically necessary that if P is true, then P v Q is true. Likewise, it is also logically necessary that if Q is true, then P v Q is true. So, in a case where both P and Q are true, the truth of P v Q is logically overdetermined. This generates problems for B□.

To see why B□ is problematic, suppose that Amanda and Kate independently detonate explosives at the two vital areas of a mountain where an avalanche could be initiated (citation removed for blind review). Since Kate’s actions were independent of Amanda’s, Amanda is not responsible for the fact that Kate detonated explosives. Further, the fact that Kate detonated explosives logically entails that explosives were detonated at one of two the vital areas. So, by B□ Amanda is not even partially responsible for the fact that explosives were detonated at one of those areas.

Further, since Kate is not responsible for Amanda’s behavior, parallel reasoning demonstrates that Kate is not even partially responsible for the fact that explosive were detonated at one of those areas. B□ seems to turn double success into failure. Yet, clearly, both Amanda and Kate are at least partially responsible for the fact that explosives were detonated at one of the two vital areas. After all, they did it. Both of them provided truthmakers for that proposition.

More generally, if B□ is valid, someone can only be even partially responsible for the truth of a disjunction that has two true disjuncts if she is responsible for the truth of both disjuncts. Employing inference rules of classical logic and B□ it can easily be demonstrated that if an agent is not responsible for P then she is not responsible for PvQ in the following manner.

1. NRs P (Assumption for ⊃ introduction)

2. NRs □(P ⊃ (PvQ)) (v introduction)

3. NRs (PvQ) (B□, 1, 2)

4. NRs P ⊃ NRs (PvQ) (⊃ introduction, 1–3)

Yet, an agent who is not responsible for P may still be at least partially responsible for PvQ by being responsible for Q.

Existentially quantified sentences produce a similar problem (citation removed for blind review). Suppose that Bob and Sue independently robbed the same bank. Since their actions are entirely independent, Bob is not responsible for the fact that Sue robbed the bank. Yet, the fact that Sue robbed the bank logically entails that someone robbed the bank. Since Bob is not responsible for a proposition that logically entails that someone robbed the bank, B□ entails that Bob is not even partially responsible for the fact that someone robbed the bank. Yet, since Bob robbed the bank, he is at least partially responsible for the fact that someone did. If B□ is valid, two people cannot be independently even partially responsible for the same fact. Yet, one of the most obvious features of moral responsibility is that frequently different agents acting independently are at least partially morally responsible for events that occur.

 The reason that these problems occur for the Direct Argument is that ontological relations are significantly more intricate than semantic relations. Bob is at least partially responsible for the fact that someone robed the bank because he robbed it. Certainly, Bob’s actions aren’t the only thing that makes it true that someone robbed the bank. Sue’s actions also made it true that someone robbed the bank. There are frequently multiple truthmakers for the same proposition. If we concentrate purely at the semantic level, we miss a significant amount of richness that occurs in the world. Bob makes it true that someone robbed the bank and Bob could have refrained from making it true that someone robbed the bank. Nevertheless, Bob cannot render it false that someone robbed the bank. When we concentrate on ontology instead of semantics, counterexamples to rule B□ develop. This shouldn’t be surprising. Rule B□ attempts to transfer non-responsibility (a distinctly metaphysical notion) through entailment relations (a distinctly semantic notion). Since B□ conflates ontological and semantical concepts, we ought to expect that it would falter precisely where it does.

1. The Consequence Argument

Given that the Consequence Argument makes the exact same mistake as the Direct Argument in that they both concentrate purely on the semantic level to draw conclusions about ontology, problems with the Direct Argument ought to make us suspicious of the seemingly smooth transitions that occur in the Consequence Argument. Not surprisingly, the Consequence Argument suffers from the exact same problems as the Direct Argument. Yet, the full force behind these insights is often missed because they were frequently seen as isolated counterexamples that needed to be addressed instead of as being indicative of a more fundamental problem in the form of reasoning that occurs in the arguments.

Most participants in debates about the Consequence Argument believe that McKay and Johnson (1996) have shown that Rule β is invalid. Suppose that a coin had never been flipped. While Jane had a single opportunity to flip the coin, she freely decided not to do so. Let us label the proposition that the coin did not land on heads as ~H, and the proposition that the coin did not land on tails as ~T. Consider the following logically necessary truth. If the coin did not land on heads, then, if the coin did not land on tails, then it did not land on heads and it did not land on tails. Hopefully, it is obvious that the preceding claim is logically necessary, but admittedly iterated conditionals are tough to read.

Consider the logical structure of that sentence, □( ~H ⊃ (~T ⊃ (~H & ~T). The first conditional allows us to ignore any row of the truth table where H is true. In those cases the conditional will be trivially true. The conditional within the parentheses allows us to ignore any row of the truth table where T is true. In those cases the imbedded conditional will be trivially true. Yet, since the imbedded conditional is true, and the imbedded conditional is the consequent of the entire proposition, the proposition is true. Conditionals with true consequents are true. The only remaining rows on the truth table are ones in which both H and T are false. Yet, this is precisely what the consequent of the imbedded conditional claims. So, the entire sentence is a logically necessary truth.

Rule α, however tells us that nobody has any control over logically necessary propositions. So, by rule α we can derive that Jane did not have any control over the truth of that iterated conditional. Further, Jane has no control over the manner in which a fair coin would land. If Jane had control over whether the coin lands on heads, it would not have been a fair coin. So, Jane had no control over the fact that the coin did not land on heads (Nj ~H). Yet from Nj ( ~H ⊃ (~T ⊃ (~H & ~T) and Nj ~H, Rule β allows us to derive that Nj (~T ⊃ (~H & ~T). Again, because the coin was fair, Jane had no control over the fact that the coin did not land on tails (Nj ~T). Rule β, however, allows us to derive Nj (~H & ~T) from Nj (~T ⊃ (~H & ~T) and Nj ~T. So, the inference rules of the Consequence Argument allow us to derive that Jane had no control over the fact that the coin did not land on heads and did not land on tails.

In other words, since Jane cannot control which direction the coin lands Rule β entails she cannot control the fact that it didn’t land on either heads or tails. Yet, this is clearly problematic. Jane could have made it true that the coin landed on either heads or tails by merely flipping the coin. While she has no control over which direction the coin lands, she does have control over the fact that the coin did not land on either side. β is invalid.

 When one studies both the truthmaker literature and the free will literature an incredible sense of déjà vu is often generated. McKay and Johnson’s argument was independently derived in the truthmakers literature by Read (2000) (It is a credit to those in the free will literature that our colleagues discovered this problem four years prior to the same issue arising in the truthmakers literature). As was mentioned earlier, the disjunction principle for truthmakers claims that any truthmaker for a disjunction must be a truthmaker for one of its disjuncts. Read, however, has proposed a potential counterexample to DPT. Suppose that Valentine and Epitaph are the only horses in a race. That the race occurred entails that either (V) Valentine wins the race or (E) Epitaph wins the race. So, according to the entailment thesis, the race’s occurrence is a truthmaker for (V v E). Nevertheless, the occurrence of the race neither guarantees that Valentine wins nor guarantees that Epitaph wins. So, the race’s occurrence is not a truthmaker for either of the disjuncts. Perhaps something can be a truthmaker for a disjunction without being a truthmaker for either disjunct.

The same point could easily be made with the case of a coin. That the coin was flipped entails that either it lands on heads or it lands on tails. So, according to the entailment thesis, the fact that the coin was tossed is a truthmaker for the proposition that the coin landed on heads or tails. Yet, the fact that the coin was tossed neither guarantees that the coin lands on heads nor guarantees that the coin lands on tails. So, the fact that the coin was tossed is not a truthmaker for either disjunction.

 While it is still contested whether DPT is true, it is noteworthy that Read’s counterexample is identical to McKay and Johnson’s. The parallels between the truthmaker literature and the free will literature are not mere accidents. What McKay and Johnson have illustrated in their counterexample to β is that the rules of classical entailment employed in the Consequence Argument seem inadequate for transferring ontological issues like control. Instead, the appropriate logical inferences to be employing when examining ontological issue like free will is the logic of truhmakers—not truthbearers.

So, it is not at all surprising that the exact same argument used to illustrate that someone who cannot render either disjunct of a disjunction false can still render the disjunction false also provides reasons to believe that something can be a truthmaker for a disjunction without being a truthmaker for either disjunct. The reason that arguments about the logic of truthmakers parallel arguments about the logic of free will is that they share the same logic. The logic of ontological relations is not the logic of entailment but instead is the logic of truthmaking.

The standard response from incompatibilists to Johnson and McKay’s counterexample has been to admit a minor defeat. Rule β must be abandoned. Nevertheless, perhaps the Consequence Argument can still survive. Rule β can be replaced with the following rule.

(β□) N P and N □ (P ⊃ Q) Ⱶ N Q

The revised rule does not generate Johnson and McKay’s counterexample. β allows us to derive N (~H & ~T) from N ~T and N (~T ⊃ (~H & ~T). Yet, in order to employ rule β□ to derive this conclusion we would need to derive the proposition N □ (~T ⊃ (~H & ~T) and not merely the proposition N (~T ⊃ (~H & ~T). Yet, this proposition is false. The mere fact that the coin did not land on tails does not logically entail that it did not land on heads and did not land on tails. The coin could have landed on heads. The inference rules of the Consequence Argument allow us to derive N(~T ⊃ (~H & ~T) from □( ~H ⊃ (~T ⊃ (~H & ~T) and N~H. Yet, to the credit of those inference rules, we certainly cannot derive N□ (~T ⊃ (~H & ~T) from the inference rules of the Consequence Argument. Yet, the second application of Rule β□ would require this stronger premise in order to derive N(~H & ~T). The amended Consequence Argument is immune to Johnson and McKay’s counterexample.

 Yet, once again, incompatibilists have attacked Johnson and McKay's counterexample while ignoring the deeper problem the example illustrates. Rule β□ is problematic for the exact same reason that Rule B□ is. In response to the counterexamples of Ravizza, Johnson, and McKay incompatibilists have attempted to tweak their arguments while still maintaining the idea that classical logic transfers a lack of responsibility and a lack of control. While this tactic provides a successful response to the counterexamples, it leaves untouched the underlying problem that gave rise to the counterexamples. Ravizza, Johnson and McKay’s counterexamples were merely symptoms of the more severe problem that the arguments treat free will as if it were merely a semantic issue. While people working in the free will literature have become aware of some of the problems that occur when we employ the logic of semantic relations for preserving ontological issues, they have missed the root cause of these problems. Far from resolving metaphysical issues, semantic ascent blurs our ability to think clearly about ontological issues.

 The ability to do otherwise has little to do with whether an agent can render a sentence false. An agent who makes a sentence true could have done otherwise merely by not making the sentence true (without thereby making it false). When we concentrate purely on the semantic plane we blind ourselves to only two options. Either the sentence is true or else it is false. When we consider what agents do when they perform actions that bring about the truthmakers for a sentence a third option becomes available. An agent who can produce a truthmaker for a sentence and refrain from producing a truthmaker for that sentence has a significant amount of control over a particular state of affairs *even if she cannot make that sentence false*.

Consider again the case of Bob and Sue who independently rob the same bank. Bob had no control over the fact that Sue robbed the bank. Further, it is logically necessary that if Sue robbed the bank then someone robbed the bank. So, if β□ is a valid inference rule, Bob has no control over the fact that someone robbed the bank. Yet, Bob robbed the bank and he could have done otherwise. Bob produced a truthmaker for the claim that someone robbed the bank, and he could have done otherwise. If all that the Consequence Argument is supposed to show us is that Bob lacks the ability to render it false that someone robbed the bank, then the argument is sound. Yet, β□ fails to transfer a lack of control. Bob certainly has some control over the fact that someone robbed the bank, and so does Sue. After all, they freely robbed the bank.

If β or β□ are valid inference rules, two agents cannot independently have even some control over the same state of affairs. Yet, it is frequently the case that multiple agents independently have at least some control over the same state of affairs. Rules B□ and β□ have an extremely implausible exclusivity built into them.

A similar problem occurs in cases of disjunctions. In the case of Amanda and Kate, both independently detonated explosives at key locations of the mountain. According to the inference rules of the Direct Argument, however, neither is even partially morally responsible for the fact that explosives were detonated at one of the two key areas on the mountain. The inference rules of the Consequence Argument present a similar problem. If β□ is valid someone cannot be even partially responsible for a disjunction with two true disjuncts being true unless she is responsible for the truth of both disjuncts.

1. Ns P (Assumption for ⊃ introduction)

2. Ns □(P ⊃ (PvQ)) (v introduction)

3. Ns (PvQ) (β □, 1, 2)

4. Ns P ⊃ NRs (PvQ) (⊃ introduction, 1–3)

According to the transfer principles employed in the Consequence Argument, if an agent has no control over the fact that one of the disjuncts of a disjunction is true then she has no control over the disjunction. Thought of in purely semantic terms, this is not too troubling. Certainly, if the agent cannot render one of the true disjuncts false, then she cannot render the disjunction false. Yet, once we think of the inference rules of the Consequence Argument at the ontological level, they become deeply problematic. Amanda has no control over what Kate does. So, she has no control over the fact that Kate detonated explosives at one of the key areas on the mountain. However, Amanda has significant control over the world being such that explosives were detonated at one of these key areas. After all, she made it the case that explosives were detonated at one of those areas and could have refrained from making it the case that explosives were detonated in one of those areas. Had Amanda refrained from making it the case that explosives were detonated in one of those areas, it still would have been true that explosives were detonated in one of those areas. So, Amanda cannot render it false that explosives were detonated in one of those areas. Yet, having at least some control over a state of affairs is not the same thing as being able to render a proposition about that state of affairs false.

 It is for this reason that there may be sound versions of the Consequence Argument even though the argument is deeply flawed. Opponents of the Consequence Argument need not argue that the argument is invalid, nor that any of its premises are false. Instead, they merely need to point out that it is completely off topic. Free will is about ontology not semantics.

4. Technical Glitch?

The Consequence Argument has become so entrenched in the free will literature that it has become extraordinarily difficult to persuade theorists how deeply flawed it is. Typically, technical challenges are responded to with the quip that especially in the informal simple versions of the argument it becomes clear that the argument is compelling. In this section, I shall discuss three reasons why the above problems aren’t a mere technical glitch but instead provide reason to believe it is unlikely that the Consequence Argument can be salvaged.

Many of the most successful attacks against the Consequence Argument and the Direct Argument have been seen as isolated cases. The task for the incompatibilists was merely to reformulate the Consequence Argument in such a manner that would avoid the alleged counterexample. What was missing in these attacks was an awareness that they were merely symptoms of a devastating disease. It was not until we discovered through the truthmaker literature that it is deeply problematic to resolve ontological issues in purely semantic terms that it could become obvious how McKay and Johnson’s argument stemmed from the same source as Ravizza’s. Another early attack on the Consequence Argument brilliantly diagnosis the problem with the Consequence Argument, but occurred prior to developments in the truthmaking literature and therefore the importance of the criticism was not fully appreciated in the literature. Michael Slote claims,

A straightforward argument against the main modal principle of the incompatibilist arguments then becomes available. Given the above assumptions, we cannot now do anything about past events because they are due to factors that brought them about via a causal chain that did not include our present abilities, desires, etc. And appropriate laws of nature have the same sort of necessity because whatever it is that makes them be as they are (certain deeper laws, the basic structure of the universe or what have you) is surely something that does not involve our present abilities and desires. But even if our deliberate actions are determined, that determinism operates, nonfatalistically, by means of (causal chains involving) the approximately coeval desires, abilities, character, and beliefs of human agents. So if the necessity involved in incompatibilist arguments selects factors that bring something about (make it exist) without making use of such coeval desires, etc., then most of us can do something about the actions we are about to perform and the main modal principle of these arguments fails. Certain past events will be necessary in the relevant sense (necessary in relation to the right sort of factor) and certain laws leading from them to an agent’s later actions will also be necessary; but it will not follow that those actions are themselves necessary at some later time when the agent is considering whether to perform them. Of course, those actions will be determined and presumably predictable in terms of factors prior to the agent’s desires and abilities. But those earlier factors nonetheless bring such actions about only by means of (causal chains involving) later desires (roughly coeval with the actions they help to bring about). And what I have been claiming is that it is precisely this further aspect of the matter which is crucial to whether a given act is avoidable.

` One problem with believing propositions on the basis of common sense is that we infrequently ask why we ought to have that belief. Since almost everyone agrees, little effort needs to be spent asking why the proposition is true. This attitude seems rather common when we examine the belief that we have no control over the laws or the distant past. When some compatibilists provide a counterfactual or dispositional account of abilities and tries to convince us that we do have some sort of control over the laws or the past, we typically respond by trying to show what is wrong with their position. Yet, an equally important question to ask is what is right about the position that we have no control over the past or the laws. Merely being in the majority does not provide us a pass on defending the position. So, why ought we to believe that we have no control over the past or the laws?

 Slote provides a very credible answer. The laws were as they were, and the past was as it was, long before our reasons could have made them be that way. We did not make the laws as they are, we could not have refrained from making the laws as they are, and we certainly could not make them different. Yet, if our reasons for believing that we cannot be responsible for the laws and the past is because our reasons and actions are irrelevant to what makes it the case that the laws and the past were as they were, then we have excellent reasons to believe that we do have control over our actions and the states of affairs that are brought about by our actions.

 In fact, we have the exact same reason to believe that we have control over these as we have to believe that we do not have control over the past and the laws. Consider the case of raising your hand in a deterministic world. The laws and a complete description of the remote past may entail that you will raise your hand at that precise moment. So, the laws and the past might provide a truthmaker for the claim that your hand rose at that moment. Yet, there can be multiple truthmakers for the same proposition.

Another thing that certainly makes it true that you raise your hand is that you intended to do so. In fact, the only manner in which the laws and the past make it true that I will raise my hand is through me. The idea that the laws and the past somehow bypass my agency and reduce my control only makes sense when we ignore what is going on in the world when we act and instead focus merely on the semantic plane. The laws and the past may entail that I raise my hand, which may make it appear that I have been pushed out of the story and lost my control over the situation.

Yet, it would only do so if we forget what it is that makes it true that my hand rose. I raised it. To the extent that the laws and the past make it true that my hand rose, they only did so through my agency. When we focus on what occurs in the world, instead of merely considering descriptions of the world, it becomes odd to think that determinism reduces my control. I have no control over the past and the laws because they occurred prior to my mental states being able to influence them. The past and the laws may entail that I will raise my hand at a particular time. Yet, I do have control over whether I raise my hand…after all it was I who made it true that my hand rose.

 A second reason to believe that problems with the Consequence Argument cannot be overcome by merely tinkering with ways to avoid technical challenges is that the argument rests heavily upon the modal composition fallacy. An exact description of the initial conditions of the universe will mention many basic particles, but will not mention us. Similarly, the basic laws of nature will describe the behavior of these basic particles, but will not describe our behavior.

 Certainly, however, from descriptions of the basic particles of the universe and their modal properties we can determine things about our actions. If the laws and the past guarantee that the atoms of my hand will move in a particular pattern at a particular time then they also guarantee that my hand will rise at that moment. In some sense, my hand’s rising just is the atoms of my arm moving in a particular pattern. Yet, while we always ought to be cautious of the distinction between semantics and ontology, this distinction becomes exceptionally important for modal issues.

 Consider an easier example. The fact that a collection of atoms are arranged in a particular fashion may guarantee that there is a statue present. Given that those atoms are arranged in that pattern, it is true that there is a statue present. Further, in at least some sense, there is nothing more to the statue than the atoms that compose it. Yet, the mere fact that we can derive that there is a statue present by knowing how more fundamental particles are arranged does not mean that we can read the modal properties of the statue off of the modal properties of the atoms composing the statue. That collection of atoms would cease to be upon the annihilation of any of the atoms. Yet, the statue certainly can survive the loss of an atom. One thing that has become abundantly clear in the material constitution literature is that the modal properties of a composite object are often distinct from the modal properties of the material composing that object.

 In fact, even the facts about the material composing an object throughout all times are not sufficient for determining the modal properties of the composed object. In the case of Lumpel and Goliath, the statue Goliath is composed of the lump of clay Lumpel. Further, Lumpel and Goliath both come into existence at the moment in which the top half of the statue (or lump) is connected to the bottom half. Further, Lumpel and Goliath go out of existence at the same instant where they are annihilated. Throughout its entire existence, Goliath is composed of Lumpel. We can know almost everything we would want to know about Goliath by merely examining Lumpel. However, there is at least one significant distinction between Lumpel and Goliath. They differ modally. Unlike Goliath, Lumpel could have survived being squashed into a ball. The facts about Lumpel do determine most of the facts about Goliath. But, they do not determine the modal facts about Goliath. Being made of exactly the same matter and operating under the exact same laws Lumpel and Goliath still differ modally.

 When we concentrate purely on the semantic plane, we often blind ourselves to lessons we have learned in metaphysics. Reading the modal properties of an object off of the modal properties of the constituents of that object is merely an instance of committing the modal composition fallacy. Yet, the same thing is true for us as is true for less interesting middle sized objects. We can no more read our modal properties off of the modal properties of those particles that compose us than we can read the modal properties of a statue off of the modal properties of the clay that composes it. Yet, both the Direct Argument and the Consequence Argument attempt to draw interesting conclusions about what an agent is able to do off of the modal properties and descriptions of those particles that compose us. Just as in the case of Lumpel and Goliath, we can derive all the non-modal facts about Goliath merely from examining Lumpel. In fact, all those non-modal facts are entailed by, and probably even grounded in, the facts about Lumpel. Yet, it is a fallacy to assume that we can derive Goliath's modal properties from facts about Lumpel. Similarly, since we are composed of the particles mentioned in the laws of nature, we can derive all of the non-modal facts about us from a description of those particles and their modal properties. The fallacy is to assume that we can therefore derive modal facts about us from the modal and non-modal facts about our constituent parts. Yet, whether an agent is able to do otherwise is a modal question. As long as our arguments focus purely on the semantic plane, however, it is difficult to see how what we have learned in other areas of metaphysics ought to alter how we think about free will.

 The third reason to believe that the Direct Argument and the Consequence Argument do not merely suffer from technical problems, but are instead deeply flawed, stems from recognizing that they derived from a very different meta-philosophical view than is prevalent today. In fact, they stem from a discredited meta-philosophical view.

 Part of the reason that some of the main arguments in the free will literature are deeply flawed is that free will is probably the most difficult topic in all of philosophy. Thinking about free will seems to require thinking seriously about moral responsibility, laws of nature, modality, philosophy of action, causation, dispositions, material constitution, truthmakers, and the list seems to go on almost indefinitely. So many other areas of philosophy seem to bear upon what we ought to think about free will. Yet, nobody has the time to master all of these various literatures. So, it would be nice if we could avoid all of these other thorny debates when we wish to concentrate upon free will.

 The linguistic turn in philosophy has provided us with a view about how philosophy ought to proceed that is very congenial for difficult topics like free will. Since so many difficult metaphysical debates seemed almost intractable, those spearheading the linguistic turn had a neat suggestion. It was thought that through semantic ascent we could avoid many of the tricky areas of philosophy. During the linguistic turn, it was thought that we could avoid challenging metaphysical issues by replacing ontological concerns with concerns about how we talk about these ontological issues. For example, instead of worrying about what laws of nature are like we could switch our topic to concerns about the semantics of laws of nature. Part of the motivation here was the assumption that the task of discovering what the world is like would have to be done purely by science, and if philosophy is to retain a role it could only be in the study of semantics.

 Near the end of the last century, it became obvious that this attempt to avoid metaphysics was misguided. First, language is a part of the world. So if philosophers have something interesting to add about language then they have something interesting to say about the world. Second, as we have learned from linguistics language is not an exclusive domain for philosophers. There can be a science of language. Third, the work of Kripke has shown not only that blurring the distinction between semantics, ontology, and epistemology can be problematic, but has also shown that what words mean often highly depends upon what the world is like. Causal theories of meaning indicate that we cannot avoid ontology in our study of language. ‘Water’ means what it does in part because of the substance we refer to with that term. These pressures, among others, have lead philosophers to abandon the linguistic turn and revitalize metaphysics.

 Yet, because the free will debate is so intertwined with other aspects of philosophy, it would have been nice if the linguistic turn had not proven to be so problematic. It would be ideal if those of us working on the free will debate could shelve all the other intricate areas of philosophy that bear upon the free will debate so that we could focus purely on a topic that is difficult enough in its own right. Unfortunately, wanting something to be the case does not make it true. Moving to the semantic plane to address ontological issues is problematic; the linguistic turn has failed. Yet, because the free will debate is so intertwined with so many complex metaphysical issues we have done less to abandon the linguistic turn than perhaps any other area of metaphysics.

 We tend to define determinism in semantic terms. In fact, both the Consequence Argument and the Direct Argument have gone wrong at an area that is seldom called into question. The first premise of these arguments commits us to considering determinism as a semantic concept instead of as a way a world might be. Further, we focus upon whether agents can render propositions false instead of focusing on the ontology of agents and their capacities. We want smooth transitions from propositions to propositions that they entail to carry heavy ontological weight so that we can avoid many of the intricate areas of philosophy we may need to take a stance on in order to address issues in free will on the ontological level instead of on the semantic plane. It would be nice if substantive positions in free will could be adopted without having to delve into the multitude of thorny related issues. Yet, given the failure of the linguistic turn, the free will literature must become significantly more complex. We must start thinking about what deterministic worlds are like, and not merely what a deterministic description of a world would look like. We must start thinking about what agents abilities are like, and not merely what propositions can be entailed by descriptions of the past and descriptions of the laws of nature. Replacing the current semantic debates about free will that are fostered by the Consequence Argument and the Direct Argument will make the free will debate more difficult, but at least we will start discussing what free will is fundamentally about. Free will is fundamentally about the world, and not mere descriptions of it.

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