

Refutation of a template for converting counterexamples to necessitarianism to internalism

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Abstract: From
Therefore a *non* tautologous fragment of the universal logic VŁ4.

We assume the method and apparatus of Meth8/VŁ4 with Tautology as the designated proof value, **F** as contradiction, **N** as truthity (non-contingency), and **C** as falsity (contingency). The 16-valued truth table is row-major and horizontal, or repeating fragments of 128-tables, sometimes with table counts, for more variables. (See ersatz-systems.com.)

LET ~ Not, ¬ ; + Or, ∨, ∪, ∪ ; - Not Or; & And, ∧, ∩, ∩, ; \ Not And;
> Imply, greater than, →, ⇒, ⇨, >, ⊃, ≻ ; < Not Imply, less than, ∈, <, ⊂, ⊆, ≪, ≲ ;
= Equivalent, ≡, :=, ⇔, ↔, ≐, ≈, ≅ ; @ Not Equivalent, ≠ ;
% possibility, for one or some, ∃, ∂, M; # necessity, for every or all, ∀, □, L;
(z=z) **T** as tautology, **T**, ordinal 3; (z@z) **F** as contradiction, ∅, Null, ⊥, zero;
(%z>#z) **N** as non-contingency, Δ, ordinal 1; (%z<#z) **C** as contingency, ∇, ordinal 2;
~(y < x) (x ≤ y), (x ⊆ y), (x ⊆ y); (A=B) (A~B).
Note for clarity, we usually distribute quantifiers onto each designated variable.

From: Skiles, A. (2019). Metaphysical grounding and necessity. [supposed to be a dictionary entry]
[academia.edu/39395740/_Metaphysical_Grounding_and_Necessity_?email_work_card=view-paper](https://plato.stanford.edu/39395740/_Metaphysical_Grounding_and_Necessity_?email_work_card=view-paper)

Grounding relates to necessity in the modal import of grounding, such as what facts ground what facts, for disputes of necessitarianism versus contingentism and disputes of internalism versus externalism. Necessitarianism does not entail internalism, and contingentism does not entail externalism. Arguments to support contingentism may also support internalism in a general template for converting counter-examples to necessitarianism into counter-examples to internalism. For an example:

Suppose that [p] grounds, but does not necessitate, a certain fact [q]. (3.1)

$((p>q)\&\sim(\#(p>q)=(s=s)))) ;$ (3.2)

Remark 3.2: Eq. 3.1 is a trivial tautology.

Let [r] be any arbitrarily chosen fact that is not modally or ground-theoretically connected to either [p] or [q]. (4.1)

$\sim(r>(p+q))=(p=p) ;$ **FFFF TFFF FFFF TFFF** (4.2)

Now consider the fact [(p & q) + r]. (5.1)

$((p\&q)+r) ;$ **FFFF TTTT FFFF TTTT** (5.2)

Remark 6.0: The conjecture becomes Eqs. 3.1 and 4.1 implies 5.1. (6.1)

$((((p>q)\&\sim(\#(p>q)=(s=s))))\&\sim(r>(p+q)))>((p\&q)+r) ;$ (6.2)

Remark 6.2: Eq. 6.1 is a trivial tautology as the starting assumption.

Given widely held principles governing the grounding of logically complex facts ... , in a possible situation where [p] grounds [q], we have it that [p] alone grounds [(p & q) + r]. (7.1)

$$\%(p>q)>(\#p>((p\&q)+r)) ; \quad (7.2)$$

Remark 7.2: Eq. 7.1 is another trivial tautology.

Yet given our starting assumptions, there is also a possible situation in which [p] holds but not [q], yet nonetheless [r] holds, and thus one in which [p] and [(p & q) + r] both hold even though the former does not ground the latter. (8.1)

Remark 8.1: We write this as Eq. 6.1 (the starting assumptions) implies 7.1 to imply the consequent above.

$$\begin{aligned} & (((((p>q)\&\sim(\#(p>q)=(s=s)))\&\sim(r>(p+q)))>((p\&q)+r))>(\%(p>q)>(\#p>((p\&q)+r)))) > \\ & (((p\&\sim q)\&\#r)\&\sim(p>((p\&q)+r))>(p\&((p\&q)+r)))) ; \\ & \quad \mathbf{FFFF\ FFNF\ FFFF\ FFNF} \quad (8.2) \end{aligned}$$

[M]ethods of arguing for externalism make no appeal to contingentist-supporting considerations, and are compatible with its denial. For example, a putative instance of grounding early pre-emption [where word meanings are irrelevant]:

if [p1] holds but not [q1], then [p1] would ground [r]—but only by way of [p1]’s grounding [p2]. (10.1)

LET p, q, r, s, t: p1, q1, r, p2, q2

$$(p>r)>((p\&\sim q)>(p>r)) ; \quad \mathbf{TTTT\ TTTT\ TTTT\ TTTT} \quad (10.2)$$

if [p1] holds but [q1] holds too, then [q1]’s grounding of [r] by way of [q1]’s grounding [q2] ‘pre-empts’ [p1]’s grounding of [r], as [q2]’s holding is incompatible with [p1]’s grounding [p2]. (11.1)

$$\begin{aligned} & (t@(p>s))>((p\&q)>(((q>t)>(p>r))>(q>r))) ; \\ & \quad \mathbf{TTTT\ TTTT\ TTTT\ TTTT} \\ & \quad \mathbf{TTTT\ TTTT\ TTTT\ TTTT} \quad (11.2) \end{aligned}$$

Yet even if this is a potential counterexample to internalism, it need not be a counterexample to necessitarianism: even though [p1]’s grounding of [r] is pre-empted, it is still a case in which [p1] and [r] both obtain, and thus no threat has yet been raised to [p1]’s necessitating [r]. (12.1)

$$\begin{aligned} & (((q>t)>(p>r))>(p>r))>\#(p>r) ; \\ & \quad \mathbf{NFNT\ NNNN\ NFNT\ NNNN} \\ & \quad \mathbf{NFNF\ NNNN\ NFNF\ NNNN} \quad (12.2) \end{aligned}$$