

COMMENTS ON  
GREG RESTALL & GILLIAN RUSSELL'S  
"BARRIERS TO INFERENCE"

Peter B. M. Vranas  
vranas@iastate.edu  
Iowa State University

2<sup>nd</sup> Formal Epistemology Workshop, 27 May 2005

# OVERVIEW

---

## Part 1

HUME'S LAW:  
NORMATIVITY FORMULATION

## Part 2

TWO PROBLEMS  
WITH HUME'S LAW

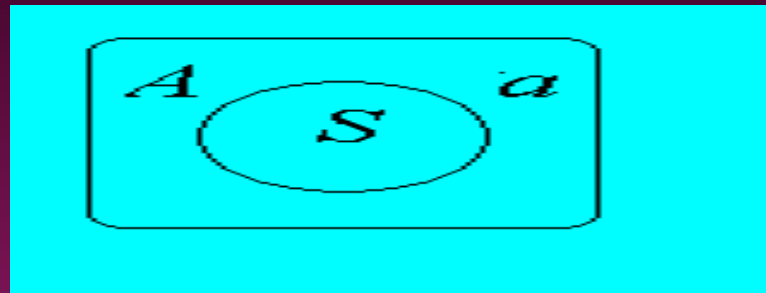
## Part 3

TWO RESPONSES  
TO THE SECOND PROBLEM

# HUME'S LAW: NORMATIVITY FORMULATION

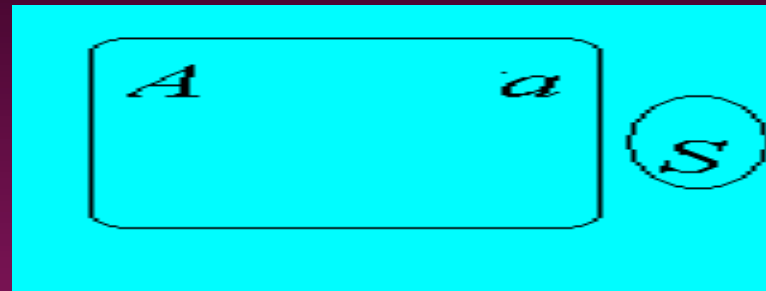
- Hume's Law: No satisfiable set of *descriptive* sentences entails a *normative* sentence.
- A sentence  $A$  is descriptive iff it is *preserved* under normative translations: for every model  $M$  that satisfies  $A$ , every normative translation of  $M$  also satisfies  $A$ .
- A sentence  $A$  is normative iff it is *fragile* under normative translations or extensions: for every model  $M$  that satisfies  $A$ , some translation or extension of  $M$  does not satisfy  $A$ .

# PRESERVATION & FRAGILITY: NORMATIVE TRANSLATIONS



- $S$  is the set of ( $a$ -) morally satisfactory worlds.
- $A$  is obligatory iff it is true in *every* morally satisfactory world:  $OA \leftrightarrow S \subseteq A$ .
- $A$  is permissible iff it is true in *some* morally satisfactory world:  $PA \leftrightarrow S \cap A \neq \emptyset$ .
- A normative translation changes  $S$ . So  $A$  remains true (is *preserved*), but  $PA$  and  $OA$  (if  $A^C \neq \emptyset$ ) may become false (are *fragile*).

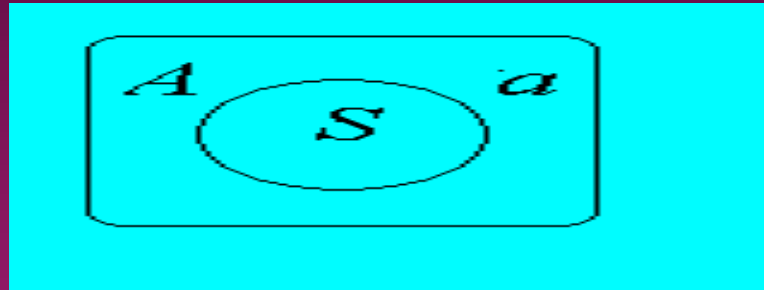
# PRESERVATION & FRAGILITY: NORMATIVE TRANSLATIONS



- $S$  is the set of ( $a$ -) morally satisfactory worlds.
- $A$  is obligatory iff it is true in *every* morally satisfactory world:  $OA \leftrightarrow S \subseteq A$ .
- $A$  is permissible iff it is true in *some* morally satisfactory world:  $PA \leftrightarrow S \cap A \neq \emptyset$ .
- A normative translation changes  $S$ . So  $A$  remains true (is *preserved*), but  $PA$  and  $OA$  (if  $A^C \neq \emptyset$ ) may become false (are *fragile*).

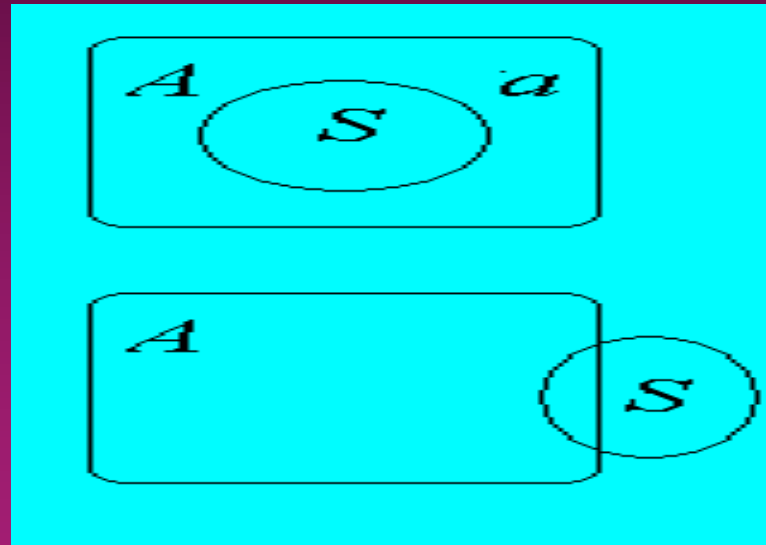
# PRESERVATION & FRAGILITY: NORMATIVE EXTENSIONS

- A normative extension adds new worlds, including morally satisfactory ones.



# PRESERVATION & FRAGILITY: NORMATIVE EXTENSIONS

- A normative extension adds new worlds, including morally satisfactory ones.



- So  $A$  and  $PA$  remain true (are *preserved*), but  $OA$  may become false (is *fragile*).

# PART 2

## Part 1

HUME'S LAW:  
NORMATIVITY FORMULATION

## Part 2

TWO PROBLEMS  
WITH HUME'S LAW

## Part 3

TWO RESPONSES  
TO THE SECOND PROBLEM



# A TECHNICAL PROBLEM WITH HUME'S LAW

- The problem: Hume's Law is false because  $\Box A$  (which is descriptive because it is preserved under normative translations) entails  $OA$  (which is normative if  $A$  is not a tautology): in every model in which  $A$  is true at every world,  $A$  is true at every morally satisfactory world.
- The glitch: Lemma 26 is false because  $\Box A$  is descriptive but not preserved under extensions.
- Restall & Russell might reply:  $\Box A$  is not in their language. But then they should show that the problem disappears in a richer language.

# PRIOR'S OBJECTION TO HUME'S LAW

- Prior's objection: Take a descriptive sentence  $D$  and a normative sentence  $N$ . Consider  $D \vee N$ .
- ① If  $D \vee N$  is normative, Hume's Law is false because  $\{D\}$  entails  $D \vee N$ .
- ② If  $D \vee N$  is descriptive, Hume's Law is false because  $\{D \vee N, \sim D\}$  entails  $N$ .
- Restall & Russell's reply: Prior's objection relies on a false dichotomy.  $D \vee N$  may be *neither* descriptive *nor* normative.

# WHY $A \vee OA$ IS NEITHER DESCRIPTIVE NOR NORMATIVE

- 1 Take a model in which  $A$  is false but  $OA$  is true (so  $A \vee OA$  is true). Then in some translation  $OA$  becomes false and  $A$  remains false; so  $A \vee OA$  becomes false and is thus not translation-preserved (i.e., not descriptive).
- 2 Take a model in which  $A$  is true. Then  $A \vee OA$  is true and remains true in every translation or extension. So  $A \vee OA$  is not translation- or extension-fragile (i.e., not normative).

# A SUBSTANTIVE PROBLEM WITH HUME'S LAW

- The problem: Paradigmatically moral sentences are neither descriptive nor "normative". E.g.:
  - ◆ If he asks, you ought to tell him:  $\sim A \vee OT$ .
  - ◆ Every citizen ought to vote:  $\forall x(Cx \rightarrow OVx)$ .
  - ◆ No student may cheat:  $\forall x(Sx \rightarrow \sim PCx)$ .
- Importance of problem: Hume's Law is silent about such sentences, but we want a law which says that such sentences don't follow from nonmoral ones. So Restall & Russell have in effect retreated to a weakened barrier thesis.

# PART 3

## Part 1

HUME'S LAW:  
NORMATIVITY FORMULATION

## Part 2

TWO PROBLEMS  
WITH HUME'S LAW

## Part 3

TWO RESPONSES  
TO THE SECOND PROBLEM

# RESPONSE 1: INTUITIVE ARGUMENT FOR FRAGILITY

- The response: Intuitively, fragility captures normativity. E.g.: (1) it is obligatory that X not hit Y, but (2) it is *not* obligatory in an "extension" in which they are training, and (3) it *is* obligatory in a further "extension" in which Z would kill both if X were to hit Y.
- My reply: ❶ This justifies fragility at most for  $OA$ , not for  $PA$  or  $A \vee OA$ . ❷ (2) and (3) cannot both hold: if  $OA$  is false in a model, it's false in *every* extension. So the argument is suspect.

## RESPONSE 2: HUME'S LAW IS THE BEST ONE CAN DO

- The response: Mixed sentences, although admittedly moral, *must* be excluded from *any* version of Hume's Law because they follow trivially from paradigmatically nonmoral sentences (Prior): "No one is a citizen" entails "Every citizen ought to vote".
- My reply: One *can* do better. Recent work focuses on versions of Hume's Law in terms of "non-vacuous" entailment. See Gerhard Schurz, *The Is-Ought Problem*, Kluwer 1997.