

The True Causes & Effects Notes

1. Topic:

Singular causation (Fred's smoking caused his cancer); *not* general causation (smoking causes cancer)

2. Assumption:

Causation is *contingent*: sufficient causes don't entail their effects; causation can be indeterministic.

3. Target: singular causes *c* and effects *e* are 'events':

(i) particulars; (ii) things with properties; (iii) changes in things; or (iv) tropes (property instances).

4. Assumptions about target:

(i) Causes *c* and effects *e* are non-abstract empirical entities, with limited locations in space and time.
(ii) All singular causation is statable in '*c* causes *e*' format.

5. Implications of assumptions:

(i) '*c* causes *e*' entails that *c* and *e* exist in the actual world.
(ii) '*c* causes *e*' is *transparent*. E.g.
'Caesar's stabbing caused his death',
'Caesar's stabbing = the stabbing in the Theatre of Pompey on the Ides of March', and
'Caesar was Rome's Dictator' entail
'The stabbing in the Theatre of Pompey on the Ides of March caused the death of Rome's Dictator'.

6. Case against '*c* causes *e*': (i) '*c* affects *e*':

Fred's injection caused his death *to be painless*; Fred's injection didn't cause his *death*.
So Fred's painless death \neq Fred's death.

7. Case against '*c* causes *e*': (ii) *identities* as causes or effects:

Causes: JFK's being US President *caused* him to be shot;
JFK's being Joseph Kennedy's second son *didn't* cause him to be shot.
Effects: Trump's winning the 2020 election *would* cause Trump to be the 2021 US President;
Trump's winning the 2020 election *wouldn't* cause Trump to be Trump.

8. Case against '*c* causes *e*': (iii) *inactions* and other *non-events*:

Fred's *not* being injected caused him to die painfully; Fred's operation caused him *not* to die of cancer.

9. 'Q because P' format:

'Q because P' entails 'P' and 'Q': i.e. causes and effects are *facts* in the innocuous sense that
It's a *fact* that P if and only if 'P' is *true*.

10. Objection (i) to 'Q because P': it *doesn't* entail that *explanation is causal*.

Reply: (a) 'Q because P' is causal if it's shorthand for 'P's being the case causes Q to be the case';
(b) 'Q because P' shows that causes *explain* effects, but (since it's asymmetrical) not *vice versa*.

11. Objection (ii) to 'Q because P': P and Q *facts have no spacetime locations*.

Tenseless and non-indexical 'P' and 'Q' are true everywhere and always.
Reply: location is in *content*: 'Trump is US President in 2021 because he won 2020 US election';
'JFK was shot because he was [*already*] US President'; 'Caesar died because he was stabbed [*earlier*]'

12. Case for 'Q because P': (i) implied by principal theories of causation.

Theories: (a) *covering law*, (b) *counterfactual*, and (c) *probabilistic*:
(a) '*Gx* because *Fx*' = 'All *Fs* are *Gs*' – *sufficient* causation;
(b) '*Gx* because *Fx*' = 'If *x* wasn't *G* it wouldn't be *F*' – *necessary* causation;
(c) '*Gx* because *Fx*' = 'If *Fx* then $ch(Gx)=p$ [& if $\neg Fx$ then $ch(Gx)<p$] & $Fx \wedge Gx$ ' – *chancy* causation.

13. Case for 'Q because P': (ii) it can express *causing/affecting* distinction

Fred *dies* because *he has cancer*; Fred *dies painlessly* because *he's given a painkilling injection*.
'Fred dies painlessly' \models 'Fred dies'.

14. Case for ‘Q because P’: (iii) it can express *identity* causes and effects:

‘Trump is the 2021 US President because he wins the 2020 election’ *doesn’t* entail

‘Trump is Trump because he wins the 2020 election’.

‘JFK was shot because he was US president’ & ‘JFK was Joseph Kennedy’s second son’ *don’t* entail

‘JFK was shot because he was Joseph Kennedy’s second son’.

15. Case for ‘Q because P’: (iv) it can express causation by and of *non-events* and *inactions*:

Fred dies in pain because he *doesn’t* get painkiller; Fred *doesn’t* die of cancer because he has operation.

16. Case for ‘Q because P’: (v) facts have negations:

Facts: ‘Fred doesn’t die’ \models ‘Fred doesn’t die *painlessly* & Fred doesn’t die *painfully*’.

Events: Fred’s non-death would have to be both *painless* and *painful*.

17. Transparency:

Caesar died because he was stabbed & there was a stabbing of Caesar & there was a death of Caesar: so

Caesar’s stabbing caused his death.

Caesar’s stabbing = the stabbing in the Theatre of Pompey & Caesar’s death = the Dictator’s death: so

The stabbing in the Theatre of Pompey caused the Dictator’s death.

18. Opacity:

‘Q because P’ can be opaque because it’s not a *complete* truth function of ‘P’ and ‘Q’.

19. Opaque causation of action:

Caesar is *both* Calpurnia’s husband *and* the would-be Emperor.

Brutus *believes* that Caesar is Calpurnia’s husband & that Caesar is the would-be Emperor. But

‘Brutus stabs Caesar because he believes Caesar is the would-be Emperor’ is *true*;

‘Brutus stabs Caesar because he believes Caesar is Calpurnia’s husband’ is *false*.

20. Ontological postscript (i) non-maximalist truthmaking:

Only *some* ‘primary’ truths have non-propositional truthmakers, which include:

things having *natural properties* (and relations), *events* having *durations*; spacetime *regions*’ curvatures.

Complete truth functions of primary propositions, including

negations, disjunctions, conjunctions

don’t need their own [non-propositional] truthmakers to make them true: e.g.

if a primary ‘V’ is false, ‘ $\neg V$ ’ is made true by the *non-existence* of ‘V’s truthmaker.

21. Ontological postscript (ii) ‘Q because P’ ’s truthmakers (TMs):

‘Q because P’ entails ‘P’ and ‘Q’, which may or may not need truthmakers.

‘Q because P’ *isn’t* a complete truth function of ‘P’ and ‘Q’, so it *does* need a truthmaker.

‘*o* accelerates at A m/sec² because F Newtons is applied’: TM is *o*’s having mass $M=F/A$ kg.

‘*o doesn’t* accelerate because *no* force is applied’: TM is *o*’s having *a* mass.

‘Salt dissolves because it’s immersed in water’: TM is salt’s properties that dispose it to dissolve in water.

‘Salt *doesn’t* dissolve, because it’s *not* in water’: TM is salt’s properties that dispose it *not* to ‘dissolve’ in air.