In Defence of Hume’s Law*

Gillian Russell
Princeton University
February 13, 2003

0 Introduction

Hume’s Law says that you can’t get an ought from an is or, less memorably, that no set containing only descriptive sentences implies a normative sentence. The literature on Hume’s Law contains a number of arguments that purport to be counterexamples to the law; that is, valid arguments from descriptive premises to normative conclusions.¹

In the face of such arguments, there are two responses open to someone who has found Hume’s Law intuitive. The first is to give up on the Law. This was the line taken by A.N. Prior in his 1960 paper ‘The Autonomy of Ethics’:

It has often been said - in fact, I have said it quite emphatically myself - that it is impossible to deduce ethical conclusions from non-ethical premises. This now seems to me to be a mistake."²

---

¹Thank you to JC Beall, Antony Eagle, Alan Hazen, Charles Pigden, Graham Priest, Greg Restall, Gideon Rosen, Mark Schroeder, Gerhard Schurz, Scott Soames, Jeff Speaks, and Nathan Williams for discussion and encouragement, and also to those who contributed to the discussion of versions of this paper at the 2002 AAP in Christchurch and at the January 2003 ‘Hume, Motivation, ‘Is’ and ‘Ought’ conference at the University of Otago, New Zealand.

²A point of clarification: Hume’s Law does not deny that a normative sentence can be derived from a set that contains both normative and descriptive sentences, rather it requires that at least one of the premises be normative. One way to make this idea vivid is to think of normativity as a virus. If the conclusion has contracted it, it must have caught it from one of the premises. I will refer to this thought later as ‘the virus intuition’.

²[Prior, 1960]
The other option is to come up with a more careful formulation of the law, in effect to reformulate the law so that it avoids the counterexamples.\textsuperscript{3} The challenge associated with this second option is that of finding a new formulation of the law which avoids all the counterexamples, and of making it plausible that this is no mere \textit{ad hoc} rescue attempt motivated by counterexamples alone, but was the intuitive content of Hume’s Law all along.

This paper argues that we should take up the challenge of reformulation. In section 1 the proposed counterexamples to Hume’s Law are reviewed, in section 2 the similarity between Hume’s law and some other, mostly platitudinous, inference barrier theses is pointed out. In section 3 I show that all the proposed counterexamples to Hume’s Law have appropriately similar ‘sister’ arguments which can be run against the other barrier theses. Since we would never take these to show that the other barrier theses should be relinquished, but only that we had yet to find the right way to express them, I argue in the final section that we should treat Hume’s Law in the same way: attempt to formulate it more precisely, rather than give it up on the basis of the counterexamples.

1 Alleged Counterexamples To Hume’s Law

Prior’s Argument: In ‘The Autonomy of Ethics’ Prior proposed the following counterexample to Hume’s Law:

\textsuperscript{3}Given that the standard formulation of Hume’s Law is not all that precise there might be room for someone to proceed by providing definitions of terms in the law (e.g. ‘normative’ and ‘descriptive’) that were restrictive enough that - understood as demanded by these definitions - the law no longer conflicts with the ‘counterexample’ arguments. Someone who proceeded this way might want to claim that he had not really reformulated Hume’s Law, but just made its content clearer. But then, it seems to me that the line between clarification and reformulation is not all that sharp; even if one were to change the wording of the law, we might be tempted to say that this is what was meant (if not explicitly stated) all along. I will be treating all these kind of approaches as ‘reformulation’ responses to the counterexamples.
Tea-drinking is common in England.

Tea-drinking is common in England
or all New Zealanders ought to be shot. (1, VI)

One might doubt whether the conclusion to Prior’s argument is really a normative sentence, and thus whether this is really an argument with only descriptive premises and a normative conclusion. But if the conclusion is not normative, the following argument will do just as well:

Tea-drinking is common in England
or all New Zealanders ought to be shot.
Tea-drinking is not common in England.

All New Zealanders ought to be shot. (1,2 DS)

I take it that the sentence all New Zealanders ought to be shot counts as normative on any respectable understanding of that expression, so it seems that at least one of the above arguments must be a valid argument from descriptive premises to a normative conclusion.

**Material Implication:** There are also a set of counterexamples to Hume’s Law that draw on the distinctive features of material implication. If we use ‘N’ as a schematic sentence letter that may only be replaced by a normative sentence and ‘D’ as a schematic sentence letter that may only be replaced by a descriptive sentence, then the following valid arguments are counterexamples to Hume’s Law:

\[ D \land \neg D \vdash N \]
\[ D \vdash N \lor \neg N \]
\[ D \vdash \neg D \rightarrow N \]

**A Relevant Counterexample:** The use of the ‘paradoxes’ of material implication and disjunctive syllogism in the above arguments might suggest to
a certain kind of philosopher that Hume’s law can be straightforwardly reformulated using a relevant logic, e.g. ‘no structure containing only descriptive sentences relevantly implies a normative sentence.’ However there are counterexamples to this formulation too. If we assume for the moment that sets of normative and descriptive sentences are closed under negation (i.e., that the negation of a normative sentence is also a normative sentence and the negation of a descriptive sentence is also a descriptive sentence) and that all non-normative sentences are descriptive, then consider the following:

‘$D \lor N$’ relevantly implies ‘$N$’, so if Hume’s Law is true ‘$D \lor N$’ is normative, and hence, by our assumption, so is ‘$\neg(D \lor N)$’. But ‘$\neg D$’ is descriptive (using our assumption) and relevantly implies ‘$\neg(D \lor N)$’. Thus you can, relevantly, get an ‘ought’ from an ‘is’.

**Informal Counterexamples:** I take it that there are two kinds of good deductive argument. In one kind the validity of the argument is secured by its form. An example of such an argument would be:

All men are mortal.
Socrates is a man.
\[\text{Socrates is mortal.}\]

But an argument can be a good deductive argument without being a formally valid one, because the truth of the conclusion, given that of the premises, may be guaranteed by some conceptual link between the sentences, as in:

\[\text{Socrates is a bachelor.}\]
\[\text{Socrates is a man.}\]

All the alleged counterexamples to Hume’s Law considered so far have been formally valid, and this has enabled me to discuss argument forms at times as opposed to arguments composed of natural language sentences. But many

\[\text{4I first came across this argument in Gideon Rosen’s Spring 2001 graduate seminar at Princeton.}\]
of the counterexamples to Hume’s Law that can be found in the literature are conceptually, but not formally, valid.

For example, John Searle presents the following argument:

P1 Jones uttered the words “I hereby promise to pay you, Smith, five dollars.”
C1 Jones promised to pay Smith five dollars.
C2 Jones placed himself under (undertook) an obligation to pay Smith five dollars.
C3 Jones ought to pay Smith five dollars.

Those who accept that there is a conceptual link between what we desire and what we have reason to do might also accept the following as a valid argument from descriptive premises to a normative conclusion:

Jones wants the car to go faster.
If Jones puts pressure on the accelerator the car will go faster.
Jones has a reason to put pressure on the accelerator.

**Flurging:** The final counterexample that I will consider is due to Gideon Rosen. It uses a stipulative definition to introduce a new term, which is then used in an inference from a descriptive premise to a normative conclusion:5

---

5There is a view according to which metalinguistic sentences about the meanings of words are normative sentences. For example, on this view the sentence ‘Horse means HORSE’ (Where a word in capital letters refers to the meaning of that word, whether that be a property, a set or something else,) is a normative sentence. If the word were introduced using an explicit definition, then the defender of Hume’s law might respond by saying that the implicit premise in the argument (the definition) was normative, and that because of this the argument was no counterexample to Hume’s Law. The definition is not explicit however, but implicit. (This is the philosopher’s distinction between implicit and explicit definitions rather than the logician’s; on the former a definition is implicit just in case it uses the word rather than mentions it, on the later a definition is explicit just in case it has one of a small number of forms, e.g. ‘x is F iff...’ or ‘a= the F’.) The sentence that defines the word uses it to state an apparently descriptive fact. So the ‘definitions are normative’ response is not available in
**Definition 1 (To Flurg)** To **flurg** is to do something that one ought not to do in front of children.

Jones is in the presence of children.

Jones ought not to flurg.

One difference between the above arguments and the formal ones considered previously is that the conceptual ones have the appearance of being much more straightforward; there is less room for suspicion that they rely on counter-intuitive or ‘tricky’ inference forms in propositional logic.

However there is scope for a different suspicion. Someone might claim that there is no real conceptual link (such as that between ‘bachelor’ and ‘man’), guaranteeing the validity of the argument. This response would be hostage however, to the opponent of Hume’s law coming up with new terms to use in the argument, for which there is a conceptual link.\(^6\) Moreover, it will not work against all the arguments above. Searle, for example, turns his argument into a formally valid one by adding the linguistic facts he assumes:

1a Under certain conditions C anyone who utters the words (sentence) “I hereby promise to pay you, Smith, five dollars” promises to pay Smith five dollars.”

2a All promises are acts of placing oneself under (undertaking) an obligation to do the thing promised.

---

\(^6\)This strategy will not work against the philosopher who claims that there are never conceptual links like this that validate arguments. But such a philosopher can skip this section - there is no need to defend Hume’s Law against conceptually valid arguments to her.
2 Inference Barrier Theses

Hume’s Law is an inference barrier thesis; it says that you cannot get from premises taken from a certain set to a conclusion taken from another. It is not the only such thesis. Indeed, Hume seems to have made something of a career out of identifying and insisting upon inference barrier theses. Here are three more, capriciously named after philosophers who have maintained them:7

Russell’s Law: You can’t get a general or universal sentence from particular ones.

In his ‘Lectures on Logical Atomism’ Bertrand Russell provides a particularly clear statement of this law:

You can never arrive at a general proposition by inference from particular propositions alone. You will always have to have at least one general proposition in your premises. 8

Russell’s point here is, I believe, uncontroversial. His endorsement of the particular/general inference barrier is notable for its clear statement of the virus intuition. Just as a normative conclusion had to be ‘infected’ with normativity by some premise, so Russell maintains that general conclusions must have

7Hume’s Law itself is so-named because of the following famous passage from Hume’s Treatise, (though in fact it is controversial among Hume scholars whether Hume really endorses the law here). “In every system of morality, which I have hitherto met with, I have always remark’d, that the author proceeds for some time in the ordinary way of reasoning, and establishes the being of a God, or makes observations concerning human affairs; when of a sudden I am surpriz’d to find, that instead of the usual copulations of propositions, is, and is not, I meet with no proposition that is not connected with an ought, or an ought not. This change is imperceptible; but is, however, of the last consequence. For as this ought, or ought not, expresses some new relation or affirmation, ‘tis necessary that it shou’d be observ’d and explain’d; and at the same time that a reason should be given, for what seems altogether inconceivable, how this new relation can be a deduction from others, which are entirely different from it.” [Hume, 1978, Treatise III, i, 3]

8[Russell, 1918, P.101]
caught their generality from an infected premise.

Hume’s Second Law: You can’t get a sentence about the future from sentences about the past or present.

Hume writes:

all inferences from experience suppose, as their foundation, that the future will resemble the past...If there be any suspicion that the course of nature may change, and that the past may be no rule for the future, all experience becomes useless, and can give rise to no inference or conclusion. It is impossible, therefore, that any arguments from experience can prove this resemblance of the past to the future; since all these arguments are founded on the supposition of that resemblance.\(^9\)

Here Hume makes a claim about what the infected premise is. It is the one which says that the future will resemble the past. Since he thinks that no inference from statements about the past and present to those about the future can be valid without this premise, there will be no such valid inference which does not contain an infected premise.

Kant’s Law: You can’t get sentences saying that something is necessarily the case from sentences which say how things actually are.

Though I cannot find a suitably clear and precise statement of this law in Kant it seems clear to me that this barrier is an important theme in his work.

It is also perhaps the inference barrier (of these three) that we are most inclined to doubt. I, for one, think that It is necessary that Hesperus is Hesperus follows from Hesperus exists.\(^10\) But do I think that those eminent philosophers

\(^9\)[Hume, 1777, IV,II.32]

\(^10\)This, I believe (although I also believe what I believe to be contentions) is because proper
who appealed to the inference barrier were mistaken? No. This inference barrier is closely linked in the history of philosophy to the problem of how it is that we can know the laws of nature, given the observations that are available to us. On one traditional conception such laws claim that some connection is necessary and what philosophers have denied the validity of are inferences of the following form:

\[(Nec) \quad F a_1 \land G a_1 \ldots F a_n \land G a_n \vdash \square(\forall x)(F x \rightarrow G x)\]

Just because all the F’s so far have been G’s, they say, it doesn’t follow that all F’s have to be G’s. And of course, they are right about this. It seems to me that the important observation that there is something interesting going on when we have sentences containing identity should not cause us to give up on Kant’s Law completely. Observations about identity tell us that the naive formulation of the law is too strong. What we should now think is that it was just a first stab at expressing an important thesis.

If you put these three barrier theses together - no all from an is, no will from a was, not must from an is - you get the problem of induction in its strongest form. Now everyone understands the problem of induction and accepts that there is an issue about how to get laws (if not necessary ones, at least general and future directed ones) from data - particular observations about the actual world now and in the past. To the extent that you see what philosophers have been concerned about here, you recognize these inference barriers.

---

names are non-descriptional - they are not synonymous with descriptions and their referent in a possible world is not determined by a description associated with the name by a speaker - and so there is no mechanism whereby the extension of the name may change from world to world. This means that to determine the extension of a name in this world is to determine it in all possible worlds and what it is like in that possible world plays no part in determining the extension there. In short, to determine the extension of a proper name is to determine its intension. So, in a trivial way, proper names have information about all other possible worlds (about what is necessary) built in.
3 Collateral Damage

The main point that I want to establish in this paper is that all the putative counterexamples to Hume’s Law (that have been discussed in this paper) have sister arguments which can be run against the other three inference barrier theses.

In the case of the formal arguments this is very straight-forward, since each of the arguments was a theorem of, or an instance of a theorem of, some sentential calculus and general, future and necessity-style sentences can be used to interpret sentence letters. Thus where A.N. Prior, for example, gave us:

\[
\text{Tea-drinking is common in England.}
\]

\[
\text{Tea-drinking is common in England or all New Zealanders ought to be shot.}
\]

we note that the following arguments are also truth-preserving:

\[
\text{Bird A is white.}
\]

\[
\text{Bird A is white or all ravens are black.}
\]

\[
\text{The sun has risen every day so far.}
\]

\[
\text{The sun has risen every day so far or the future will resemble the past.}
\]

\[
\text{Event A was followed by event B}
\]

\[
\text{Event A was followed by event B or it is necessary that B follows A}
\]

Should someone suggest that the conclusions are not really of the relevant conclusion kind (i.e. not really future, necessity-style or general) then the next move can be the same as in the Hume’s Law case. If \textit{Bird A is white or all ravens are black} is not a general statement, then the following argument will serve just as well as a counterexample to Russell’s law:
Bird A is white or all ravens are black.

It is not the case that bird A is white.

All ravens are black. (1,2 DS)

Moreover, just as the idiosyncrasies of material implication provide arguments from members of the premise kind to members of the conclusions kind for Hume’s Law, so they will with the other barrier theses too. For example:

\[ Ma \land \neg Ma \vdash \forall x M x \]

\[ S \land \neg S \vdash GS \]

\[ S \land \neg S \vdash \Box S \]

are theorems of first order classical logic, T and K respectively. The key steps of the argument against the relevant formulation are also trivial to replicate.

There are merely conceptually valid inferences from statements of the premise kind to statements of the conclusion kind for each of the inference barrier theses too. For example:

The only chair in the room is black.

All the chairs in the room are black.

Hesperus exists.

Necessarily, Hesperus is Hesperus.

\[^{11}\text{In the above and what follows ‘M’ is a predicate letter, ‘S’ a sentence letter, ‘\Box’ a necessity-style operator, and ‘P’ and ‘G’ are sentential operators from tense logic with the informal semantics ‘it was at some time in the past the case that’ and ‘in the future it will always be the case that’ respectively. Towards the end of this section ‘O’ is an operator with informal semantics ‘it ought to be the case that’. The arguments in the first three subsections below are theorems of the most standard, or alternatively the weakest appropriate system (the classical first-order calculus, K or T).}\]

11
Dracula is immortal.

At all future times it will be the case that Dracula is alive.  

It is less obvious how the flurg argument can be adapted for use in the generality, time and necessity cases, but this is perhaps just because it is less obvious how the flurg example works. The form of the definition of flurg is:

$$\forall x(\text{Fl}(x) \Leftrightarrow \neg \text{D}(x))$$

where ‘\text{Fl}(x)’ is the predicate ‘flurg’, ‘\text{D}(x)’ is ‘x is done’ and ‘\neg \text{D}(x)’ is ‘there are children around’. The argument against Hume’s Law then has the form:

$$\neg \text{D}(x) \vdash \forall x(\text{Fl}(x) \rightarrow \neg \text{D}(x))$$

By replacing the ‘\neg’, and (for plausibility) ‘\forall’ and ‘\forall \neg’, we can generate schemata for definitions that will allow counterexamples to each of the barriers discussed above, and translate these back into English. For example, let ‘\forall \neg’ be replaced with ‘colour is determined by chemical structure’, ‘\neg \text{D}(x)’ by ‘is blue’ and replace ‘\forall’ with ‘\square’ and ‘flurg’ with ‘eternal blue’. This gives us the following:

**DEFINITION 2 (ETERNAL BLUE)** Something is *eternal blue*, iff, providing colour is determined by chemical structure, it will be blue at all future times.

Colour is determined by chemical structure.

Eternal blue things will be blue at all future times.

Repeating the process for the necessity case gives us:

---

\[12\] For the sake of argument, I’ll assume that vampires are both dead and alive (‘the living dead’), and take the best gloss on ‘is immortal’ to be ‘will always be alive’ rather than ‘will never die’, though I’m sympathetic to the thought that the fact that vampires are supposed to be both dead and immortal shows up a certain confusion in the myth.
**Definition 3 (Determinedly Earnest)** Someone is *determinedly earnest* iff, if character traits are inherited, he is necessarily earnest.

Character traits are inherited

Anyone who is determinedly earnest is necessarily earnest.

The generality case is more complicated since quantifiers operate on sentential functions rather than sentences and so we will not get well-formed statements if we replace our operators with quantifiers. But we can look at, and extrapolate from, more general features of the *flurg* argument. The right-hand side of the definition consists of a condition, under which a statement of the conclusion kind will hold. In the generality case the conclusion kind is general statements. So we might define the predicate *projectable pink* as follows:

**Definition 4 (Projectable Pink)** Something is *projectable pink* iff, if it is quartz, everything that is quartz is pink.

It then seems straightforward to formulate an argument from a particular case to a general conclusion:

This is quartz.

If it is projectable pink, all quartz is pink.

### 4 The Defence

So that was the main point of this paper: a number of putative counterexamples have been formulated against Hume’s Law. You might, quite reasonably, like Prior, have thought that these should lead us to relinquish the law. But, as I have shown, arguments with all the same salient features can be formulated against other inference barrier theses, and, it seems to me, it would not be reasonable to give up on these. *Clearly*, there is something to these theses, it’s just that we don’t yet have the right formulations. But what follows from this?
Well, two things. First, I think this shows that the argument from the existence of the purported counterexamples to the falsity of Hume’s Law is incomplete. The detractor from Hume’s Law owes us an argument to the effect that the thesis to which he has counterexamples is really a good formulation of the Law. Otherwise we can reasonably wonder whether the best formulation of Hume’s Law - just like the best formulations of Russell’s, Kant’s and Hume’s second laws - won’t be one that avoids conflict with the arguments that have been given as counterexamples.

And second, I think the observation that the same kind of counterexamples can be run against such platitudes gives us a good company argument for Hume’s Law. So there is a case to be made against Hume’s Law, but so what? There are other, perfectly good inference barrier theses that are in exactly the same position. If someone were to suggest that Russell was completely wrong in saying that you can’t get general statements from particular ones because ‘\( Fa \lor \neg Fa \vdash \forall x Fx \)’ is a valid argument, the objector would be thought confused, or at best a frightful pedant with an implicature bypass; Russell’s statement is a somewhat loose way of stating something that is clearly right. The same can be said for Hume’s 2nd Law and Kant’s Law; so why single out Hume’s Law for special treatment?\(^{13}\)

Perhaps that last question can be answered. Good company arguments can be good arguments, but they are not deductively valid arguments and they are defeasible. So the next step, for both opponents and defenders, must be to find the right formulation of Hume’s law.

\(^{13}\)Adam Elga suggested to me that someone might take my section 3 to show, not that Hume’s Law was in good company, but that the other three inference barriers are false too. I suppose he’s right - they might and I’ve been assuming that my readers intuitions are such that the respectability of the other theses would rub off on Hume’s Law, and not that the others would suddenly be seen to have fallen in with a bad crowd. But though one might take that line, I want to emphasis just how radical it is: restrictions on universal generalisation are enshrined in the natural deduction rules for first order logic; should anyone reject these, they are welcome to the inverted version of the argument.
References


