

On What We Can Ensure

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Abstract:

The *Conjunction Principle* says, roughly, that if the truth of a conjunction can be brought about, then the truth of each conjunct can be brought about. The current essay argues that this principle is not valid. After a clarification of the principle, it is shown how a proper understanding of the involved notions falsify the principle. As a corollary, a recent attack on van Inwagen's *Consequence Argument* will be rebutted, because it relies on the invalid conjunction principle.

Introduction

Suppose there is a conjunction whose truth can be brought about. Does it follow that the truth of each of its conjuncts can be brought about? I will call the affirmative answer to this question the *Conjunction Principle*. If we use 'Mp' to express, roughly, that it can be brought about that *p*, we may put the Conjunction Principle schematically as follows:

$$\mathbf{CP} \quad M(p \ \& \ q) \rightarrow M p.$$

Three remarks: (i) This formalization is adopted from Blum (2003); I will stick to it to allow for straightforward references to Blum's use of the principle. (ii) Although **CP** is strictly speaking only a *schema*, I will refer to it as a principle (if we allow for quantification into sentential position, **CP** can in fact directly be turned into a principle). (iii) A more natural rendering of the principle would be 'M(*p* & *q*) → Mp & Mq'. However, given the equivalence of 'M(*p* & *q*)' and 'M (*q* & *p*)', the two versions are equivalent as well.

The evaluation of the Conjunction Principle (in what follows: **CP**) is the main objective of this paper; while the principle looks plausible at first, I will argue that it is not universally valid. The truth or falsity of the principle is of some importance to a general understanding of abilities and their "logic", and the discussion of **CP** will yield a

clarification of some interrelated notions important to the philosophy of action in general. But the evaluation of the principle is also of some more specific interest to the free will debate, because Blum recently relied on the principle in an attack on van Inwagen's Consequence Argument.

The paper proceeds as follows: in section I, van Inwagen's Consequence Argument is briefly recapitulated and the impact of **CP** on the argument is explained. In section II, three different readings of the principle are distinguished and explicated in detail. In section III, an argument against the three versions of the principle is advanced. In the concluding section IV, some consequences of the discussion are indicated (in particular, Blum's argument against the Consequence Argument is rebutted).

I. The Consequence Argument and the Conjunction Principle

The Consequence Argument can roughly be put as follows:

If determinism is true, then together with the laws of nature, the state of the world at a remote past determines how an agent acts today. But no agent had any choice regarding such a state or the laws of nature. So, if determinism is true, no agent has any choice over her actions.

This line of reasoning was worked out in detail by van Inwagen, who presented three precise versions of it. For the third version, van Inwagen introduced the operator 'N', whose meaning is given by the following stipulation:¹

Df. N $Np \leftrightarrow_{\text{df.}} p$ and no one has, or ever had, any choice about whether p .

For the argument, van Inwagen relies on two principles:

Alpha $\Box p \models Np$,

Beta $Np, N(p \rightarrow q) \models Nq$.

Now let P_0 be a proposition describing the state of the world at a time before the first human being was born, let P be a proposition describing the state of the world at some arbitrary later time, and let L be the conjunction of all laws of nature. Let us moreover use the small letters ' p_0 ', ' p ' and ' l ' as placeholders for sentences expressing P_0 , P , and

¹ Van Inwagen (1983: 93).

L respectively. Now, if determinism is true, then P follows from the conjunction of L and P_0 ; thus we have:

1 (1) $\square ((l \ \& \ p_0) \rightarrow p)$ Assumption

Furthermore, it seems obvious that no one ever has or had a choice about whether the conjunction of L and P_0 is true:

2 (2) $N (l \ \& \ p_0)$ Assumption

Here we can in turn apply rules Alpha and Beta:

1 (3) $N ((l \ \& \ p_0) \rightarrow p)$ 1, Alpha

1,2 (4) $N p$ 2,3 Beta

Since P was arbitrarily chosen, the argument supposedly shows that no one has or ever had any choice about the truth of any proposition what so ever. But then, determinism is not compatible with freedom of the will (at least not in any sense of ‘freedom’ in which a free agent must have a choice about the truth of some propositions).

Whether the argument is sound depends – among other things – on the validity of rule Beta. Accordingly, Beta and its interplay with other structural principles involving the operator ‘N’ became the object of a long debate. One such principle is the Conjunction Principle. Blum accepts **CP** and hence rejects Beta, because he shows that the combination of Beta and **CP** implies fatalism which is a false doctrine. To understand the interplay between the **CP** and Beta notice first that ‘M’ is introduced as a complement to van Inwagen’s operator ‘N’ such that the following equivalence holds:²

M&N $Np \leftrightarrow (p \ \& \ \neg M \neg p)$.

While ‘N’ expresses some lack of power, ‘M’ accordingly expresses the possession of some power. Based on (M&N) and (Df. N), we can define ‘Mp’ as follows:

Df. M $Mp \leftrightarrow_{\text{df.}} \text{someone has (or had) a choice about whether } \neg p$.

Given the equivalence (M&N), we may reformulate rule Beta in terms of ‘M’:

Beta₁ $p \ \& \ \neg M \neg p, (p \rightarrow q) \ \& \ \neg M \neg (p \rightarrow q) \models Nq$.

² Cp. Blum (2003: 423).

Further transformation yields:³

$$\text{Beta}_2 \quad p, q, \neg M\neg p, \neg M(p \ \& \ \neg q) \models Nq.$$

Now take some necessary mathematical truth, such as

$$(5) \quad 2+2=4.$$

While this proposition is true, no human agent has or ever had *any* choice about it; no one could either ensure its truth or its falsity. Thus, we have:

$$(6) \quad \neg M\neg(2+2=4) \ \& \ \neg M(2+2=4).$$

In combination with the Conjunction Principle, the second conjunct allows for any instance of ‘*q*’ to infer that

$$(7) \quad \neg M(2+2=4 \ \& \ q).$$

If ‘*q*’ stands for an arbitrary true sentence, then together with (1)–(3) we have:

$$(8) \quad 2+2=4 \ \& \ q \ \& \ \neg M(2+2=4) \ \& \ \neg M(2+2=4 \ \& \ q).$$

But now we can directly apply rule Beta₂ and conclude that *Nq*. This is to say that given Beta and **CP** *any* truth is beyond the control of human agents, because taken together these two principles imply the universal validity of ‘*q*→*Nq*’. Since this is an unacceptable result, Blum rejects Beta.

Now Beta is beset with problems anyway (independently of **CP**);⁴ but Blum also argues that Widerker’s (1987) improved substitute of Beta, i.e.

$$\text{Beta}' \quad (Np \ \& \ \Box(p \rightarrow q)) \rightarrow Nq.$$

is not better off: together with **CP**, it equally entails fatalism.⁵ Since advocates of the Consequence Argument often resort to this replacement of the original rule Beta, Blum’s argument would still be unwelcome news to them.

³ For ‘ $\neg M\neg(p \rightarrow q)$ ’ is equivalent to ‘ $\neg M(p \ \& \ \neg q)$ ’, and ‘ $p \ \& \ (p \rightarrow q)$ ’ to ‘ $p \ \& \ q$ ’.

⁴ McKay & Johnson (1996: 115) showed for instance that together with van Inwagen’s principle Alpha, Beta implies that ‘*N*’ is agglomerative, which it is not. For an overview over the debate concerning rule Beta and its variants see Kapitan (2002).

⁵ Since the argument for this claim is more complicated than in the case of Beta and **CP**, I will not repeat it here; anyway, I do not dispute the validity of that argument, but rather deny **CP**.

Having seen how the validity of principle **CP** bears on the evaluation of the Consequence Argument, it is time to take a closer look at the principle (in the end of the paper, I will come back to the Consequence Argument).

II. Understanding the Conjunction Principle

a. Three Conjunction Principles

Before principle **CP** can be fruitfully discussed, it has to be clarified what exactly it amounts to. It will be seen that the principle allows for at least three different interpretations, resulting from different readings of the involved operator ‘M’; although the interpretations of **CP** are closely related, their differences matter in some cases of the evaluation of **CP** (as will turn out later).

First recall the definition of ‘Mp’ that was given in the last section:

Df. M $Mp \leftrightarrow_{\text{df.}} \text{someone has (or had) a choice about whether } \neg p.$

Following Finch and Warfield,⁶ one can further explain the talk of someone’s having a choice about a proposition in terms of her/his ability to ensure the falsity of that proposition:

Choice $x \text{ has a choice about whether } p \leftrightarrow x \text{ is able to ensure that } \neg p.$ ⁷

Then, one can reformulate the definition of ‘M’:

⁶ Finch & Warfield (1998: 516); Blum (op. cit. 424) accepts the core idea of this proposal.

⁷ Perhaps one could improve upon this suggestion in either of the following ways:

Choice* $x \text{ has a choice about whether } p \leftrightarrow (x \text{ can ensure that } p \ \& \ x \text{ can ensure that } \neg p).$

Choice** $x \text{ has a choice about whether } p \leftrightarrow (x \text{ can ensure that } p \vee x \text{ can ensure that } \neg p).$

These explications may seem to square better with van Inwagen’s phrase; the first captures the idea of an agent’s having a *complete* choice over some proposition p (to have this, she should be both able to ensure p and be able to ensure its negation). The second definition captures a form of limited choice over some proposition: if someone has it in his power to ensure either the truth *or* falsity of some proposition, she has some kind of choice about *whether* p (presumably, nobody can ensure that nobody ever eats 78 doughnuts in two days; but whoever has a strong enough stomach seems to have *some* choice about whether nobody ever eats 78 doughnuts in two days, for he can ensure that somebody does). For reasons of simplicity, however, I will in the main text stick to Finch & Warfield’s proposal.

Df. M^* $Mp \leftrightarrow_{df.}$ someone is (or was) ensure that p .

A great merit of Finch's and Warfield's proposal is that it illuminates the connection between the third version of van Inwagen's Consequence Argument (which is formulated in terms of 'N', i.e. in terms of someone's having a choice), and its first version (which is formulated in terms of 'the ability to render something false', a phrase interchangeable with 'the ability to ensure the falsity of something').

Given this understanding of 'M', the following reading of **CP** may come to mind:⁸

CP_{Personal} If someone can ensure that ($p \ \& \ q$), then s/he can ensure that p .

Actually though this is not an exact translation of **CP**; what **CP** really amounts to is only the following claim:

CP_{Personal*} If someone can ensure ($p \ \& \ q$), then *someone* can ensure p .

This latter principle is weaker than the former, at least logically: while the former entails the latter, the entailment in the other direction is not warranted by logic alone.

Interestingly, when Blum introduced the operator 'M' to formulate **CP**, he gave a different explication of it than the one developed above. In his words, ' Mp ' is meant to express that 'it is or was humanly possible to ensure the truth of p '.⁹ In a footnote, Blum gives an alternative explication that reads 'something could have been done to ensure that p '.¹⁰ If ' $\neg Mp$ ' is true, he writes, then 'nothing could have been done to ensure the truth of p , even if the human race as a whole was involved.'

From comparing the two quotations we can see that the notion of somebody's being able to ensure something is central to Blum's understanding of 'M' too; but still it differs from the above reading of 'M'. Blum is interested in the big picture; he is interested in what humanity *as a whole* could have brought about, not in what one single member of it could have done. The temporal modifications in the first explication suggest, moreover, that his interest is bound to the *actual world* and to what humanity, such as it actually has evolved, is or was able to bring about. Granting a grasp of the intuitive idea behind this notion for now, we will later see that it is not so easy to spell it out properly.

It is not quite clear to me, by the way, why Blum favours his explication over the one above. But anyway, the notion that Blum wants to express by 'M' is of interest for the

⁸ For sake of brevity, I henceforth use 'can' instead of 'is or (was) able to'.

⁹ Blum (2003: 423).

¹⁰ Blum (2003: fn. 1).

debate about free will, and thus we may also consider the third variant of the Conjunction Principle that is based on it:

CP _{Big Picture} If humanity can ensure that $(p \ \& \ q)$, then humanity can ensure that p .

How exactly these three readings are interconnected will be discussed in the following two sections. Having clarified their relations, I will argue that all three principles are false.

b. Ensuring, Implication, Explanation

All three variants of the Conjunction Principle presuppose an understanding of the phrase ‘ x can ensure that p ’, which belongs to a family of similar idioms suited to express the same idea, as for instance ‘ x can make it (come) true that p ’, ‘ x can bring it about that p ’, or ‘ x is able to render p true’. These phrases are not just technical terms. Ordinary speakers would usually have no problems understanding them. For philosophical purposes it would be useful, however, to have some explication of these phrases. Thus, several proposals have been made about how to understand the phrase ‘is able to render p false (true)’, typically based on modal notions (on strict or counterfactual conditionals).¹¹ As a representative example, we may take van Inwagen’s (1983: 68) preferred proposal:

x is able to render it false that $p \leftrightarrow$
 x is able to act somehow, such that necessarily: if x acts that way and the past does not differ from the actual past, then it is false that p .

This explication falls short of catching our intuitive grasp of the phrase.¹² It yields wrong results for several examples involving both necessary statements and contingent statements about the past. To wit, according to this explication, I am able to render it false that $2+2=5$. For I can raise my hand, and it is necessary that if I do it and the past does not differ from the actual past, then it is false that $2+2=5$. But it seems that neither my arm raising nor I myself have anything to do with the falsity of this proposition, and

¹¹ See, for instance, Fischer (1986: 256) and Lewis (1981: 297).

¹² Cp. Schnieder (2004: 415–17), from which the following points are borrowed. Schnieder (2006) points out structural similarities between the currently discussed notion and the notion of a truth-maker; thus it seems noteworthy that a principle similar to **CP** plays a role in the recent literature on truth-makers, namely: $\forall x (x \text{ makes it true that } (p \ \& \ q) \rightarrow x \text{ makes it true that } p)$. Rodriguez-Pereyra (2006) argues against this conjunction principle for truth-making.

thus I should not count as being able to bring it about.¹³ Or take some arbitrary falsity about the remote past, i.e. the false proposition that Napoleon was an English man. Necessarily, if I raise my arm and the past does not differ from the actual past, then it is false that Napoleon was an English man. But it seems that *I* cannot render this false.

Schnieder argued that other explications of ‘*x* can render it false that *p*’ which are based on modal notions have similar shortcomings. He proposed to base the explication on an *explanatory* notion instead:¹⁴ in a natural understanding of ‘ensure’, something that I do should *make* it so, should be the *reason* or *ground* for the truth that I ensure.¹⁵ In other words:

x can ensure that *p* ↔ *x* can act somehow such that if *x* did it, then *because of that* it would be the case that *p*.

I will adopt this analysis for what follows; it delivers the right results, both in basic cases and in the cases that are problematic for the purely modal explications: (i) If Ann can spill the milk all over the table, she can ensure that the table is wet; for if she spilled it, the table would be wet because she spilled it. (ii) It is true that $2+2=4$, but not because of anything that Ann does or even could do; so the analysis rightly renders Ann unable to ensure that $2+2=4$. (iii) Even if I raised my arm, Napoleon would not *because of that* be an English man, but rather for some other reason; since the same holds for everything I can do, I cannot ensure that Napoleon was an English man if we accept the proposal.

The analysis calls, by the way, for an objective account of explanation such that the truth of ‘because’-statements should be grounded in some objectively, i.e. mind-independently obtaining relations (these may, for instance, be causal relations, supervenience relations, and relations of conceptual analysis).¹⁶ While this is not the right occasion to go into much detail here, it should at least be noted that such an account is indeed compatible with the assumption that many pragmatic factors are relevant for our evaluation of explanations. Such factors may, for instance, be allowed to

¹³ Notice that both van Inwagen and Blum assume that we have no choice over necessary truths (Blum relies on this in his derivation of fatalism from Beta and CP, while van Inwagen commits himself to this view by stating rule Alpha).

¹⁴ Schnieder (2004: 418).

¹⁵ That phrases of the kind ‘*x* makes *y* such-and-such’ are explanatory has been noted early in the literature on the philosophy of explanation; see e.g. Scriven (1962: 173f.).

¹⁶ For a defence of such an account see for instance Kim (1987) and Correia (2005: ch. 3). Correia defines a notion of existential dependence in terms of an explanatory notion, pointing out shortcomings of modal approaches to dependence (op. cit. 42ff.) which parallel the described shortcomings of modal approaches to the notion of rendering something false.

contribute to what is *conveyed*, though not explicitly *said*, by the utterance of a ‘because’-statement.¹⁷ They may also be relevant for the evaluation of an explanation as *good* and *informative* (as opposed to *true*).¹⁸ Finally, an objective account of explanation may be supplemented with an account of ‘because’ as a *context-sensitive* expression (think of the following analogy: epistemological contextualists regard ‘know’ as a context-sensitive expression, which does not make them reject an objective account of knowledge).

With the explication given, we have a good basis for a discussion of the first two variants of the Conjunction Principle, i.e. $\mathbf{CP}_{\text{Personal}}$ and $\mathbf{CP}_{\text{Personal}^*}$. But we are still in need of an explication of the big picture reading of \mathbf{CP} which is formulated in terms of what humanity as a whole can ensure.

c. Ensuring: Lonely Deeds & Joint Ventures

So, how can we delineate what humanity, as a whole, could ensure from that about whose truth humanity has no choice? The following observation provides a good starting point: what humanity as a whole is able to bring about depends upon what powers its individual members possess. If there is a human agent who can ensure the truth of some proposition p , then humanity can ensure it. The same holds if there are two human agents who can ensure the truth of p with some collaborative effort, and it also holds if there is any larger group of human agents who can jointly ensure the truth of p . But if there is, on the other hand, no such group then it seems that it is not within humanity’s powers to ensure the truth of p . And thus, we may relate the powers of humanity to the powers of groups of human agents:

Df. Humanity’s Powers

It is humanly possible to ensure the truth of $p \leftrightarrow_{\text{df.}}$
either there is a human agent who can ensure the truth of p , or there are some human beings m_1 – m_n who are able to jointly ensure the truth of p .

Even if this explication might still be improved upon, it seems to be at least a fair approximation to the notion.¹⁹

¹⁷ Cp. Grice’s (1989) theory of conversational implicature.

¹⁸ Cp. for instance Lewis (1986: 226ff.).

¹⁹ Let me just briefly explain my reservations: consider the proposition that there is no last man on earth. Perhaps humanity could ensure the truth of this proposition by being always

But now we are left with another notion yet to be clarified, i.e. the notion of what some agents can *jointly* ensure, and it turns out to be a somewhat tricky question how exactly individual abilities contribute to joint abilities. One thing is clear: simply adding together the truths that can individually be brought about will result in but a subset of the truths that humanity can bring about. If Jean can lift the 50 kilograms stone, and Anne can lift the 60 kilograms stone, the two of them can not only lift the 50 and the 60 kg stone, but also (at least ideally) the 110 kg stone. Thus, what they can *jointly* do is not exhausted in what either of them can do on her own. However, jointly ensuring some truth should not strictly be modelled like jointly lifting a stone, because the deeds that contribute to the joint act of ensuring may well be performed at remote places and times. If we adopt an unrestricted summation principle for actions, we may say the following:

Df. Joint Ventures

x and y jointly ensure the truth of $p \leftrightarrow_{df}$
 x performs some action a , at some time t , & y performs some action a^* , at some time t^* , such that the sum of these performances ensures the truth of p .

But this only explains how a truth *is* jointly ensured, not yet what truths we jointly *can* ensure. Could we perhaps simply plug in a ‘can’ in the above definition and say that:

? Df. Joint Ability

x and y can jointly ensure that $p \leftrightarrow_{df}$
 x can perform some action a , and y can perform some action a^* , such that the joint performance of a and a^* would ensure that p ?

No! This definition suffers from two shortcomings:

Firstly, two agents x and y could well be capable of performing some actions a and a^* respectively, such that the joint performance of a and a^* would ensure that p , while x and y are nevertheless *unable* to ensure that p . The reason is that the exercise of x 's ability may have prevented y from making use of her ability (it may, in the extreme, have involved bringing about y 's death). To give an example: assume, Popeye can lift the 200 kilograms stone after he has eaten a good dose of spinach (but otherwise, he only manages 40 kilograms). And assume, the same holds for Brutus. Now imagine

peaceful and protecting the environment (perhaps it could not; but let us just assume it could). Then it would be only by the efforts of *infinitely* many human beings that humanity could ensure it, which would render the above account insufficient. However, such cases are somewhat esoteric and I regard it as legitimate to focus on more ordinary cases.

them together on an island where only one dose of spinach is available. Then Popeye can ensure that the 200 kilograms stone is lifted (he can consume the spinach and lift the stone), and Brutus can ensure that the 200 kilograms stone is lifted. But although these abilities would in normal circumstances give them the ability to jointly lift the 300 kilograms stone, here it does not – once one of them makes use of his ability, the other cannot any more, since he will be gone out of spinach.

Secondly, an agent may possess a power the exercise of which *bestows* another agent with a power that she has not possessed before. Take such a case, and assume x was able to bestow y with the power to ensure that p . Then it seems reasonable to say that humanity, as a whole, could have ensured that p , though this does not follow from the above definition which quantifies over agents and the powers they *actually* possess(ed). An example: imagine Popeye and Mr. Green are on a lonely island, gone out of spinach. However, Mr. Green knows how to grow spinach on that Island; together they then can ensure that some 200 kilograms stone is lifted, because Mr. Green can do something that will bestow Popeye with the power to lift the stone – even though he actually lacks the power.

The given definition then states neither sufficient nor necessary for the notion we are after. It has to be modified in two respects: (i) the performance of the relevant action a should not prevent action a^* from being performed, nor vice versa, and (ii) it should be granted the possibility that y does not yet possess the relevant ability, but only *acquires* it due to x 's conduct. The following definition takes care of both points:

Df. Joint Ability

x and y can jointly ensure that $p \leftrightarrow_{df}$

x is able to perform some action a , such that:

x performs $a \square \rightarrow (y$ could perform some action a^* , such that the joint performance of a and a^* would ensure the truth of p).

As it stands, this definition should still not be accepted, though. The reason is that the 'and' in ' x and y can jointly ϕ ' should certainly be symmetrical: if Jean and John can jointly lift a stone, then John and Jean can equally do it. But in the given definition, the order of the variables ' x ' and ' y ' matters to its evaluation; so it allows for the case that x and y can ensure that p , while y and x cannot – which is, of course absurd. Fortunately, the problem is easily remedied; we can secure that the order of the variables does not matter by adding 'or y is able to perform some action b , such that if y performed a , then x could perform some action b^* ' and 'or the joint performance of b and b^* ' in the

appropriate places. Since the repair is easy but the result is cumbersome, I will not write down the lengthier but corrected version of (Df. Joint Ability) here.

Now, for any natural number of people we can give a strictly analogous definition of what they are able to bring about. In fact, we can give a single definitional schema with a recursive clause that yields all these notions at once:

Df. More Joint Abilities

The human beings m_1 to m_n can ensure the truth of $p \leftrightarrow_{df}$

- (i) m_1 is able to perform some (possibly complex) action a_1 , such that,
- (ii) if m_1 – m_i had performed a_1 – a_i respectively, then m_{i+1} would have been able to perform some action a_{i+1} , such that
- (iii) the combined performance of a_1 by m_1 , ... , a_n by m_n would have ensured the truth of p .

(Note that the remarks about the order of the variables applies here too; a fully-fledged version of this principle would need a number of additional lines.)

This definition yields an explication of the big picture reading of ‘M’: humanity can ensure that p , iff a group of human agents can ensure it; the conditions under which the latter is the case are given by (Df. More Joint Abilities). We see, then, that the notion of humanity’s powers is rather complicated to spell out. In fact, it seems disputable whether the above definitions can give a proper conceptual analysis of the idea we grasped before, or whether it only lays down necessary and sufficient conditions for it that can serve as a kind of Carnapian *explication* of the notion.²⁰ But this need not be settled here.

III. The Failure of the Conjunction Principle

a. The Plausibility of CP

Let me turn to the evaluation of principle CP. The principle certainly seems attractive at first glance. Furthermore, Blum put forth some reasoning in its favour:²¹ a conjunction ‘ p & q ’ is equivalent to a negated disjunction ‘ $\neg(\neg p \vee \neg q)$ ’. Now, how should we understand ‘M $\neg(\neg p \vee \neg q)$ ’ if not as: it is ensurable that *neither* is it not the case that p ,

²⁰ Cp. Carnap (1956: 7f.) for his idea of an *explication*.

²¹ See Blum (2003: 425), right after principle (i).

nor is it not the case that *q*? But this, so Blum seems to suggest, is only the case if it is ensurable that *p*.

Is this reasoning convincing? To me, it sounds just as plausible as **CP** itself; but it cannot provide an independent argument for this principle: since the conjunction and the negated disjunction are equivalent, **CP** and ' $M \rightarrow (\neg p \vee \neg q) \rightarrow Mp$ ' stand and fall together; any argument that counts against one of these principles *eo ipso* counts against the other.

b. Partial Explanations and CP

And now for the argument against **CP**. In ordinary cases, 'because' allows for a *partitive* reading, such that it indicates only a *partial*, not a *complete* explanation. As a matter of fact, explanations of the last kind are hard to find. This is obvious in the case of causal explanations. Such an explanation cites a cause of something; *one* cause among many. Thus, we say that the match was lit because it was struck, thereby citing *a* cause of the lighting, while leaving many unmentioned: causes of the striking (at least many of them) will count as causes of the lighting just as much as some of its effects, as for instance the sudden increase in temperature of the match that was caused by the striking etc. And there may be further events, happening simultaneously with the striking, that contributed to the lighting, such as a mild blowing of the air that helped the match inflate. Nevertheless, our initial claim that the match was lit because it was struck is certainly correct. To say otherwise would be a violation of the linguistic rules that govern our use of 'because'. Therefore, it is in agreement with established usage that explanations expressed by the use of 'because' may be partial.

The same holds for explanations that are (partly or wholly) conceptual. I am an uncle because Tobias, my sister's son, exists. But at the same time, I am an uncle because Thorben, another son of my sister, exists; equally, I am an uncle because my sister gave birth to Tobias, thereby bringing him into existence. The existence of these correct explanations does not deprive the explanation first given ('because Tobias exists') of its truth. But this feature of the connector 'because', i.e. its compatibility with partial explanations, gives us a good reason to reject **CP**.

Counterexample 1. Imagine the following situation: apart from me, my parents have two other children, my sisters. Now, if my sisters are married, I am in a position to ensure that

DREAM Every child of my parents is married.

Imagine my parents gave voice to their dream that their children would all be married, and asked me to make their dream come true. They would certainly not accept it as an answer if I said: ‘I am sorry, but this is nothing that I can ensure. I can only ensure that I myself am married.’ They would rightly reject this as a lame, since incorrect, excuse. In the situation described, I am in the position to ensure the truth of DREAM. I had not, perhaps, been in this position until both of my sisters were married. But I was in this position afterwards, even if the truth of the proposition that all my parents’ children have married required more than my personal efforts. Now, just as I am in the situation to ensure the truth of DREAM, I am equally able to ensure the truth of

- (1) The daughters of my parents are married & the son of my parents is married.

I can ensure this truth by marrying. As before, I had not always been in a position to ensure it – to come into such a position, I first had to benefit from what my sisters have already achieved for the truth of (1).

That I can ensure the truth of (1) provides a counterexample to **CP** in one of its readings – namely **CP**_{Personal} – because I can ensure only one of the conjuncts of (1). We see what makes this case possible; ensuring a conjunctive truth is something that can be done successively and by divided labour. If I am able to ensure a conjunct of a conjunction whose other conjunct has already been made true, I am in the lucky position to finish the project and ensure the truth of the conjunction.

This particular example does not defeat **CP** in the big picture reading, nor does it defeat **CP** in the second reading, i.e. **CP**_{Personal*}. After all, *someone* once had a choice about whether the first conjunct of (1) be true, and *someone* once had a choice about whether the second conjunct of (1) be true – it is just not one and the same person that had these choices. One of my sisters had a choice about the first conjunct, and I had a choice about the second.

Counterexample 2. So, let me present a counterexample to **CP**_{Personal*} now. Some truths can be jointly ensured by two agents, although no single agent is ever in the position to ensure them. Take for instance, the truth of

- JUMP Laurel and Hardy are jumping up at *t*.

We may assume that Laurel could not ensure the truth of JUMP on his own, since he lacked the required influence upon Hardy, and we may further assume that Hardy

equally could not ensure the truth of JUMP. Nevertheless, they were able to jointly ensure the its truth.²² So, there are some propositions such that there is no agent who is ever in the position to ensure the truth of them, although there are sometimes groups of agents able to ensure it.²³ But now take the following proposition:

- (2) Laurel and Hardy are jumping up at t , and Laurel is kneeling at t^* ,

where t^* is a later time than t . If Laurel and Hardy jumped at t , they ensured the truth of the first conjunct of (2), thereby putting Laurel in a position to ensure the truth of the conjunction (he could do it by kneeling at t^* , which I just assume was in his power). So, $\text{CP}_{\text{Personal}^*}$ is wrong: since Laurel was able to ensure the truth of (2), *someone* was able to do it. But there is no agent who ever was able to ensure the truth of its first conjunct.

This example, however, does not count against the third reading of CP yet; since Laurel and Hardy were able to ensure the first conjunct of (2), it was within humanity's powers to ensure it. One may even urge that no examples of the kinds discussed could defeat CP in the big picture reading of 'M'. The basic idea of the examples is that some conjunction is *successively* made true by a couple of agents. If the principle is concerned with what humanity as a whole can bring about, the temporal dimension breaks away. That may be correct. However, there are other examples that count against *any* reading of CP .

Counterexample 3. After Tolkien had finished his first book, he was in a position to ensure the truth of

- (3) Tolkien wrote his second book & $2+2=4$.

Statement (3) is true, *because* Tolkien wrote his second book and $2+2=4$. But it is equally correct to say that statement (3) is true because Tolkien wrote his second book, full stop. We leave out part of the explanation here, but a part that may be dropped

²² This example differs crucially from the proposition that Laurel and Hardy are jumping at some time or another. By jumping first, Hardy makes Laurel able to ensure the truth of this proposition. But Hardy cannot in the same way make Laurel able to ensure that they are jumping *instantaneously* at t , for Hardy cannot do his part in ensuring the proposition *before* Laurel does his part.

²³ This presupposes, by the way, that there is no being which could exercise enough control on both Laurel and Hardy as to make them jump at t – at least an omnipotent being (God) might be able to do that. If God exists, the idea could still be made to work by modifying the example into 'Laurel and Hardy are jumping at t without being forced to do so by anyone'.

according to the standard usage of ‘because’. The part that is left out is a non-contingent, conceptual truth that nobody needed to do anything to establish it.

Compare the following: A statue in the museum is connected to an alarm system. The alarm is set off if there is an interval of ten seconds within which the statue is touched three times. Now assume Clouseau touches the statue first at 20:15:21, then touches it again at 20:15:22, and finally he does it again at 20:15:25. Then, the alarm is set off *because* Clouseau touched the statue at 20:15:21, at 20:15:22, and at 20:15:25. This explanation, albeit correct, is incomplete and defers to some conceptual, in particular arithmetical, facts; namely to the fact that the span between 20:15:21 and 20:15:25 is not longer than 10 seconds, and the fact that if someone touches something, and he repeats that twice, then he touches it thrice. (Presumably, there are even more facts that would contribute to the complete explanation.) Just as it is nevertheless correct to say that the alarm was set off because Clouseau touched the statue at ... etc., it is correct to say that because Tolkien wrote his second book, it is true that Tolkien wrote his second book and $2+2=4$.

Indeed, what we have here is, again, some kind of divided labour, comparable to the cases discussed above. My sisters had to do their parts to put me in a position to ensure the truth of (1); Laurel and Hardy had to do their parts to put Laurel in the position to ensure the truth of (2). In Tolkien’s case, the only *efforts* to ensure the truth of (3) lay with him; but what makes the two cases comparable is that there were other entities, together with their properties, involved in bringing about the truth of (1), (2), and (3): my sisters and their actions in the first case, Laurel and Hardy and their actions in the second, the numbers 2 and 4 and their arithmetical relationship in the third. Furthermore, in all three cases some conditions had to be established before the agents – me, Laurel, and Tolkien – had their respective powers. The difference is that we must interpret the ‘before’ differently in both cases: in the first two cases, the relevant conditions had to be established *temporally prior* to my being in the position to ensure the truth of (1) and (2) respectively. In the third case, the necessary conditions are not temporal and had not to be brought about *at a time before* Tolkien was in the position to ensure the truth of (3). They were atemporal conditions, whose holding had eternally been taken care of by the laws of arithmetic.

A final remark about the last example: one might agree that it counts against **CP** in all three readings but hold that it just is not very important. Could we not, *by fiat*, exclude cases involving necessary truths from the scope of the principle? My response is twofold: I tend to believe that the only counterexamples to **CP**_{Big Picture} are those involving necessary truths – although I cannot give a concise argument to this

conclusion (the same is certainly not true for the other two variants of **CP**). So, perhaps we could turn **CP**_{Big Picture} into a true principle by limiting its scope. It would still be an interesting result that it is not valid as it stands.

IV. Concluding Remarks

a. Taking stock

Let me summarize the main points of this paper: First, I distinguished three different readings of the Conjunction Principle. Second, I tried to clarify the involved notions of (i) an agent's being able to ensure the truth of some proposition, of (ii) humanity's being able to do so, and of (iii) some agents' being able to jointly ensure the truth of some proposition. Third, I argued that the Conjunction Principle fails in all three variants. My argument was based on the developed proposal about how to understand phrases such as 'to ensure that *p*' (namely as involving an explanatory notion), and on a semantic fact about the common use of 'because' (namely that it allows for *partial* explanations).

Admittedly, the semantic profile of the connector 'because' is in need of further investigation. What, for instance, are the principles (if there are any) that determine exactly what parts of a complete explanation may be omitted, such that the result is still a *correct*, though *incomplete*, explanation? This is an important question (and there will be others), but to answer them is an enterprise for other articles. For the present argument, it suffices to presuppose that 'because' allows for partial explanations *in some cases* (in particular, in the case described), without knowing exactly where to draw the line. Finally I shall hint at some consequences and applications of my position.

b. Morality

The discussion in this paper is relevant for the topic of shared or collective responsibility. Agents are apparently responsible for many of their actions as well as their omissions (e.g. not having stood up against some unjust decision). For the latter cases, it is not only relevant what the agent could have brought about on his own, but also what he could have contributed to some joint actions (even if *x* did not have the power to change some injustice on his own, this does not imply that any endeavours on his part would have been in vain; after all, he might still have *contributed* to a change). To evaluate such cases, we need a robust understanding of the idea of *joint abilities* which is advanced by the analyses developed above. Moreover, if the Conjunction

Principle – in its first reading, i.e. $\mathbf{CP}_{\text{Personal}}$ – were valid, it could be relied upon in certain excuses: let P be any proposition whose truth x was unable to ensure. Then someone might argue as follows:

- (1) An agent x can only be blamed for not having ensured the truth of a certain proposition, if x was able to ensure it.
- (C) So, x cannot be blamed for not having ensured the truth of any conjunction involving P as a conjunct, because $\mathbf{CP}_{\text{Personal}}$ implies that x was unable to ensure such a conjunction (because, by assumption, x could not ensure P).

This style of argument fails if $\mathbf{CP}_{\text{Personal}}$ is not valid. If the truth of P has already been taken care of and x was able to ensure the truth of Q , then x was able to ensure the truth of the conjunction of P and Q . If, for instance, I never make the dream of my mother come true, I can probably not be blamed; but this is because I have the right to decide whether I marry or not, and not because I lacked the power to make her dream come true. I possess that power, because I could have married (at least if there was a partner just waiting to marry me).

c. Consequences for the Consequence Argument

Let me finally return to Blum's criticism of the Consequence Argument, which went as follows:²⁴

- (1) \mathbf{CP} is true.
- (2) In combination with either rule Beta or Beta', \mathbf{CP} entails fatalism.
- (3) Fatalism is false.
- (C) Rule Beta and rule Beta' are incorrect.

Since I argued that \mathbf{CP} is a failure, Blum's argument loses its crucial premise and should be rejected.

But wait: I admitted there might be a valid variant of $\mathbf{CP}_{\text{Big Picture}}$, i.e. one we get by excluding conjunctions involving a necessarily true conjunct. So, why could Blum not rely on such a variant and still argue against the Consequence Argument? Answer:

²⁴ Notice in passing that there is a potential gap in Blum's argument, because he does not employ van Inwagen's reading of 'N', but rather what I called the Big Picture-reading. So, it would have to be seen whether Blum's argument really affects the original Consequence Argument or only a variant of it.

because his argument just requires an instance of **CP** that involves a necessary truth (a conjunction of a contingent and a necessary truth; see section I above).²⁵ If one limits the scope of his principle in the way indicated, it becomes worthless for his purposes.

But wait: Blum also argues that Widerker's Beta' itself implies **CP**. If it did, my arguments above, though counting against **CP**, would be no good news for the Consequence Argument. If Beta', a crucial premise of it, implied a falsehood, it would be a falsehood itself, and the argument relying on it would not be sound.

But does Beta' really imply **CP**? To show that it does, Blum first derives

(3) 'p' implies 'M¬p ∨ ¬M¬(p∨q)'.

from Beta'.²⁶ Now, according to Blum, (3) entails that:

(3*) M¬p ∨ ¬M¬(p∨q),

is a logical truth. But if (3*) is a logical truth, so is **CP**.²⁷ Hence, Beta' implies **CP**.

Blum does not say why (3) should entail that (3*) is logically true.²⁸ But anyway, the claim is provably wrong. Substitute any necessary falsehood for 'p', and substitute 'Ann is singing' for 'q'. While the resulting instance of (3) is true (a necessary falsehood implies anything whatsoever), the resulting instance of (3*) is false, because both its disjuncts are false: nobody can ensure that $-2+2=3$, whereas somebody (i.e. Ann) can ensure that $\neg(2+2=3 \vee \text{Ann is singing})$; she can do it by not singing. Thus, (3) is compatible with there being *false* instances of (3*), and therefore it cannot imply that the latter is logically true. So, Beta' may well imply (3), without implying **CP**.

I conclude that the rejection of **CP** in fact saves the Consequence Argument from Blum's threat. Whether it fails to be sound or not, Blum did not provide a good reason to think it does. And by subscribing to Beta', one is not committed to accept **CP** as well.

²⁵ See Blum (2003: 426 and 428, transition from 2. to 3.).

²⁶ Blum (2003: 425).

²⁷ Take this chain of equivalences: (i) $M\neg p \vee \neg M\neg(p\vee q)$; (ii) $M\neg(p\vee q) \rightarrow M\neg p$; (iii) $M(\neg p \& \neg q) \rightarrow M\neg p$. Now put '¬p' for 'p', eliminate the double negations, and you get **CP**.

²⁸ It may be helpful to see that there are analogous cases in which the analogous implication does not hold either: thus, for any instance of 'p' we have (i) 'p' implies 'p', and (ii) 'p' implies 'p ∨ q'. But (i) does not entail that any instance of 'p' is a logical truth, nor does (ii) entail that any instance of 'p ∨ q' is a logical truth.

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References

- Blum, Alex (2003): 'The Core of the Consequence Argument', *Dialectica* **57**, 423–29.
- Carnap, Rudolf (1956): *Meaning and Necessity* (2nd edition), University of Chicago Press.
- Correia, Fabrice (2005): *Existential Dependence and Cognate Notions*, München: Philosophia Verlag.
- Finch, A. & Warfield, T. A. (1998): 'The *Mind* Argument and Libertarianism', *Mind* **107**, 515–28.
- Fischer, J. M. (1986): 'Van Inwagen on Free Will', *Philosophical Quarterly* **36**, 252–60.
- Grice, H. P. (1989): *Studies in the Way of Words*, Harvard: Harvard UP.
- Kapitan, Tomis (2002): 'A Master Argument for Incompatibilism?', in: Kane, Robert (ed) (2002): *The Free Will Handbook*, Oxford: OUP, 127–57.
- Kim, Jaegwon (1987): 'Explanatory Realism, Causal Realism, and Causal Exclusion', *Midwest Studies in Philosophy* **12**, 225–39.
- Lewis, David (1981): 'Are we Free to Break the Laws?', *Theoria* **47**, 113–21. Reprinted in: Lewis, D. (1986): *Philosophical Papers II*, Oxford: OUP, 291–98.
- Lewis, David (1986): 'Causal Explanation', in: Lewis, D. (1986): *Philosophical Papers II*, Oxford: OUP, 214–40.
- McKay, T. & D. Johnson (1996): 'A Reconsideration of an Argument against Compatibilism', *Philosophical Topics* **24**, 113–22.
- Rodriguez-Pereyra, Gonzalo (2006): 'Truthmaking, Entailment, and the Conjunction Thesis', *Mind* **115**, 957–82.
- Schnieder, Benjamin S. (2004): 'Compatibilism and the Notion of Rendering Something False', *Philosophical Studies* **117**, 409–28.
- Schnieder, Benjamin S. (2006): 'Truth-making *without* Truth-makers', *Synthese* **152**, 21–47.
- Scriven, M. (1962): 'Explanations, Predictions, and Laws', in: Feigl, H. & Maxwell, G. (ed) (1962): *Minnesota Studies in the Philosophy of Science Vol.3*, Minneapolis: University of Minnesota Press, 170–230.
- Van Inwagen, Peter (1983): *An Essay on Free Will*, Oxford: Clarendon Press.
- Widerker, David (1987): 'On an Argument for Incompatibilism', *Analysis* **47**, 37–41.