# The Exploding 'Ought'1

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ABSTRACT: In this paper I wish to discuss so-called principles of inheritance and the familiar claim that it leads to deontic paradoxes. By combining two such paradoxes it will be shown that inheritance amounts to a principle of explosion: supposing that in the actual world there is at least one thing that one ought to do, almost anything is something one ought to do. I will then attempt to qualify the principle of inheritance so as to avoid this and other paradoxical results.

KEYWORDS: Broome – deontic paradoxes – inheritance – ought – paradox of the Good Samaritan – Ross's paradox – Wedgwood.

### 1. Introduction

There are eight sections of this paper. In this, the first section, I will set out the structure of the paper. In the second section I will lay out a number of inheritance principles and explain how and in what way they each support inheritance. In the third section I will lay out the axioms of deontic logic and show that if we use these as the semantics of 'ought' then

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inheritance turns out to be a fairly obvious consequence of the first two axioms. In the fourth section I will describe paradoxes that inheritance seems to generate, in particular one I christen a Principle of Explosion for oughts. This is the case against inheritance. In the fifth section I will discuss why inheritance is an attractive principle and why we should want to preserve it if we can. This is the case for inheritance. In the sixth section I will discuss, but reject, the possibility of explaining away these paradoxical results as being not as paradoxical as they initially seem. In the seventh section I will try to break the deadlock between the cases for and against inheritance by putting forward new principles for transmitting oughts from ends to means. The qualified inheritance supported by these principles should avoid the problematic paradoxes, though it will leave some problems unresolved. In the eighth section I will lay out my conclusions.

### 2. The principles

Below are a few examples that express roughly the same idea of inheritance:

Inheritance<sub>C</sub>: p semantically entails  $q \Rightarrow$  "It ought to be the case that p" semantically entails "It ought to be the case that q" (cf. Cariani 2009, 1).

Inheritance<sub>W</sub>: If one ought to E, and it is necessary that (one E's  $\supset$  one M's), then one ought to M (cf. Setiya – Way n.d., 27).

Inheritance<sub>S</sub>: If X objectively ought to do A, and to do A X must do B, it follows that X objectively ought to do B (cf. Schroeder 2009, 234).

These are largely the same; however, there may be differences hidden in the modal terms used.

By "to do A X *must* do B" Schroeder (2009, 234) seems to mean nomic necessity or something similar, for he talks of the relation of B to A as a relation of means to ends. While accepting the possibility of alternatives, Setiya – Way (n.d., 3) are much more explicit about what they mean by "necessity" in "it is necessary that (one E's  $\supset$  one M's)", favouring an epistemic construal where P is epistemically necessary if and only if P is true at all candidates for the actual world not ruled out by the relevant body of information. Clearly, this rules *in* all the logical consequences of the relevant body of information. Lastly, "p semantically entails q" says that there is no model in which p is true and q is false.

All three principles have the result that inheritance is closed under entailment, though they differ in what those entailments can be from. Inheritance $_{\rm C}$  seems the most modest, for only the entailments of p alone inherit from p that it ought to be done. Inheritance $_{\rm W}$  seems the least modest, for all the entailments of the relevant body of knowledge will qualify as epistemically necessary. Schroeder is less forthcoming, but we might suppose that he means whatever can be entailed from the initial conditions of the actual world and its causal laws; then, inheritance $_{\rm S}$  is closed under entailment in the same way and degree that deductive-nomological explanation is closed under entailment.

Similar in spirit is:

Inheritance<sub>B</sub>: ((S requires of N that p) &  $(p \in q)$  is logically valid)  $\in$  (S requires of N that q) (Broome 2007, 19).

S is here the source of the requirement and N the agent. This principle says that requirements that a source may generate are likewise closed under entailment, since if  $(p \in q)$  is logically valid then this means that p entails q. This shares inheritance<sub>C</sub>'s modesty, entailment being from p alone rather than from p conjoined with other true propositions (a relevant body of information).

### 3. The axioms

Inheritance is often supported by appeal to the semantics of 'ought,' or at least to the semantics of the *deliberative* 'ought.' Wedgwood (2006, 137) puts it like this:

[T]he semantic value of the practical or deliberative 'ought' is determined by the role it essentially plays ... in *practical reasoning* or *deliberation* ... given by the following rule: Acceptance of the first-person statement ' $O_{(me,t)}(p)$ ' ... commits one to making p part of one's plan about what to do at t.

To commit to making p part of one's plan is for one's plan to be a proposition that logically entails p. If this is a biconditional (as it seems to be), it follows pretty quickly that any q within the deductive closure of the plan is a proposition for which ' $O_{\langle me,t\rangle}(q)$ ' is true, that is to say, it is something I ought to do at t, and given that p is in the deductive closure of the plan

any q logically entailed by p will eo ipso be likewise within the deductive closure of the plan. Thus,  $(O_{\langle me,t\rangle}(p))$  and  $(p \in q)$  is logically valid  $\in O_{\langle me,t\rangle}(q)$  turns out to be to be a materially valid inference; to deny the consequent while accepting the antecedent is simply to misunderstand what the deliberative 'ought' means.

Wedgwood (2006, 144-148) spells out these consequences, which turn out to be the axioms of von Wright's original deontic logic. These are:

- 1) If p and q are logical equivalents,  $O_{\langle me,t\rangle}(p)$  and  $O_{\langle me,t\rangle}(q)$  are logical equivalents.
- 2) If  $O_{(me,t)}(p \land q)$  then  $O_{(me,t)}(p)$  and  $O_{(me,t)}(q)$ .
- 3) If  $O_{(me,t)}(p)$  and  $O_{(me,t)}(q)$  then  $O_{(me,t)}(p \land q)$ .
- 4) If p is logically false, then  $O_{(me,t)}(p)$  is logically false.
- 5) If *p* is logically true, then  $O_{(me,t)}(p)$  is logically true.

Although he does not formulate an inheritance principle explicitly, it is easy to see that it follows from the principles above. If  $(p \in q)$  is logically valid then p and  $(p \land q)$  are logical equivalents, so if  $O_{\langle me,t\rangle}(p)$  is true then from (1) above  $O_{\langle me,t\rangle}(p \land q)$  must also be true, and from (2) above  $O_{\langle me,t\rangle}(q)$  will be true. To deny inheritance, then, is to deny that one of these first two principles is true.

## 4. The paradoxes: the case against inheritance

However, these intuitive principles of inheritance are often held up to be false because of certain counter-examples. These are the deontic paradoxes.

Broome denies that inheritance<sub>B</sub> is true because of Ross's paradox. This makes use of the fact that any proposition entails the disjunction of itself and any other proposition, true or false. In short, the rule of V-introduction guarantees that whenever p is entailed so also is  $p \vee q$  for any q. Therefore, if  $O_{\langle me,t\rangle}(I \text{ post the letter})$  then  $O_{\langle me,t\rangle}(I \text{ post the letter or burn it})$ . But then I can do something I ought to do by burning the letter, despite the fact that by burning it I cannot post it. This is deeply counter-intuitive (cf. Broome 2007, 20).

Does Broome reject (1) or (2) above? In using a possible-worlds semantics for requirements it seems that he is committed to the same axioms that Wedgwood is committed to, since any possible world in which I post

the letter is a world in which I post the letter or burn it; possible-worlds semantics seem to support automatically the deductive closure of requirements. Broome denies this by making a distinction between the property and a code.

Suppose that the requirement is a rational requirement; then, rationality is its source and being rational is the property. The things that rationality requires are the code and by complying with the code the agent instantiates the property, i.e., he is being rational to the extent that he complies with what rationality requires of him. There may be other properties that the agent, in having the property (e.g., being rational) must necessarily have (e.g., being alive) and propositions that must necessarily be true (e.g., I post the letter or burn it) but these are not part of the code. "Not all propositions that are necessary conditions for having the property need be in the code," says Broome (2007, 15), indicating that (1) above is an axiom only for the property and not the code; logical equivalents and implicata are not substitutable *salve veritate* into the context of a deontic operator when these are being used to express codes.

If so, why is Ross's paradox still a problem? In the property sense it is true, Broome seems to say; the world in which I post the letter is the same world in which I post the letter or burn it, and by occupying this world I am doing what I ought to do or what I am required to do. Something like this seems to be Wedgwood's position also when he says that if we bear in mind its truth-functional meaning, this is not counter-intuitive at all, explaining away the fact that it seems counter-intuitive on the Gricean grounds that it is less informative than what we should say, viz., "I ought to post the letter" (cf. Wedgwood 2006, 149-150). Wedgwood freely admits that this amounts to a kind of *principle of explosion* for oughts:

First Principle of Explosion for Ought: "If there is anything that you ought to do, then whatever you do, you do something that you ought to do" (Wedgwood 2006, 150, ff. 23). In symbols,  $O_{\langle me,t\rangle}(p) \in \mathbb{N}$  instantiates the property of doing as he or she ought by making q true for any (or any compossible) q.

In other words, since  $O_{\langle me,t\rangle}$  ("I post the letter") is true, I can do something I ought by doing something else, whether it is burning the letter or something quite irrelevant like scratching my finger. Note that it does not follow that  $O_{\langle me,t\rangle}$  ("I burn the letter") or  $O_{\langle me,t\rangle}$  ("I scratch my finger"), but it does follow that by doing these things I would instantiate the same deontic

properties and obey the same deontic axioms as I would if I posted the letter. Wedgwood sticks to his guns that this is not as counter-intuitive as it first appears – there are lots of things that you ought to do, and the problem is only with doing all of them.

Why, then, does Broome reject inheritance<sub>B</sub>? Simply because it would be strange if the source issued a requirement that could be satisfied in principle by satisfying any other arbitrary proposition, or any proposition that is true in a possible world or even all the possible worlds in which the required proposition is true. It remains counter-intuitive that this can be even slightly rational, that I am satisfying a genuine requirement or doing something that I ought to do when I do this.

It is also counter-intuitive that this can be because of some completely unrelated 'ought.' As the First Principle of Explosion implies, it doesn't actually matter what the derived ought is derived from; as long as there is something that you ought to do, then there are all sorts of things that you ought to do, or all sorts of things by doing which one is to count as rational. The only requirement seems to be that there is some possible world in which they are all true.

Here is another paradox. For any true q, p implies  $p \land q$  and  $p \land q$  implies q. This gives us:

Second Principle of Explosion for Ought: If there is anything that you ought to do, then any true proposition whatever is something that ought to be made true. In symbols,  $O_{(me,t)}(p) \in [q \supset O_{(me,t)}(q)]$ .

Now, perhaps we might accept the result (as axiom 5 above indicates) that if q is necessarily true then  $O_{\langle me,t\rangle}(q)$  is true, but surely it is unacceptable for  $O_{\langle me,t\rangle}(q)$  to be true whenever q and  $O_{\langle me,t\rangle}(p)$  just happen to be true in the same world. Once again we can derive this result from the first two axioms of deontic logic: if q is true, then p and  $(p \land q)$  are logical equivalents, so if  $O_{\langle me,t\rangle}(p)$  is true then from axiom 1 above  $O_{\langle me,t\rangle}(p \land q)$  must also be true, and from axiom 2 above  $O_{\langle me,t\rangle}(q)$  will be true.

Together with the First Principle of Explosion, this second principle implies:

Combined Principle of Explosion: Provided there is some p for which  $O_{\langle me,t\rangle}(p)$  is true, any q that is true or is made true by acting is something that I ought to do because it is a way of satisfying  $O_{\langle me,t\rangle}(p \vee q)$  (by the first principle) and because it satisfies  $O_{\langle me,t\rangle}(q)$  which (by the second principle) must also be true.

I don't think that an attempt to explain away this result on pragmatic grounds works; it cannot be true, yet it is the direct result of the fact that inheritance is closed under entailment.

### 5. Derived requirements: the case for inheritance

Perhaps failure to be closed under entailment might be considered no great loss, but it has been noted (Wedgwood 2006; Cariani 2009; Broome 2007) that inheritance has some highly intuitive consequences. One of these is the ease with which one can appeal to inheritance to explain why one fails to do what one ought although one does not initially seem to violate a specific requirement. For instance, although there is no specific 'ought' prohibiting driving at double the speed limit, this is something that one ought not to do because one ought not to drive above the speed limit, and driving above the speed limit is necessary to drive at double the speed limit. Or in an example from Goble discussed at Broome (2007, 21-22), it is because one ought not to camp on public streets at all that one ought not to camp there on Thursday night. Inheritance guarantees this simply on the basis of deductive (arguably material) validity; there are specific oughts for these things because these subsist in the more inclusive ought. Broome responds that no such explanation is needed – when one camps on Thursday night one violates the code that requires one not to camp at all; we do not need the code to provide a new requirement for the specific case, the general requirement will suffice. The temptation to think otherwise is due to conflating the code sense with the property sense once more.

This contrasts with Cariani's view that the semantics of 'ought' should be such that, for instance, I would be correct to assert "I ought to drive at less than double the speed limit," and this because I would be correct to assert "I ought to drive at less than (or at) the speed limit." On the view that 'ought' is a propositional operator these are correct things to assert because O("I drive at less than the speed limit") is true and, because of inheritance<sub>C</sub>, it follows from this that O("I drive at less than double the speed limit") is true. Although Cariani rejects the view that 'ought' is a propositional operator he takes it as a constraint on his semantics that it should support the correctness of these assertions (see Cariani 2009, 15). Broome's view translated into the language of 'ought' seems to say that we are not strictly speaking correct to assert that I ought to drive at less than double the

speed limit; we are saying something strictly false, because there is no 'ought' whose embedded proposition is "I drive at less than double the speed limit," or in other words, O("I drive at less than double the speed limit"), read now as "S requires of N that N drive at less than double the speed limit" is false.

True, Broome might want to say that it is truly the case that I ought to drive at less than double the speed limit and that what I should not strictly say is that I am required by the source of the requirement S to do this. But after appealing to linguistic data to support his claim that the source sense is the one we typically use - that we do not say, for instance, that morality requires us to be alive despite the fact that being alive is necessary for behaving morally (cf. Broome 2007, 15-16) – it seems fair to wonder whether Broome can afford to be so sanguine about the prospects of explaining it away on the grounds of confusion between the source sense and the property sense; it is not obvious that the oddness of saying "There is no requirement to drive at less than double the speed limit, but there is a requirement to drive at less than the speed limit," or "There is no requirement to drive at less than double the speed limit, but there is a requirement not to drive over the speed limit" is dispelled even restricting ourselves to the source sense. In fact, it is not obvious from what Broome says that there is any requirement not to drive over the speed limit, for he could give an analogous explanation of this as for camping on a Thursday. This amounts, as I have said already, to rejecting axiom (1) as applying to codes. But we can easily explain why there are such requirements by accepting inheritance<sub>B</sub>, the requirements not to drive over the speed limit and to drive at less than double the speed limit following automatically from a requirement to drive at the speed limit or under.

So, at least some entailments seem to be a good thing. One disanalogy between 'good' inheritance and 'bad' inheritance, it might be thought, is that in the cases of 'good' inheritance the inheritance was from a genus to a species or from a more specific 'ought' to a less specific 'ought'; in other words, there was an intensional logical connection as well as an extensional logical connection. There is no such intensional connection between p and  $p \lor q$  for arbitrary q or between p and  $p \land q$  for true arbitrary q. This suggests one plausible way of qualifying inheritance. For instance, you could stipulate that inheritance is not closed under deductive entailment but under what Chisholm (1981) calls *conceptual entailment*: if a thinker cannot have P as the content of a belief without having Q as the content of the be-

lief, then P conceptually entails Q. Conceptual entailment differs from deductive entailment in the following ways: 1) P does not conceptually entail a conjunction of itself and a necessary truth R, e.g., P does not conceptually entail P & 2 + 2 = 4, and; 2) P does not conceptually entail P OR Q.<sup>2</sup> When P conceptually entails Q and Q conceptually entails P, P is conceptually identical to Q. This rules out successively, and quite neatly, the first and second principles of explosion above, and rules in what we want to rule in, for I cannot have as the content of a belief that I drive under 65 m.p.h. without having as the content of a belief that I drive under 100 m.p.h.

Relating this back to the axioms of deontic logic, we can modify axiom (1) to (1\*): "If p and q are conceptually identical, then  $O_{\langle me,t\rangle}(p)$  and  $O_{\langle me,t\rangle}(q)$  are conceptually identical (or, perhaps, logically equivalent)." Note that this is no longer a possible-worlds semantics – which is extensional – but a much finer-grained semantics based on intensions. Now, if P conceptually entails Q then P conceptually entails P & Q and, trivially, P & Q conceptually entails P. Thus, if P conceptually entails Q then P is conceptually identical to P & Q. Then, by our new axiom (1\*),  $O_{\langle me,t\rangle}(P)$  and  $O_{\langle me,t\rangle}(P)$  & Q) are conceptually identical. Next, by an analogous version of (2) I will call (2\*), it follows from  $O_{\langle me,t\rangle}(P)$  & Q) that  $O_{\langle me,t\rangle}(P)$  and  $O_{\langle me,t\rangle}(Q)$ . So, we can derive a version of inheritance on the basis of conceptual entailment in an analogous way as before.

However, an inheritance principle so defined is both too strong and too weak. It is too weak because it does not handle the deontic paradox of the Good Samaritan. If it is the case that I ought to help those in need, then it is logically necessary that there be someone in need, yet clearly one ought not to act so that somebody is in need in order to help them afterwards. Conceptual entailment does not seem to help here, because I cannot have as the content of a belief that I help someone without having as the content of a belief that there is someone to help. I am not introducing any new, arbitrary propositions here.

It is too strong because it rules out ordinary means-ends relationships. Suppose that I ought to review a paper, and in order to do so it is necessary that I accept the commission to review the paper. Intuitively, I ought to accept the commission, and inheritances explains why I ought to do this –

<sup>&</sup>lt;sup>2</sup> P and Q are actually properties, rather than propositions. For Chisholm, when we believe something we attribute a property to ourselves rather than have an attitude towards a proposition. However, I will speak as if they were propositions.

the means inherits from the end for which it is a means the force (or a part thereof) of the 'ought'-claim. There is generally no logical connection between the end and the means, still less an intensional connection, although there is a necessary connection.

### 6. The bullets

We could save our new principle of inheritance if we could "bite the bullet" for these two problems. In this section I will discuss the possibility of doing precisely this, and note that this has been done in the philosophical literature.

Beginning with the Paradox of the Good Samaritan, the paradox is dissolved as long as we index the 'ought' operator to time, Wedgwood (2006, 150) says, it being the case after the one to be helped is in this situation that one ought to help him, but not before. This makes sense of our intuitions that it is not the case that the person ought to be in this situation, and even that he ought not to be in this situation, and yet, *given* this situation, helping him is what we ought to do. Properly indexed to time we do not get any conflict between the 'ought'-claims O("I help X") and O("X needs my help").

Cariani seems to be referring to much the same thing when discussing 'secondary obligations.' Suppose that Mary ought to turn in her paper by Friday. Then, at all the deontically best worlds available before Friday, Mary has turned in her paper. Saturday comes and Mary has not turned in her paper. Should Mary be punished for not handing in her paper on Friday? In none of the deontically best worlds is Mary punished, for in those worlds Mary handed in her paper. The solution, Cariani (2009, 10) says, is to update the possible worlds on Friday when Mary misses her deadline. Before Friday, Mary ought to turn in her paper by Friday, but after it is too late to hand in her paper and hence the worlds in which she does so are no longer accessible, Mary ought to be punished, without it being the case that Mary ought to have done whatever puts her in this situation. So, O(Mary, Friday) ("Mary hands in her paper by Friday") is true but O(Mary, Saturday) ("Mary hands in her paper by Friday") is false, whereas O<sub>(Mary, Friday)</sub> ("Mary is punished on Saturday") is false but O(Mary, Saturday) ("Mary is punished on Saturday") is true. Similarly, at the time that the person comes to be in need, there comes also the obligation to help. Worlds where the person

does not need help or where Mary has passed in her paper are no longer available; the modal claims can only be assessed against this updated background.

This seems to suggest optimism for biting the bullet. However, I am unconvinced. This still seems to amount to a rejection of inheritance<sub>C</sub>; for the proposition "Mary ought to be punished for not handing her paper in by Friday" entails that "Mary did not hand her paper in by Friday", so if O("Mary is punished for not handing her paper in by Friday") then, by inheritance<sub>C</sub>, O("Mary did not hand her paper in by Friday"), which implies that Mary ought to have done something for which she ought to be punished, that is to say, something she ought not to have done. Clearly, it cannot be the case that Mary ought to have done something that she ought not to have done. Similarly, I still do not find it obvious why the possibleworlds semantics (or even a more fine-grained semantics) does not license O("X needs my help") for the same indices as O("I help X"), and it seems to me that Wedgwood has answered a different question to the one asked. Granted that without backwards-causation or time-travel there is nothing I can actually do to bring about the situation that X finds himself in, but if I could then surely what I ought to do is not put X into that situation but, on the contrary, to make it so that X is not in that situation, and it seems not unreasonable to expect this to be grounded in the semantics.

Furthermore, even if we accept that it is *not* the case that Mary or X *ought* to be in the situation they are in, what it seems that we want to be able to say is that they *ought not* to be in that situation. That is to say, even if we deny that inheritance has the consequence that O("X needs my help") for the current time it does not itself have the consequence that O("X does not need my help"), either for the current time or earlier, when I may have been able to do something about it. Yet surely if it is true that I ought to help you it must be the case that you are in a situation that you ought not to be in and that I ought to stop you being in were it possible.

Perhaps it might be argued that it is not the semantics of the 'ought'-operator that should license the inference from an 'ought'-claim that is true at some later time to an 'ought'-claim that was true earlier, but it seems strange that inheritance should appear to give precisely the wrong answer. On the contrary, it seems to me that what makes the 'ought'-claim that I should help X true at t is the fact that it inherits from a true 'ought'-claim prior to t that I ought not permit X to be in the situation that I later ought to help him out of. The fact that I was not at that time in a position

to stop X from getting into that situation, and that I am not at the current time in a position to have stopped X from getting into that situation, are contingent features of the situation and not a matter of logic. I would say also that this is something that I ought to do at t even before t. Given that she does not hand in her paper on Friday, it is equally as true before Friday as after that I ought to punish her on Saturday. Time enters into the content of our obligations but not their structure; it is not, I dare to say, an index. The updating mechanism implies instead that one's obligations come into and out of existence.

So, I don't think the Paradox of the Good Samaritan is so easily disposed of.

What about inheritance from means to ends? We noted that the new inheritance principle did not license O(M) on the grounds of O(E) when M is the means to E, yet inheritance W and inheritance certainly did. Are they right to do so?

It might be thought that the force of the 'ought'-claim should not be transmitted from ends to means after all. Suppose that, even if I accept the commission to write the review, I am so disorganized that I am actually unlikely to write the review.<sup>3</sup> It may then be the case that I ought not to

This example is based on the following example of Setiya – Way (n.d., 9): "Professor Procrastinate ... and Professor Dispatch have equally strong reason to review a book. A necessary means to this is accepting the commission to review it. There are no sidebenefits to accepting; the only reason to accept ... transmits from the reason to review. Dispatch is extremely likely to write the review, if he accepts. Procrastinate is extremely likely not to write the review, if he accepts. ... Dispatch and Procrastinate have the same reason to accept: namely, as much reason as they have to write the review. But surely Dispatch has more reason to accept than Procrastinate has. We would unhesitatingly advise Dispatch to accept, while being very reluctant to advise Procrastinate to do the same."

This is couched in the language of reasons; Setiya and Way would claim that Professor Procrastinate has reason to write the review (unless, possibly, he knows that there is no chance at all of his writing the review, in which case it is questionable whether this is something he ought to do in the first place) but less reason to accept the commission. They are doubtful whether it is possible to say that there is an all-things-considered reason to write the review but that it is not what one ought to do. Thus, this might be a case where Professor Procrastinate ought to achieve the end (write the review) and cannot do so without taking the necessary means (accepting the commission) but ought not to take the means, since by doing so he would be making it less likely that the review will get written than if he left it to Professor Dispatch. This

accept the commission, for by doing so I may knowingly be probably putting myself into a less deontically good world – a world in which the paper is not reviewed – than I would if I did not accept the commission and left it for someone else to review. It is because of situations like this that Setiya – Way (n.d.) reject inheritance $_{\rm W}$  altogether. The new principle of inheritance may then be considered to be giving the right result.

The example here seems to me under-described. The fundamental 'ought'-claim involved (that often seems to be left out of the presentation) seems to be O("Someone reviews the paper"). If I am the only one who can review this paper, then it is necessary for the truth of "Someone reviews the paper" that I review the paper. Thus, inheritance should license O("I review the paper"). Next, it is necessary for the truth of "I review the paper" that "I accept the commission to review the paper", so inheritance should license O("I accept the commission to review the paper"). Inheritancew and inheritances do license these 'ought'-claims, giving us:

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O("Someone reviews the paper")

U("I review the paper")

U("I accept the commission to review the paper")
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where  $\downarrow$  is inheritance on the grounds of (extra-logically) necessary relations between the propositional contents of the 'oughts'. The new principle of inheritance does not license either, although it does license O("Someone reviews the paper") on the grounds of its being *conceptually entailed* by O("I review the paper") – the converse of the inheritance above.

Now, if I am not the only one who can review the paper then "I review the paper" is not necessary for "Someone reviews the paper" so inheritance does not license O("I review the paper"). To get O("I review the paper") we must appeal instead to a principle based on sufficiency:

Means-Ends Transmission Principle: If you have a reason to do A and doing B is a sufficient means to doing A, you have a reason to do B (cf. Way 2010, 224).

seems to be Setiya and Way's intuition: accepting the commission does not inherit from writing the review that it is something that ought to be done for someone in Professor Procrastinate's situation. For this reason, Setiya – Way (n.d., 17) deny that inheritancew is true.

Since my reviewing the paper is a sufficient means for making it such that someone reviews the paper, this principle means that I have a reason to review the paper. If we admit that at least sometimes (possibly when it is undefeated) this reason amounts to an 'ought'-claim, then I ought to review the paper, and inheritance guarantees the rest, giving us:

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O("Someone reviews the paper")
↓
O("I review the paper")
↓
O("I accept the commission to review the paper")
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where \$\preceq\$ amounts to transmission on the grounds of (extra-logically) sufficient relations between the propositional contents of the 'oughts'.

In both versions, it seems that I ought to accept the commission. To describe the case where it might seem that I ought not to accept the commission in line with Setiya and Way's intuitions we need to include the other agent explicitly, giving us:

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O("Someone reviews the paper")

U("I review the paper")

O("You review the paper")

O("I accept the commission")

O("You accept the commission")
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This shows (by the double strikethrough) that O("I accept the commission") does not inherit any force from O("I review the paper"), the reason being that you are more likely to review the paper than I am and we cannot both of us review the paper and accept the commission, so that if I accept the commission I make it less likely that you will and consequently less likely that someone reviews the paper.

Note that this could be taken as a counter-example to the Means-Ends Transmission Principle as applied to 'oughts,' rather than inheritance, or perhaps not so much a counter-example as a case where the reason, being defeated, falls short of being one I ought to act on. The only thing that I ought to do is act in such a way that some sufficient means for the end is taken. So, what follows from O("Someone reviews the paper") is O("I review the paper or you review the paper or ...") for the disjunction of sufficient but non-necessary means. Now, it may seem odd that I ought that you do something, but there clearly are acts of omission that I can 'per-

form,' – e.g., not accepting the commission – to help make it such that you review the paper. This is so for any acts by doing which would make it impossible for you to do them or less likely that you do them, as it seems we are meant to assume in this example. To put the matter slightly differently, it could be said that reviewing the paper is something that we ought to do, although my contribution is entirely a matter of my not doing things. This is because it is not my writing the review that the deontically best world requires but only that the review be written. This is to reject Setiya and Way's intuition that I ought to review the paper, it then being no surprise that it is not the case that I ought to accept the commission. In fact, since I ought that you accept the commission, and we cannot both accept the commission, I ought not to accept the commission – a stronger result than it not being the case that I ought to accept the commission.

Perhaps some of the 'ought'-facts in the deontically best worlds are agent-relative – it is not enough that some state is achieved or some act is performed by someone, but that a particular agent perform that particular act. That is to say, we might drop the assumption that the fundamental 'ought'-claim is O("Someone reviews the paper") or O("The paper is reviewed") but is O("I review the paper") or O("The paper is reviewed by N"). Is it then still possible to claim, when I am very unlikely to write the review, that I ought not to accept the commission? I don't think so. My accepting the commission is necessary for my writing the review, and although you may be more likely to write the review, it is not the writing of the review but my writing of the review that is at issue, that is in the deontically best world. Setiya and Way's intuitions depend (not unrealistically) on it not mattering who actually reviews the paper as long as it gets reviewed, but in those cases I have argued that it is not the case for any particular person that they ought to review it, though it may well be true that collectively they ought to bring about its being reviewed.

This means that when there is a genuine 'ought'-claim for an end, the force of that 'ought'-claim should be transferred to necessary means. It remains a problem with the new principle of inheritance that it does not have this result. Along with the Paradox of the Good Samaritan, these bullets are not easily bitten.

#### 7. The means

Instead, I propose we take Schroeder's more instrumentalist-looking principle inheritance<sub>S</sub> "If X objectively ought to do A, and to do A X must do B, it follows that X objectively ought to do B" and try to define what "to do A X must do B" means in such a way as to allow transmission from ends to means and from the more specific to the less specific. As a first approximation, I propose that it means that X A's by B-ing.

This simple linguistic test of the 'by'-locution seems to rule out what we want to rule out and rule in what we want to rule in. It is false to say "I posted the letter by posting the letter or burning it" and "I helped the needy by putting them in need" and true to say "I drove at less than 100 m.p.h by driving at less than 60 m.p.h" and "I reviewed the paper by (in part) accepting the commission."

The most complete analysis of the by-relation is in Goldman (1970, 43):

Act-token A level-generates act-token A' if and only if

- (1) A and A' are distinct act-tokens of the same agent that are not on the same level;
- (2) neither A nor A' is subsequent to the other; neither A nor A' is a temporal part of the other; and A and A' are not co-temporal;
- (3) there is a set of conditions C\* such that
  - (a) the conjunction of A and C\* entails A', but neither A nor C\* alone entails A';
  - (b) if the agent had not done A, then he would not have done A';
  - (c) if C\* had not obtained, then even though S did A, he would not have done A'.

The relation of *level-generation* is meant to be wider than the by-relation and is not exhaustive of the possible relations between act-tokens: act-tokens are *identical* if they are the exemplification by the same subject (however described) of the same property (where, unlike Goldman, I count those properties the same that are *conceptually identical* as defined above) at the same time; they are on the *same level* if they are not identical but differ only by having different concepts of their objects; one act-token is a temporal part of another when it is one of a series of actions, e.g., each separate action involved in tying a shoelace or changing a tyre; one act-token is co-temporal with another when they both need to be performed independ-

ently at the same time for another action, e.g., the act of jumping is cotemporal with the act of shooting, and these together *level-generate* the act of jump-shooting.

Condition (1) above specifies that act-tokens related by level-generation are not identical or on the same level, but are the act-tokens of the same agent and, because (2) specifies that neither act-token is subsequent to the other, at the same time. The rest of (2) specifies that act-tokens are not in either of the other two relations. Condition (3) says that an act-token A level-generates another A' when it is logically entailed by the conjunction of A with a set of conditions C\* but is not entailed by A or C\* alone. These conditions C\* may be of different types, and these determine what type of level-generation is involved. What should be noted is that C\* can be causal facts about the actual world. So, if my act-token of flipping a switch causes a light to go on, then it *level-generates* the act-token of turning on the light, though it does not *cause* my turning on the light, which is a different event from the light's going on.

Let us look at some examples of inheritance on the basis of levelgeneration, being a temporal part, and being a co-temporal part. If flipping a switch were the only way to turn on the light, then O("I turn on the light") should transmit its force to O("I flip the switch"). As for the temporal parts of necessary acts and the co-temporal parts of necessary compound acts, these do not seem to inherit any oughtness from each other (from one temporal or co-temporal part to another) but from the act that they are the temporal or co-temporal parts of; I ought to grab each end of my shoelaces if I ought to tie my shoelaces and I ought to jump and I ought to shoot if I ought to jump-shoot. What is also interesting is that C\* can, in fact, contain these 'ought'-facts (cf. Goldman 1970, 25). For instance, if C\* is O("I tie my shoelaces") then my tying my shoelaces level-generates my doing something I ought to do. Similarly, if I ought to turn on the lights, my turning on the light level-generates my doing something that I ought to do and since my flipping the switch level-generates my turning on the light, it also generates my doing something that I ought to do, for level-generation is transitive.

How does this work with our previous examples? Although it seems true to say "I drove at less than 100 m.p.h by driving at less than 65 m.p.h" it is not obvious how the act-tokens of my driving at less than 100 m.p.h and my driving at less than 65 m.p.h are related. It does not seem to be *level-generation*, because driving at less than 65 m.p.h entails on its own

driving at less than 100 m.p.h, thus violating 3(a) which says that A should not entail A' on its own. I propose to treat this as a different way of being on the *same level*. In general, where two property-instances are related such that they are either *conceptually identical* or by a more inclusive one containing a less inclusive one (one *conceptually entails* the other), then the property-instances are on the same level.

This seems to suggest the following principle of inheritance:

Inheritance\*: If X objectively ought to do A, and either:

- a) A-ing and A'-ing are not distinct;
- b) A-ing and A'-ing are on the same level;
- c) A' level-generates A;
- d) A' is a temporal part of A;
- e) A' is a co-temporal part of A;

it follows that X objectively ought to do A'.

This applies recursively. If I objectively ought to turn on the light, then since my flipping the switch level-generates my turning on the light, then condition (c) is satisfied and I objectively ought to flip the switch. Since I ought to flip the switch, and (let us suppose) my moving my finger in a certain way is a temporal part of my flipping the switch, it follows from (d) that I objectively ought to move my finger in the required way.

However, this does not quite seem to work. One problem is my treating conceptual entailment as a way of being on the same level, for being on the same level is symmetric and implies [by satisfying condition (b)] not only correctly that if I objectively ought to drive at less than 65 m.p.h. then I objectively ought to drive at less than 100 m.p.h, but also incorrectly that if I objectively ought to drive at less than 100 m.p.h. then I objectively ought to drive at less than 65 m.p.h. This can be solved by modifying condition (b) to say that A' does not conceptually entail A. So, if A is driving at less than 65 m.p.h. and A' is driving at less than 100 m.p.h., A conceptually entails A' and A' inherits from A the force of O("I drive at less than 65 m.p.h") and make it true that O("I drive at less than 100 m.p.h"). But if A is driving at less than 100 m.p.h. and A' is driving at less than 65 m.p.h., A' conceptually entails A and even if O("I drive at less than 100 m.p.h") is true [which it will be if O("I drive at less than 65 m.p.h") is true] A' does not inherit any of its force. The inheritance can only go in the same direction as the conceptual entailment, which is both ways if A and A' conceptually entail each other, that is to say, they satisfy condition (a) in being not dis-

tinct. In this case it is reasonable for inheritance to be symmetric, as it was in deontic axiom  $(1^*)$ .

There are apparently less reasonable ways in which inheritance can be symmetric on inheritance\*. We have already seen one: my reviewing the paper is a means for making it such that the paper is reviewed, so O("I review the paper") follows on this basis from O("Someone reviews the paper"). But my reviewing the paper *conceptually entails* that the paper is reviewed, so O("Someone reviews the paper") follows from O("I review the paper"). There are two possible ways my reviewing the paper and somebody's reviewing the paper seem to be related here, and inheritance goes one way according to one such relation and the other way according to the other.

What about the relation between my accepting the commission and my reviewing the paper? Here, reviewing the paper seems to be subsequent to accepting the commission, so these act-tokens do not seem to be in any of the relations described, for in all of these the act-tokens occur at the same time. The account above does not appear to deal with precisely the kind of means-end relationships that we introduced it for. Goldman (1970, 52-53) calls acts like accepting the commission "putting oneself in a position to do x". Here, I do not think it is too much of a stretch to talk of A' being a cause of A, especially if we take this in the minimal sense of being an INUS condition of A. It is necessary for my reviewing the paper that all the conditions in C\* that together level-generate my reviewing the paper from the basic actions I perform are true, and one of these, rather trivially, is that there is a paper to review. My accepting the commission is necessary for the truth of this condition. This is a case where there is a causal relation (weaker than causal necessitation) between the act-tokens.

<sup>&</sup>lt;sup>4</sup> Goldman claims that by virtue of believing that act A' puts oneself in a position to do A and that we want to do A, we want also to do A' and our A'-ing is intentional. However, this claim does not help us. For one thing, nothing in inheritance\* implies that it is only our intentional actions that we ought to do – if my writing the review causes a fly to move and thereby generates my act of moving the fly, and I ought to write the review, then I ought to move the fly. Remember that the content of the 'ought'-claim concerns an act-token, and this *particular* act of moving the fly is something I ought to do because without having done it I could not have reached the state of having written the review. Also, inheritance\* transfers the force of the 'ought'-claim from the end to an actual means, not to what might only be believed to be a means.

However, this leads us back to something very like the paradox of the Good Samaritan, because it is necessary for my helping someone that there is someone to help, and I can put myself into a position to help someone by acting in a way that makes them need help. Not every act that is a cause of A is something I ought to do because A is something I ought to do, and it may well be something that I ought not to do. What is worse, we have not solved the original paradox of the Good Samaritan, since it is *conceptually entailed* by my helping someone that there is someone to help, and thus from (b) I objectively ought to be such that there is someone to help.

On the plus side, we have solved the problem of the first principle of explosion and Ross's paradox. Since the entailment in condition (3(a)) is a logical one and thus if  $(C^* \land A) \vdash A$ ' then equally  $(C^* \land A) \vdash (A' \lor B)$  this might seem not to be the case, but here the counterfactual condition (3(b)) blocks this result; it is not true that if the agent had not done A, then he would not have done A'  $\lor$  B, because he might have done B and thereby done  $(A' \lor B)$  without doing A. A does not level-generate  $(A' \lor B)$ ; I do not post the letter "by" posting it or burning it.

What about the second principle of explosion? If  $(C^* \land A) \models A'$  then equally  $(C^* \land A) \supset (A' \land B)$  for any true B. But we can only say that  $(C^* \land A) \models (A' \land B)$  when  $(C^* \land A) \models B$ , in which case, since  $(C^* \land A) \models A'$  and  $(C^* \land A) \models B$  it will be the case that O(A') and O(B) when O(A), and these can be conjoined in the normal way to give  $O(A' \land B)$ . In the general case when it is not true that  $(C^* \land A) \models B$ , A will not level-generate  $(A' \land B)$  just because it level-generates A', and it will be only A' itself and not  $(A' \land B)$  that inherits from A. Nor does  $(A' \land B)$  inherit from A', for although A' and  $(A' \land B)$  are on the same level it is  $(A' \land B)$  that *conceptually entails* A'; A' would inherit by virtue of  $O(A' \land B)$  were this 'ought'-claim true but  $(A' \land B)$  does not inherit by virtue of O(A').

This suggests the following modified principle:

Inheritance\*\*: If X objectively ought to do A, and either:

- a) A-ing and A'-ing are not distinct;
- b) A-ing and A'-ing are on the same level, and A' does not *conceptually entail* A;
- c) A level-generates A';
- d) A' is a temporal part of A;
- e) A' is a co-temporal part of A;
- f) A' is a cause of A;

it follows that X objectively ought to do A'.

This is a principle for necessary means, when there is one and only one way to A.

What if A-ing is merely sufficient for A'-ing, as it was when I could bring about the paper being reviewed either by my reviewing the paper or by your reviewing the paper? There I said that it did not follow that I ought to review the paper. Or a more trivial case when I ought to have lunch but I have a choice between several options. In these cases I would say that although it is not the case that X ought to A' it is the case that X ought to *intend* to A'.

This might seem odd, and I will not offer a complete defence here. Should X really intend to take each and every option? Doesn't this imply that he ought to have two lunches? To avoid this we have to suppose intentions to be interacting in a particular way. Suppose that I have to choose between a ham sandwich and a yoghurt for lunch, and decide on the ham sandwich. My intention to have the ham sandwich for lunch is "live," so to speak – it is transmitting information to my motor centres and feeding back into my cognitive function so that, typically at least, I believe that I will eat the ham sandwich and not eat the yoghurt. However, suppose that my intended action is thwarted by the discovery that I have no bread. Do I then have to go through the decision-making process again in order to form the intention to eat the yoghurt? It seems more economical to suppose that I already had this intention and that it simply became "live" when I was no longer able to do as I originally intended; at this point I believe that I will eat the yoghurt and that I will not eat the sandwich.

If it is felt that this is too much of a distortion of the ordinary concept of an intention, we can say instead that I am disposed to form this intention. These intentions or dispositions to intend are normatively guided by obligations to have intentions, which obligations are local in nature. So, if asked why I did not eat the ham sandwich it is correct to respond that I ate the yoghurt instead, and that by doing so I did something that I ought to do, i.e., have lunch. My response is not here an explanation of why my obligation to have the intention to eat the ham sandwich does not count – it does not cite an exception – but on the contrary accepts that there is this obligation and that it was violated but that this is a local violation necessitated by my complying with the competing obligation to intend to eat the yoghurt. If it were genuinely an exception there would be no normative question to answer. So, it is not the case that I ought to eat the yoghurt, even when this carries out an intention that I ought to have, and even

though I do something that I ought to do by doing so. It is not inconsistent, on this view, to have competing intentions, even intentions that cannot be jointly satisfied.

I think that this result is quite general, and not for only those that are not necessary. For everywhere that a preparatory act is necessary, it is possible for there to be an obligation not to intend that act. So, one could have an obligation not to intend to accept the commission, and also have, because the paper ought to be reviewed, an obligation to intend to accept the commission. One has, or is disposed to have, both intentions, despite their being contradictory, depending on which aspect of the situation one is attending to. Here, since accepting the commission is not more likely to be deontically superior to not accepting the commission, and given that one is already in the state of not accepting the commission, the obligation to have the intention to not accept the commission is escaped by virtue of being already in its end-state. When an obligation to have an intention is escaped in this way any obligations to have the inconsistent intention is not one that one ought to have all things considered, for to satisfy this intention would involve consciously acting in such a way as to lead from a deontically better world to a worse. If the world one is already in is deontically better than the ones one could reach through intentional action, it cannot be the case that one ought to act, even if by doing so one satisfies an intention that one ought, in some dispositional sense, to have.

I think that, finally, we can use this in response to the Paradox of the Good Samaritan. If I ought to help one in need, then I ought to intend to be such that there is one in need, and if I ought to intend this then I ought also to intend to make it so that there is one in need. However, quite independently of these 'ought'-facts it is also true that I ought to intend not to make it so that there is one in need. The first of these intentions is not "live" - it is not one for which "I will make it so that there is one in need" is believed to be true or can be made true outside of the science-fiction possibilities of backwards causation or time-travel. Hence, it is the second of these intentions that one ought to have all things considered. Note, however, that this relies on actions having no deontic values of their own, so to speak. If deontically better worlds are defined in terms of the number of good acts rather than the goodness of the states of affairs resulting from those acts, then it might be true after all that it ought to be the case that there be people in need and who need us to perform good acts (even if it ought not to be the case that we should act purposefully to create this op-

portunity for ourselves), for good acts presuppose that the world is not deontically best as it is. Deontically inferior states of affairs are the necessary evil of deontically superior acts. Some responses to the problem of evil paint a picture rather like this.

So, having the intention that there be people in need does inherit from the fact that I ought to help the one in need that it is an intention that I ought to have, but it is not one that I ought to have all things considered in the sense of its being live, on account of the fact that independently I ought to have the intention for there not to be people in need. The principle underlying this is:

Inheritance of Local Obligation to Intend: If X objectively ought<sub>L</sub> to do A, and either:

- a) A' level-generates A;
- b) A' is a temporal part of A;
- c) A' is a co-temporal part of A;
- d) A' is a cause of A;

it follows that X objectively ought, to intend do A'

where  $ought_L$  is what I have called a local ought and one that sometimes ought all things considered to be violated. This principle is meant to supplement rather than replace

Inheritance of Obligation to Act: If X objectively ought to do A, and either:

- a) A-ing and A'-ing are not distinct;
- b) A-ing and A'-ing are on the same level, and A' does not *conceptually entail* A;
- c) A' level-generates A;
- d) A' is a temporal part of A;
- e) A' is a co-temporal part of A;

it follows that X objectively ought to do A'.

Inheritance of Obligation to Act is Inheritance\*\* minus the inheritance from effect to cause and is still meant to express what objectively ought to be done all things considered. This principle preserves the intuition that one ought to drive at less than 65 m.p.h. because one ought to drive at less than 100 m.p.h. but it does not follow from Inheritance of Local Obligation to Intend that one ought to intend to drive at less than 100 m.p.h. I think this is correct, since not everything that ought to be done ought to

be done intentionally. However, if there is an intention to A, an intention to A' will follow automatically anyway by the definition of conceptual entailment, because it will be impossible to have A as the content of an intention without also having A' as part of the content of an intention. At the other end of the spectrum, it follows from Inheritance of Local Obligation to Intend that I ought<sub>L</sub> to intend to make somebody needy but it does not follow from the fact that it is a cause that I ought to make somebody needy, there being no longer inheritance from effect to cause in Inheritance of Obligation to Act. Unfortunately, it does still seem to follow because of the conceptual entailment conditions; I still have not managed to rule this out and must leave it as an outstanding problem.

For the cases in between that are most naturally in a by-relation one both ought to do them and ought L to intend to do them. This is because conditions (a) to (c) of Inheritance of Local Obligation to Intend are the same as conditions (c) to (e) Inheritance of Obligation to Act. This even applies, I would say, to side-effects. If it is the case that I ought all things considered to write the review it must be that any negative consequences of writing the review, including reasons I may have against bring about the side-effects, must be outweighed. The picture is less clear, I think, with necessary means. Must it be in this case also that the negative consequences of preparatory (or, indeed, subsequent) acts are equally outweighed? The problem is that at the time of the preparatory act it seems possible that there may be more reasons against it than for it, as there was for purposefully making somebody needy. Thus, only an obligation to have an intention follows for causes.

### 8. Conclusion

In this paper I have discussed the view that inheritance principles license paradoxical results, including the impermissible result that everything is something that one ought to do provided that something is something that one ought to do. I proposed two principles for inheritance from ends to means, where I defined the relation of ends to means following ideas from Goldman (1970). The first of these was a principle for inheritance from ends to necessary means and was meant in part to account for a plausible semantics of 'ought'-sentences where the truth of "I ought to A" implied that there was an 'ought'-fact "A" rather than, as Broome seemed to

suppose, an 'ought'-fact "B" where "A" was an implication of "B" but not synonymous with it. The second of these was a principle for inheritance from ends to sufficient means and I argued that it was not the case that one ought to take the sufficient means but that one ought to intend to take the sufficient means. These 'oughts' are local but strict, in that any time they are not complied with counts as a violation and must be normatively justified by virtue of a competing 'ought.' Exactly how these local obligations interact has not been fully worked out, but one of its principal features is that it allows an agent to have intentions — and says that the agent even should have those intentions — even in cases where those intentions are not ones that can be carried out or are inconsistent with other intentions the agent may have (see Botting 2013).

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