# Essay 3.4

# Comments on 'Hume's Master Argument'

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**1. Why Ockham?**

Do we really need the full panoply of Ockhamist Logic to reconstruct Hume's Master Argument? It seems to me that we can get by with a lot less:

> DEM) The thesis that if **X** is the conclusion of a *demonstration* (a valid deductive argument with necessary and self-evident premises **K**) then the negation of **X** entails a contradiction. This thesis is reiterated by Leibniz in the preamble to the *Theodicy* (Leibniz, 1985, 74-75) a book which we know Hume read because he refers to it in the *Abstract* (4/646).
>
> CONT) The thesis (widely believed in the early 18th Century) that in a demonstrative *argument* (that is a valid deductive argument from consistent premises) the premises cannot conceivably be true and the conclusion false because the *matter* of the conclusion is (somehow) contained in the premises. (See the Introduction and Essay 2.3 for details.)

We can now reformulate the Master Argument as follows: To prove:

> A) *That no conclusion* Ψ*, about the future characteristics or activities of objects (and hence no a-temporal generalizations about such characteristics or activities) can be derived via deductive reason, either from self-evident premises* Φ *or from a premise set* Θ *consisting of the reports of past observations*.
>
> 1) By DEM) no such thesis Ψ can be the conclusion of a demonstration (that is a deductive argument from self-evident and necessary premises, Φ). For if it were, its negation would entail a contradiction. But 'the contrary of every matter of fact [which Ψ would have to be] is still possible; because it can never imply a contradiction'(EHU. 4.1.2/25).

2) By CONT) no thesis about the future characteristics or activities of objects Ψ can be the conclusion of a demonstrative argument from a premise set Θ consisting of the reports of past observations. For if it were, the matter of Ψ would have to be contained in Θ. But 'when a man says, *I have found, in all past instances, such sensible qualities conjoined with such secret powers*: And when he says, *Similar sensible qualities will always be conjoined with similar secret powers;* he is not guilty of a tautology, nor are these propositions in any respect the same' (EHU, 1.2.37/37). 'The [idea of] the effect is totally different from the [idea of] the cause, and consequently can never be discovered in it' (EHU, 4.1.9/29). Since there is new matter in the conclusion (matter concerning the future or the effect) which represents a 'new relation or affirmation', no conclusion about the future characteristics or activities of objects Ψ, can be derived via deductive reason from a premise set Θ consisting of observation reports about the past.

3) Further, by CONT) given a premise set Θ of observation reports about the past, it is conceivable that the premises could be true and a conclusion Ψ about the future false. Given a true premise Θ about the cause ('a Billiard-Ball moving in a straight line towards another') and a conclusion Ψ about how the second Billiard ball will move when struck by the first, the negation of Ψ is conceivable ('may I not conceive that a hundred different events might as well follow from that cause?'). (EHU, 4.1.10/29.) Hence the argument from Θ to Ψ is not deductively valid - which means that Ψ cannot be derived from Θ via deductive reason.

4) *It might be objected* that it is possible to bridge the gap between Θ and Ψ with the aid of some such premise Ω as 'the future will resemble the past' (EHU, 4.1.21/37) which might itself be deduced either from a set of necessary and self-evident premises Φ or a set of premises about past observations Θ. Setting aside the not inconsiderable problems of *formulating* such a principle precisely, from DEM) Ω is not deducible from necessary and self-evident premises Φ, since it's negation is conceivable and does not imply a contradiction. And from CONT) Ω cannot be validly derived from a set of observation reports about the past Θ, since its matter is not contained within such a set. 'Let the course of things be allowed

hitherto ever so regular; that alone, without some new argument or inference, proves not, that, for the future, it will continue so' (EHU, 4.2.21/38).

5) Therefore A) *no conclusion* Ψ*, about the future characteristics or activities of objects can be derived via formal deductive reason, either from self-evident premises* Φ *or from a premise set* Θ *consisting of the reports of past observations.* QED.

This is, I think the underlying argument of EHU, 4. The logical principles to which Hume was appealing were 'venerable, and of long-standing, not recent discoveries or innovations with which the reader might not have caught up'. Nor were they principles lost in the mists of medieval antiquity or consigned to oblivion as useless pedantries (which is unfortunately what had happened to Ockham's rules). They were the logical orthodoxies of Hume's day. Thus in developing the argument of EHU, 4, Hume was 'putting together various things which were well known separately, but which [would have had] a shocking conclusion when put together'. *Negative* principles of inference derived from the medieval tradition (3.1§2), were not necessary since *positive* principles of inference derived from the likes of Arnauld and Nicole had negative implications. If the conclusion of a valid argument must be contained within the premises, then if the conclusion of an argument is *not* contained in the premises, the argument is not valid.

It is easy to adapt the Master Argument to prove

B) *That no conclusion* Ψ'*, about external objects can be derived via deductive reason, either from self-evident premises* Φ' *or from a premise set* Θ' *consisting of the reports of past sensations*.

I leave this in the manner of logic texts as an exercise for the reader. But what about No-Ought-From-Is? From Hume's point of view, this is simply a substitution instance of CONT). It plays its part in a variant of the Master Argument.

To prove

C.i) *That (perhaps with certain important exceptions) no non-trivial moral proposition* **O** *can be demonstrated*, *that is, that no non-trivial moral proposition can be derived via deductive reasoning* either *from a set of self-evident moral*

*propositions* $O_1$ ...$O_n$, or *from a set of self-evident non-moral propositions (propositions devoid of moral matter)* **Φ''**,

C.ii) *That no moral proposition* **O** *can be demonstrated, in a looser sense, that is, that no such proposition* **O** *can be derived via* ***formal*** *deductive reasoning from a set of non-moral propositions (propositions devoid of moral matter)* **Θ''**, *consisting of claims about the being of a God, or 'observations concerning human affairs' which, though (supposedly) obvious or undeniable, are not self-evident in the strongest sense.* (The 'demonstrations' of Hobbes and Cumberland, and the projected demonstrations of Locke would appear to involve premises of this kind - see Essay 5.2.)

1) (With certain important exceptions) no non-trivial moral proposition (that is, no non-trivial proposition whose matter is distinctively moral) is self-evident. Hume does not make explicit use of DEM) to argue for this, perhaps from a motive of prudence. (It does not do, in righteously censorious times, to overemphasize your belief that [almost] any moral proposition can be negated without self-contradiction.) Instead, he hints at DEM) in his polemic against Wollaston and argues explicitly that moral propositions don't have the kind of characteristics that propositions have to have in order to be self-evident. They are not true in virtue of 'relations of ideas'. These arguments do not repay the considerable degree of effort required to understand them. Hume would have been better off if he had simply stuck with DEM).

1a) Triviality is close under deduction. That is, if a set of premises **K** is trivial and **K** $\Vdash$ **X**, then **X** is trivial too.

2) By CONT) in the form of No-Ought-From-Is, no substantive moral thesis **O**, involving the distinctively moral matter can be the conclusion of a formal demonstrative argument from a premise set **Φ'',** consisting of self-evident but non-moral truths (self-evident truths not involving moral matter). For if it were, the matter of **O** would have to be contained in **Φ''.** But conclusions **O** about how things *ought to be* are not contained in premise sets **Φ''** about how things *are* (and the same goes for conclusions involving the other distinctively moral terms, when the premises from which they are to be derived do not contain any corresponding

moral matter). Since there is new matter in the conclusion (often conveyed by the moral copula) which represents a 'new relation or affirmation', no moral conclusion **O**, can be derived via formal deductive reason from premise sets **Φ''** consisting of self-evident but non-moral propositions.

3a) Hence Ci) that - (perhaps with certain important exceptions) *no non-trivial moral proposition* **O** *can be demonstrated* (See Essay 5.2.§15)

Of course, the proof of Cii) is so trivial for a logically educated philosopher of Hume's era as to be hardly worth stating.

3b) By CONT) in the form of No-Ought-From-Is, no substantive thesis **O**, involving distinctively moral matter can be the conclusion of a formally valid deductive argument from a premise set **Θ''**, *not* containing moral matter but consisting of claims about 'the being of a God' or 'observations concerning human affairs' For if it were, the matter of **O** would have to be contained in **Θ''.** which *ex hypothesi* it is not. Hence Cii).

However in the moral case there is no equivalent of step 4). For on Hume's showing it is *sometimes* possible to bridge the gap between a set of observations concerning human affairs **Θ''** and a moral proposition **O** with the aid of an analytic bridge principle Ω''. Hume 'defines' a virtue to be *whatever mental action or quality gives to a spectator the pleasing sentiment of approbation*, thus making it analytic that the mental actions or qualities which exercise this influence are in fact virtues. (EMP, App 1.10/289). Indeed, following Hutcheson he even suggests a definition of 'obligation', and hence presumably of 'ought': 'when the neglect or nonperformance of [an action] displeases us *after a* [certain] *manner,* we say that we lie under an obligation to perform it' (T, 3.2.5.4/517). Thus it is analytic (for Hume) that *A* ought to do *B* if and only if the omission of *B* by *A* would excite the sentiment of disapprobation in any suitably qualified observer. These propositions, which presumably hold true in virtue of 'relations of ideas', are the apparent exceptions to Hume's general view that *no non-trivial moral proposition* (no proposition involving moral matter) *is demonstrable.* With the aid of such truths we can derive moral conclusions from 'observations concerning human affairs' (namely observations about what we ideally disposed to approve or disapprove of). Indeed a sufficiently astute Martian anthropologist would in principle be able to do this even if she herself were a stranger to the sentiments of approbation and disapprobation. *But* -

and this is a very big 'but' - that is not how human beings typically do it. Our opinions about moral distinctions are not *in fact* derived from reason (where reason includes conceptual truths and the results of empirical enquiry), except perhaps in sociologically based investigations such as Hume's in the *EPM*. Rather we arrive at the moral truth by approximating the ideal observer and consulting our sentiments. Thus morality is *usually* 'more properly felt than judg'd of' (T, 3.1.2.1/470). But it is not just that our *opinions* about moral distinctions are usually based on feelings rather than reason - *the distinctions themselves* are derived from sentiment rather than reason, since if we did not share certain dispositions to approve and disapprove it would be impossible to form rational opinions about them. You cannot use reason to discover facts about feelings unless there are facts about feelings for reason to discover.

But however that may be, there is no need for Ockham in any of this.

**2. Transcending Reason - Right or Wrong?**

'We can bring out this problem [of how Hume knows that Custom is reliable] by imagining, parallel with Hume, that there is a faculty which produces superstitious beliefs: call it, the faculty of *Superstition'*. So says Heathcote at 3.1§4). But there is no need for imagination here, since Hume believed in at least *two* such faculties or propensities:

> 1) a 'universal propensity to believe in invisible, intelligent power[s - that is, gods - which] if not an original instinct, [is] at least a general attendant of human nature' (NHR, 15.5/184), depending, as it does, upon 'an universal tendency amongst mankind to conceive all beings like themselves, and to transfer to every object those qualities … of which they are intimately conscious (NHR, 3.2/141);
> and
> 2) a tendency on the part of 'the mind' 'when any thing is affirmed utterly absurd and miraculous', to 'admit of such a fact, upon account of that very circumstance, which *ought* to destroy all its authority' [my italics] because of the agreeable 'passion of *surprize* and *wonder'* that such reports excite. (ECU. 10.16/117).

Thus we have a propensity to believe in gods which is founded, in part, on a universal tendency to take the universe personally. We have an 'Inclination to find our own Figures in the Clouds our Face in the Moon, our Passions & Sentiments even in inanimate Matter [but] such an Inclination may, & *ought* to be controul'd [my italics], & can never be a legitimate Ground of Assent' (*Letters*, 1.72/151, Hume to Elliot, 10/2/1751). Call this propensity

Superstition 1. (This is not quite Hume's terminology, since he has a rather more sophisticated concept of Superstition, but it will do for present purposes.) And we have a tendency to believe in the miraculous though such beliefs are not warranted by reason (where reason has been augmented by a judicious dose of Custom) because it is fun to believe in the weird and wonderful. Call this tendency Superstition 2. And there is of course a *fourth* faculty, the Moral Sense, which enables us to formulate moral beliefs, though such beliefs are not usually derived from reason, even in an extended sense. Much of Hume's work is a set of variations on a single theme (the generalized Hume thesis or GHT):

> Beliefs of kind *K* are not usually derived via reason from experience (indeed, this may be impossible). Instead they are the products of a causal mechanism or set of mechanisms, a faculty or set of propensities *Z*.

Beliefs about external objects and mundane beliefs about causal connections cannot be derived via reason from experience but are solely the products of Custom. As Hume argues in the *Natural History*, beliefs about the divine are not usually (and as he argues in the *Dialogues* cannot be) derived from experience by reason-augmented-by-Custom, but are primarily the products of Superstition 1. Beliefs in the miraculous cannot be derived from experience by reason-augmented-by-Custom but are often the products of Superstition 2. Moral beliefs, though 'in a great measure, infallible' (T, 3.2.8.8/546), are usually not derived from experience by reason-augmented-by-Custom (though this may be technically possible given certain conceptual truths) but are in fact almost always the offspring of the Moral Sense.

Now the problem with the GHT is this. In the case of Custom and the Moral Sense, Hume seems to think that it allowable, perhaps even obligatory, to transcend reason and to go with the flow of the causal mechanisms *Z*. But in the case of Superstition 1 and 2 he does not. These are propensities that we *ought not* indulge. Has Hume got a principled basis for this preference?

Let's start with the Moral Sense. The reason that Hume thinks that this is a reliable belief-generating mechanism is that the moral facts are defined in terms of its outputs. To say that an act is right is to say that, because of our shared Moral Sense, we have a tendency to approve of it under certain conditions. These include a clear view of the relevant facts. Hence, if our Moral Sense causes us to approve of an action under the relevant conditions, it follows automatically that it is right. In particular cases people can make mistakes in morals, since their reactions can be based upon factual errors and their Moral Sense perverted by

partial passions. But when it comes to generalities the conversational conventions compel us to adopt the general point of view. 'It is impossible we could ever converse together on any reasonable terms [without] continual *contradictions,* [unless we arrived] at a more *stable* judgment of things, [by fixing on] some *steady* and *general* points of view, and always, in our thoughts, plac[ing] ourselves in them, whatever may be our present situation' (T, 3.3.1.17/581-2). And when discussing generalities mankind is less liable to error than when discussing particular persons or actions. This leads Hume to declare, in a moment of hyperbole, that in the case of morals 'the general opinion of mankind … is perfectly infallible'! (T, 3.2.9.4/552.) But this is not, I think, his considered opinion. For human beings are prone to factual error, particularly under the influence of Superstition 1, which gives rise to the 'delusive glosses of superstition and false religion' (EPM, 9.1.3/ 270). And these in turn pervert the operations of the Moral Sense, leading people to mistake the monkish vices for virtues, in the erroneous belief that they are useful and agreeable, if not in this life then in the life to come.

What about Custom? Here things are different. Causal facts are not defined as the outputs of Custom even if Custom is operating at optimum. To say that *A* causes *B* is not say that Custom causes us to *believe* (under certain circumstances) that *A* causes *B*. Thus Hume must have some other basis for his evident opinion that we *ought* to transcend reason and accept the deliverances of Custom. What is it?

For Hume it is a fact, though an unknowable and unprovable fact, that we live in a law-governed world, characterized by regular causal process. Given such a world, Custom - a propensity to formulate beliefs in accordance with some appropriately refined principle of induction - is a reasonably reliable belief-forming mechanism. It is not perfect, of course, (though Hume does suggest measures for perfecting it) but if we adopted any other belief-forming strategy with respect to everyday causal connections we would 'perish and go to ruin' (T, 1.4.4.1/225). Imagine the mess we would be in if we formulated our beliefs about causal connections in accordance with some *counter*-inductive principle! There is thus 'a kind of pre-established harmony between the course of nature and the succession of our ideas; [so that] our thoughts and conceptions [go] on in the same train with the other works of nature' (ECU, 5.2.21/54-55). Hume also seems to think - though he is not as clear about this as he might be - that if we indulge our inductive propensities, whilst enlarging our experience and taking care to proportion belief to the evidence, then we will tend, over time, to converge on the same results. Indeed, this is precisely what we would expect if a) we lived in a world of causal regularities and b) some refined version of induction were a reasonably reliable method of finding out about them. 'The INDIAN prince, who refused to believe the first

relations concerning the effects of frost' (ECU, 10.1.10/113), may have 'reasoned justly' in refusing to believe such reports, but, being a 'just' inductive reasoner, he would soon have changed his mind if we had enlarged his experience by transporting him to Scotland or even the Himalayas. Under favourable circumstances, Custom causes us to converge on the facts.

'How does Hume know that [Custom] is likely to be reliable in the future, granted that it was reliable in the past?' In one sense he doesn't know: he doesn't have knowledge in the sense of *scientia.* For he doesn't have a deductive argument from premises of which he has certain knowledge, that the future will resemble the past, and thus that Custom is largely reliable. Hence it is logically possible, given such premises, that the causal regularities which govern the world will suddenly give out. But in another sense he not only has knowledge but a 'proof', 'meaning [by 'proof'] such [an] argument from experience as leave[s] no room for doubt or opposition' (ECU. 10.1n/56). For *all* of our experience testifies to a world largely characterized by causal regularities (though Hume is clearly overstating the case when he seems to suggest that experience excludes the possibility of indeterministic causation). Thus the faculty of Custom begets a belief in the reliability of Custom. (We are inductively justified in believing in some form of induction.) This means, however, that Heathcote is wrong to suppose that all question-begging arguments are deductive and therefore that *non*-deductive (inductive-probabilistic) arguments do not beg the question (3.1§5). For there are more subtle ways of begging the question than simply assuming what you set out to prove. You can also beg the question by appealing to the propensity whose deliverances you are trying to vindicate. If reason cannot justify a faith in the deliverances of Custom (as in one sense it cannot), then reason cannot justify a faith in *one* of the deliverances of Custom, namely the belief that Custom itself is generally reliable.

Nonetheless we can go some way to vindicating Hume's evident opinion that we *ought* to indulge our inductive propensities and formulate our beliefs in accordance with Custom. For Custom is *in fact* a reliable belief-forming mechanism (at least in Hume's opinion). Hence a suitably qualified spectator - a sympathetic observer, driven by reliable belief-forming mechanisms suited to the circumstances of human life - would tend to approve of Custom-based inferences and to disapprove of their 'neglect or nonperformance'. The inferences that we *ought* to draw are those that whose neglect would displease a sympathetic observer driven by a refined and reliable variant of Custom, just as those that we *ought not* to draw are those that would excite the same disgust.

What about Superstition in both its variants? We cannot know for certain that Custom *is* reliable, but we *can* know for certain that Superstition is *not*. Take Superstition 1. There may be a 'universal propensity to believe in invisible, intelligent powers' but there is no *one*

set of powers that we have a universal propensity to believe in. The gods are the products of fear and fancy, but since our fears and especially our fancies are different, we postulate different and inconsistent deities. Superstition 1 has a powerful influence on the human mind, but it influences different people in different ways producing different and inconsistent theologies. Since at most *one* such theology can be correct, Superstition 1 is evidently unreliable. Even if we happen by chance to hit on the one true religion, *most* of the gods that Superstition causes us to postulate are known to be false, a point that is admitted even by the superstitious, since those who believe in one God (or set of gods) denounce the delusive glosses of everyone else. The same goes for Superstition 2. Most of the miracles it causes us to believe in are false, even if a tiny minority happen to be true. This is the burden of the 'Contrary Miracles Argument' of ECU, 10.2.25. Furthermore, although we would 'perish and go to ruin' *collectively* without the Moral Sense and *as individuals* without the faculty of Custom, we can get by quite comfortably without either of the two species of Superstition, at least we can get by in the one and only world that Custom licenses us to believe in. Indeed a great many people have perished and gone to ruin *because* of Superstition-induced beliefs, a point emphasized by Hume in his *History of England* and by his disciple Gibbon in *The Decline and Fall of the Roman Empire*. Persecution, self-mortification and the decline of civic virtue are all put down to the malign influence of religion and hence to the twin faculties of Superstition. And we have already seen how the delusive glosses of false religion pervert the operations of the Moral Sense, converting virtue into vice and vice into virtue. Thus it is an *intellectual* vice to indulge the two faculties of Superstition, since they result in unreliable inferences and a *moral* vice to indulge them because of their pernicious effects. On both counts they would be displeasing to a suitably qualified spectator, someone informed, impartial and dispassionate, with reliable belief-forming mechanisms and a refined Moral Sense.

Thus it is sometimes right to transcend reason and sometimes wrong; right when it comes to Custom and the Moral Sense, but wrong when it comes to the two kinds of Superstition.

**3. The Containment Principle and No-Ought-From-Is**

As I see it, No-Ought-From-Is is simply an instance of CONT) which is one of the two principles underlying Hume's Master Argument. Heathcote thinks that CONT) is subject to two obvious counterexamples (which perhaps explains why he thinks that it cannot be doing the heavy lifting in Hume's Master Argument):

**(4)** $p \,\&\, \neg\, p$

$\therefore$ *A* ought to believe *q*

**(5)** $p_1 \ldots p_n \Vdash q$

$\therefore$ It is a necessary truth that if $p_1 \ldots p_n$ then *q*

.

But although these inferences are formally valid (at least in logics rich enough to accommodate the concept of logical consequence) neither constitutes a counterexample to CONT). Inference **(4)** is not a counterexample, since in its more primitive versions CONT) only applies to inferences from *consistent* sets of premisses. But **(5)** not a counterexample to CONT) either. For CONT) only applies to expressions which constitute the *matter* of the conclusion, not to the expressions which are constitutive of its *form.* It is a thesis about categorematic rather than syncategorematic content, about schematic expressions rather than logical operators. Since 'necessarily' is both a syncategorematic expression and a logical operator, and since CONT) was never intended to apply to such expressions, Heathcote's inference is not a counterexample to CONT). As a 'Gentleman' makes clear (2.3) CONT) was widely accepted in the early modern era, but even in that logically benighted age, few philosophers were silly enough to reject *ab esse ad posse,* though the inference from *A* to *A is possible* clearly involves an operator in the conclusion that is absent from the premises. Hence CONT) does not apply to such expressions.

Of course, CONT) as originally conceived is false, which is precisely the point behind Prior's famous counterexamples to No-Ought-From-Is. But it is possible to reformulate CONT) as a *provable* thesis of much greater precision and generality. The first step is to reformulate it as thesis about the (first-order) predicate calculus. We define *inference - relative vacuity* as follows:

> An expression (a predicate or propositional variable) $\phi$ occurs vacuously in the conclusion of a valid inference $\mathbf{K} \Vdash \mathbf{X}$, iff under any interpretation of $\mathbf{K} \cup \{\mathbf{X}\}$ such that both **K** and **X** come out true, we can uniformly substitute for $\phi$ any expression of the same grammatical type, without prejudice to the truth of the resulting sentence **X'** or the validity of he resulting inference $\mathbf{K} \Vdash \mathbf{X'}$

We can then characterize CONT*) as follows:

> A (non-logical) predicate or propositional variable $\phi$ cannot occur non-vacuously in the conclusion of a formally valid inference unless it appears among the premises.

This thesis is provable. What's more, a similar thesis - call it CONT **) - can be proved with respect to the operator logic of S.T. Kuhn in which sentential operators are treated as non-logical schematic variables. But the *really* significant result is due to Lloyd Humberstone. Who generalizes CONT to a much wider class of logics. What we get is CONT***):

> In any logic subject to compositional semantics, no expression $\phi$ that is S-schematic for the semantics in question - that is, no expression which is *not* a logical operator - can appear non-vacuously in the conclusion of a formally valid inference unless it appears in the premises. (See Pigden, 1989, pp 144-5.)

We don't need to make a special exception for inferences from inconsistent premises since *every* expression that appears in the conclusion of such an inference suffers from inference-relative vacuity. And we don't need to make an exception for inferences with logically true conclusions, since in all such cases the schematic expressions occurring in the conclusions will likewise be vacuous.

So far as I can see, CONT***) would enable us to vindicate Hume's Master Argument (at least as I construe it) since conclusions about the future would involve novel expressions not contained in premises about the past and conclusions about external objects would involve novel expressions not contained in premises about impressions. Step 2) becomes:

> 2) By CONT***) no thesis $\Psi$ that is *genuinely* concerned with the future characteristics of objects can be the conclusion of a formally valid argument from a premise set $\Theta$ consisting of the reports of past observations. For such a conclusion $\Psi$ would have to contain non-vacuous, non-logical expressions not contained in $\Theta$, and by CONT***) no expression which is *not* a logical operator can appear non-vacuously in the conclusion of a logically valid inference unless it appears in the premises.

Thus with Humberstone's help we can vindicate Hume. Logic does not allow you to derive conclusions about the future from premises about the past and this is basically because of the

principle that in a logically valid inference, you don't get out any non-vacuous matter that you haven't put in (where 'matter' is characterized in terms of non-logical expressions).

But does CONT***) vindicate No-Ought-From-Is? Only on three conditions:

1) that No-Ought-From-Is is amended, to the more defensible but less succinct No-Non-Vacuous-Ought-From-Is;
2) that 'ought' is not to be construed as a logical constant, i.e that there are no principles peculiar to and pervasive of all moral and evaluative reasoning (a point that I argue at 5.2§10);
and
3) that No-Ought-From-Is is to be read as a claim about logical consequence not a claim about analytic entailment. For CONT***) does not exclude the possibility of analytic bridge principles connecting 'ought' and 'is'.

**4. Adrian Heathcote and the 'Methodological Flaw'.**

Heathcote displays a certain lofty disdain for those methodologically benighted philosophers who concern themselves with logical consequence rather than analytic entailment.

> Philosophers have been bewitched by [No-Ought-From-Is] partially [because of] a deeply ingrained methodological flaw [a tendency to switch] attention from actual arguments to symbolic forms for arguments. … We should not mistake the question of what *arguments* are valid, with the question what argument *forms* are valid - where the forms are part of some particular logical system. .... Valid *arguments* are our prime resource. Argument forms simply represent the few (the very few!) that we've managed to tame.

One is tempted to reply that if formal logic is against a man a man will be against formal logic. But actually Heathcote's anti-formal polemics are rather beside the point. For so long as we have a logic with a sufficiently rich grammar (an important proviso that has not always been met in the past), if an argument Γ is *materially* valid - such that given the content of the non-logical expressions, the premises cannot be true and the conclusion false - we can construct a corresponding *formally* valid argument Γ' in which the necessary truths on which the argument turns are spelt out explicitly as extra premises (a point that has been noted since at least the fourteenth century - see Broadie, 1993, pp. 92-95). Given the *materially* valid argument *Fritz is a bachelor* therefore *Fritz is unmarried*, we can construct the *formally* valid

argument *Fritz is a bachelor, All bachelors are unmarried,* therefore *Fritz is unmarried*, where the second premise, *All bachelors are unmarried,* is both necessary and analytic. (If the second premise were not necessary it would be possible for Fritz to be a bachelor without being unmarried, in which case, the original argument would not be valid.) Thus a devotee of symbolic forms can accept essentially the same arguments as a Heathcote-like enthusiast for analytic entailment - it is just that she will formulate them differently, replacing unstated principles of inference with explicitly stated premises consisting of (putatively) necessary truths.

Explicit extra premises have an advantage over implicit principles of inference. - it is easier to subject them to critical scrutiny. So when the material validity of an argument is in dispute, it is a good idea to replace it with its formally valid counterpart since this forces us to be explicit about the alleged necessities on which the argument turns. Thus the 'deeply ingrained methodological flaw' that Heathcote complains of is due, in part, to a taste for 'transparency'. If we want to evaluate Heathcote's is/ought inferences it is illuminating to recast them as formally valid inferences in which the gap between the premises and the conclusion is bridged by an allegedly necessary truth. Note however that in Heathcote's case the extra premises must be not only necessary but *analytic*. His aim is to vindicate is/ought inferences (both epistemic and moral) in which the premises are substantively ought-free but the conclusion contains a (non-vacuous)'ought'. If the inference is to be formally valid there must be an epistemic 'ought' *somewhere* in the premises, presumably in the bridging principle, but if the bridging principle is analytic in something like the old-fashioned sense (that is true in virtue of the meanings of words[1]) we may still have an inference to a substantive epistemic 'ought' from *substantively* ought-free premises. Not so if the bridging principle is synthetic, for in that case the conclusion would depend on a substantive evaluative principle, which is exactly what Heathcote does not want.

**5. Heathcote and the Epistemic 'Ought'**

When it comes to the epistemic 'ought' there is no need to invent a bridge principle on Heathcote's behalf. For in his view the 'fundamental normative tenet of correct reasoning … 'that we used [in] deriving [epistemically] normative conclusions from non-normative premises' is the following:

$$(p \rightarrow q) \rightarrow (O\mathrm{B}p \rightarrow O\mathrm{B}q)$$

Here the arrows represent material conditionals, or unspecified stronger conditionals. (I think

that Heathcote is mistaken here, and that the extra premise that he requires to underwrite inference **(3)** is slightly different, but since it is subject to the much the same counterexamples, I shall let the matter slide.) If this principle is to underwrite the kind of epistemic is/ought inferences that Heathcote favours, the 'fundamental normative tenet' had better be necessary which means we should replace the central connective with the fishhook of entailment, thus:

$$(p \rightarrow q) \mathrel{\ni} (O\mathrm{B}p \rightarrow O\mathrm{B}q)$$

If we interpret the third arrow as the material conditional this gives us

$$(p \rightarrow q) \mathrel{\ni} (O\mathrm{B}q \vee \neg O\mathrm{B}p)$$

which is clearly what Heathcote wants. Finally I am going to interpret the first arrow in the strongest possible sense. For if, as I shall argue, the principle fails where $q$ is *entailed* by $p$, then it is unlikely hold where $p$ implies $q$ is some weaker sense. This gives us:

$$(p \mathrel{\ni} q) \mathrel{\ni} (O\mathrm{B}q \vee \neg O\mathrm{B}p)$$

Suppose $p$ represents a collection of contingent propositions relevant to our concerns for which we have excellent evidence. And suppose that $q$ represents some trivial logical consequence of $p$ [for example: $(p \vee m)$ & $(p \vee p)$ & $(p \vee r)$ & $(p$ & $p)$]. Then it may well be the case that we *are* obliged to believe that $p$ but *not* obliged to believe that $q$, since it would surely be silly to fill our heads with such useless junk. Hence the 'fundamental tenet' is false, and the inferences it underwrites invalid.

## 6. No-Ought-From-Is and the Conceivability of Nihilism

Heathcote concludes with a moral argument.

**(9)** *A* is confronted by a friend drowning
*A*'s faculties and abilities are in good working order
<u>*A* recognises that his friend has no desire to drown</u>
∴ *A ought* to attempt to save his friend.

He allows that those with those with refined moral intuitions may want to add extra conditions and caveats, but insists that in the end, most people will recognize that 'if the premises are true the conclusion *must* be true as well - and that is all that is required for validity'. To give

Heathcote a helping hand I shall modify the conclusion, effectively incorporating the caveats and conditions:

> Absent a strong moral reason why he *ought* do otherwise, *A ought* to attempt to save his friend. $[(\neg(\exists R)(R \rightarrow OA \ \& \ (A \rightarrow \neg P))) \rightarrow OP]$

Given this modification we don't have to worry about those cases where the drowning man is a torturer or a tyrant and it would be better to let him die, let alone bizarre scenarios in which a morally finkish magician would finish them both off the moment they got to the shore. For in all such cases there would be a strong moral reason why *A* ought to do otherwise than rescue his friend. Nonetheless, we still have a purported inference from non-moral premises to a substantively moral *ought* (neither inferentially vacuous nor ought-irrelevant).

But the argument isn't valid. I don't just mean that isn't logically valid (though of course it isn't). I mean that it is not *materially* valid, that the premises could be true and the conclusion false. For the premises could be true in a world in which Mackie's error theory was true and nobody ought morally to do anything. In such a world the conclusion would be false. For the argument to be valid - such that the premises *could not* be true and the conclusion false - the error theory would have to be not only false but necessarily so. It would have to be *inconceivable* that any version of the error theory could be correct. And it is hard to believe that over the last thirty years, so much anxious ink could have been spilt arguing against the inconceivable.

This is not to say that it is impossible to use analytic bridge principles to derive evaluative conclusions (whether epistemic or otherwise) from non-evaluative premises. It is just that we have no compelling example of any such principles.

## NOTES

1. See Gillian Russell, 2008, for a sophisticated defence of old-fashioned analyticity.