Refutation of reversing the counterfactual analysis of causation

Abstract: The seminal formula of C causes E iff (~C □→ ~E) is *no*t tautologous, that is, it is *not* a theorem, from which the conjecture is derived. Hence reversing the counterfactual analysis of causation is refuted. Therefore the conjecture forms 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, ⊤, 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); (A=B) (A~B).
Note for clarity, we usually distribute quantifiers onto each designated variable.

From: Broadbent, A. (2007). Reversing the counterfactual analysis of causation. abbroadbent@uj.ac.za www.academia.edu/attachments/1859485/download_file?st=MTU1ODQ1OTY3Miw3NS43MS4xNjEuMTQ2LDc2MDk1MzU4&s=swp-toolbar&ct=MTU1ODQ1OTY3MiwxNTU4NDU5NjgzLDc2MDk1MzU4

Abstract: The counterfactual analysis of causation has focused on one particular counterfactual conditional, taking as its starting point the suggestion that C causes E iff (~C □→ ~E). (1.1)

Remark 1.1: We interpret (~C □→ ~E) to mean □(~C → ~E).

LET p, q: C, E.

#(~p>~q)>(p>q) ; TCTT TCTT TCTT TCTT (1.2)

Eq. 1.2 as rendered is *no*t tautologous, that is *not* a theorem, from which the conjecture is derived. Hence reversing the counterfactual analysis of causation is refuted.