

A Counterexample to the 'No Matter What' Interpretation

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1 Introduction

The consequence argument is a salient argument in favor of incompatibilism which is the thesis that if determinism is true, then it is not case that we have free will. In a nutshell, the consequence argument has it that if determinism is true, then our acts are determined by the laws of nature and events of the past. But we are neither able to change the past nor the laws of nature. Therefore, we are not able to change the consequences of them.

This short paper consists of two main sections. In the first section, I will explain the consequence argument and rule β . In addition, in the second section of the paper I will introduce the no matter what interpretation which was suggested by Huemer (2000). Moreover, I will offer a counterexample to rule β^* and α^* .

2 The Consequence Argument and Rule beta

In this section, I will explain the consequence argument and in particular rule β . I will use the symbolization of the argument which is offered in [VI89]. Using the rules

below, Van Inwagen formulates the consequence argument. In the original argument Np stands for 'p is true and no one has any choice about the fact that p'. Assume that determinism is true. Let P_0 be a true proposition describing the state of the world in some instant in the distant past (before the emergence of any human) and L be the conjunction of all laws of nature. Assume that P is a true proposition which describes an arbitrary occurrence after P_0 .

The suggested argument is:

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|-----|-----------------------------------|---------------------------|
| (1) | $\Box((P_0 \& L) \supset P)$ | assumption |
| (2) | $\Box(P_0 \supset (L \supset P))$ | 1; modal sentential logic |
| (3) | $N(P_0 \supset (L \supset P))$ | 2; rule α |
| (4) | NP_0 | assumption |
| (5) | $N((L \supset P))$ | 3,4; rule β |
| (6) | NL | premise |
| (7) | NP | 5,6; rule β |

Premise one is the assumption of the argument that determinism is true. Rule β which is used to justify premise and the conclusion is one of the weak links of the argument. If it is not valid, then the consequence argument will be rendered unsound. [Hue00] has shown that rule β under Van Inwagen's 'rendering false' and 'possible worlds' interpretations of N is invalid. In other words, interpreting 'having a choice' as 'the ability to render false', or 'being false in a possible world one has access to', will render rule β invalid, as counterexamples will arise.

[Hue00] has proven that rules α and β are equivalent to rules α^* and β^* , which are:

1. Rule α^* : From Np and $p \rightarrow q$ we deduce Nq (\rightarrow refers to entailment.)

2. Rule β^* : From Np and Nq we deduce $N(p \ \& \ q)$.

In proving rule α^* both rules α and β are needed. The counter-examples that [Hue00] suggests are initially to rule β^* . Huemer's suggested scenario occurs in a world in which indeterminism is true in the subatomic level and the agents have free will. There is an R-particle shooter that agent S has access to, and it is nomologically necessary that it will shoot an R-particle into a basket when and only when S activates the shooter. Nevertheless, it is indeterminate that once the R-particle has been shot it lands on a particular side of the basket. The propositions below will show that rule β is invalid.

- A = No R-particle lands in the left half of the basket.
- C = No R-particle lands in the basket

While S has no choice that A , and S has no choice that $A \supset C$, nonetheless, it is not the case that S has no choice that C .

To modify rule β Huemer suggests the operator N_s . I will explain this in the next subsection.

3 Rule Beta Under the 'No Matter What' Interpretation

In response to the original 'having no choice' and the suggested 'the rendering false' interpretations for operator N which were unsuccessful, [Hue00] suggests that by using N_s and interpreting it as 'no matter what s does', we are strengthening the premises of the rule β and as a result, rule β becomes valid. Now according to his suggested 'no matter what' interpretation :

$N_s p$ = No matter what S does, p , where (No matter what S does, p) = (p , and for each action, A , that S can perform, if S were to perform A , it would still be the case that p)

To put it another way, for all actions A , for *all* the nearby worlds in which S preforms A , p continues to hold. As mentioned in [Hue00], this is stronger than having no choice to do p .

Here, the modified rules are:

- Rule α : From $\Box p$, we deduce $N_s p$
- Rule β : From $N_s p$ and $N_s(p \supset q)$, we deduce $N_s q$.
- Rule β^* : From $N_s p$ and $N_s q$, we deduce $N_s(p \ \& \ q)$.
- Rule α^* : From $N_s p$ and $(p \rightarrow q)$, we deduce $N_s q$ (\rightarrow means entailment).

Huemer claims that for the new operator N_s , rules α and β are equivalent to rules α^* and β^* .

3.1 The Counterexamples

In this section, I wish to show that new counterexamples can arise for rule α^* and β^* under this interpretation. I believe they arise in particular for the rule α^* , because whereas the possible actions of S can affect P , sometimes actions of S can have no effect on what is entailed by P . The counterexamples will arise when P and $P \rightarrow Q$ are true independent of actions of S , but Q depends on what S does. Consider the following counterexample: In the scenario that is suggested in [Hue00], let

- P : S cannot make some R-particle land in the right half of the basket at t_1 .
- $Q = P \vee T$: S cannot make some R-particle land in the right half of the basket at t_1 *or* S cannot make some R-particle land in the left half of the basket at t_1 .

Now, α^* will be:

$N_s P$ No matter what S does, S cannot make some R-particle land in the right half of the basket at t_1 .

$P \rightarrow Q$ S cannot make some R-particle land in the right half of the basket at t_1 entails that S cannot make some R-particle land in the right half of the basket at t_1 or S cannot make some R-particle land in the left half of the basket at t_1 .

$N_s Q$ No matter what S does, S cannot make some R-particle land in the right half of the basket at t_1 or S cannot make some R-particle land in the left half of the basket at t_1

In the above scenario, no actions in the nearby possible worlds can make P false, as which half of the basket the R-particle lands in, is indeterminate. In the best case scenario, S can make it 50 percent likely that some R-particle lands in one particular half of a basket by activating the device. The second premise only states that $P \rightarrow Q$ (P entails Q) which given that $Q = P \vee T$, it is true by the rules of sentential logic. However, we cannot accept the conclusion, as S has free will and has access to the shooter and one of the actions that S can perform at t_1 is activating the shooter. So an R-particle will land in one side of the basket and this will make Q false by rendering both disjuncts false by making sure that some R-particle enters the basket. To clarify, let $P = \neg A$ expressing that 'it is not the case that S can make an R-particle land in the right half of the basket', and $T = \neg B$ expressing that 'it is not the case that S can make an R-particle land in the left half of the basket'. Therefore, $Q = P \vee T = \neg A \vee \neg B = \neg(A \ \& \ B)$. Now, for the negated proposition $\neg(A \ \& \ B)$ to become false, $A \ \& \ B$ must be true. This amounts to the proposition ' S can make some R-particle land in the right half of the basket and S can make some R-particle land in the left half of the basket' which amounts to ' S can make some R-particle lands in the basket'. The later proposition is true just in case S activates the R-particle shooter. while S 's actions cannot affect P , it is clear that S can make Q false.

But, what happens to the proof that Huemer has given in the paper? If there are

counterexamples there must be a wrong step in the proof. Here is the short proof he has mentioned for the rule α^* :

assume that for every act A that S can perform, in all the nearby worlds in which S performs A , p holds. Assume also that in every possible world in which p holds, q holds. Then, obviously, for every act A that S can perform, in all the nearby worlds in which S performs A , q holds. [Hue00][539]

This proof becomes implausible, as in some of the nearby worlds that S performs A , while p holds, and p entails q ; action A make q false.

Similarly, it can be shown that rule β^* is not valid. Let P , and Q be:

- P : S cannot make some R-particle land in the right half of the basket at t_1 .
- Q : S cannot make some R-particle land in the left half of the basket at t_1 .

$N_s P$ No matter what S does, S cannot make some R-particle land in the right half of the basket at t_1 .

$N_s Q$ No matter what S does, S cannot make some R-particle land in the left half of the basket at t_1 .

$N_s(P \ \& \ Q)$ No matter what S does, S cannot make some R-particle land in the right half of the basket at t_1 and S cannot make some R-particle land in the left half of the basket at t_1 .

In the above counterexample, no actions of S in all the nearby possible worlds can make neither P , nor Q false, because the half of the basket the R-particle lands in, is indeterminate. Hence, $N_s P$ and $N_s Q$ are true. That said, S can in fact make the conjunction of the mentioned proposition $N_s(P \ \& \ Q)$ false by activating the shooter.

The conjunction is equivalent to S cannot make some R-particle land in the basket, which is false.

Again, while both p and q hold independent of actions of S , some action of S in some nearby world might affect the conjunction and render it false. I think the only fact that Huemer's proof for rule β^* shows is that $N_s p, N_s q$ entails $N_s p \ \& \ N_s q$.

Let's look at another intuitive counterexample for rule α^* . Imagine Sonia who was born with a neurological condition that makes her unable to raise her hands at the same time separately. If she tries to raise only one of her hands, her brain will fail to pass the command and nothing will happen. However, her brain is able to pass the command when she wills to raise both of her hands at the same time, and consequently she will be able to raise both hands at the same time. Additionally, for the sake of the thought experiment, let's suppose that no neurologist can cure her condition. Now the counterexample can be formulated as follow:

- P : Sonia cannot raise her right hand without help at t_1 .
- Q : Sonia cannot raise one of her hands at t_1 .

$N_s P$ No matter what Sonia does, Sonia cannot raise her right hand without help at t_1 .

$P \rightarrow Q$ 'Sonia cannot raise her right hand without help at t_1 ' entails that 'Sonia cannot raise one of her hands at t_1 '.

$N_s Q$ No matter what Sonia does, Sonia cannot raise one of her hands at t_1 .

Whereas $N_s P$ is obviously true, and P entails Q (it can be proved in predicate logic), Sonia can raise both her hands and make Q false.

4 Conclusion

We have seen that there are counterexamples to rules α^* and β^* . Since they are equivalent to β , rule β should also be invalid. This means that both versions of the consequence argument that Huemer suggests using the operator N_s along with these rules, will be rendered invalid. Unless one cannot find a flaw in my counterexamples or modify the interpretation of N in some other way, the consequence arguments which make use of N_s remain invalid.

References

- [Hue00] Michael Huemer. Van inwagen's consequence argument. *The Philosophical Review*, 109(4):525–544, 2000.
- [VI89] Peter Van Inwagen. When is the will free? *Philosophical Perspectives*, 3:399–422, 1989.