## D. Kutach, Causation and Its Basis in Fundamental Physics Chs. 8 and 9, Culpable Causation and The Psychology of Culpable Causation

#### a) Place within the book as a whole

The Three Conceptual Layers of Causation

Layer	Subject	Metaphysical Status	Standards of Adequacy
Тор	Non-metaphysical Aspects	Derivative	Relaxed
Middle	Derivative metaphysics	Derivative	Strict
Bottom	Fundamental Metaphysics	Fundamental	Strict

Culpable causation (per se) belongs to the top layer, making it (itself) concerned with non-metaphysical aspects (though this does not mean that when we are discussing culpable causation we are not also interested in metaphysical issues)

Kutach has (at least) two chracterisations for the 'non-metaphysical'-ness of these aspects

- a) having to do with features of our cognition rather than with 'what is out there in reality': "The first [scientific investigation] explores the empirical phenomena related to causation as something 'out there in reality', what ultimately becomes the metaphysics of causation. The second explores further aspects of casation that are based on how creatures think about causation." (19 f.)
- b) application of relaxed rather than strict standards of adequacy: "fundamental reality is consistent, and ... any apparent conflicts in a metaphysical theory must be ameliorated because there is no other discipline to which metaphysicians can delegate an apparent conflict for amelioration. Because metaphysics ... primarily concerns fundamental reality and secondarily anything in derivative reality that is so closely related to fundamental reality that no other identifiable discipline can reasonably be expected to ameliorate its apparent conflicts, metaphysics needs to avoid having any genuine conflicts. The many special sciences employing causal notions, on the other hand, can get by just fine using the relaxed standards that allow for more flexibilty and imprecision in one's theories. There is always place for them to delegate apparent conflicts ..." (267)

Still, the enquiry on this level is meant to be an 'empirical analysis' in Kutach's sense (i.e. one which aims at identifying scientifically improved concepts of X, Z f.), rather than an 'transcendental' enquiry, which concerns, especially (1) the psychology of causation, (2) the role of particular causes in the explanatory practices in the special sciences, and (3) causal modelling that is sufficiently remote from the character of fundamental reality (17).

[One worry: is that really all that Kutach is doing in chapters 8 and 9? Kutach says from the start that there is bound to be a significant mismatch between what we can expect from a psychologically oriented empirical analysis – which is what we are engaged in on the 3<sup>rd</sup> level – and from the

empirical analysis aimed at explaining effective strategies (1<sup>st</sup> level) (18); but to what extent could an overly large divergence/lack of connection 'falsify' or undermine our concept culpable cause?]

## b) Culpable causes

"A culpable cause of some event e is an event that counts as 'one of the causes of e' in the sense employed by metaphysicians who study causation. 'Culpable cause' is not a technical term but merely a label for the 'egalitarian' notion of cause that orthodox metaphysicians seek when they ask, 'What are the causes of (the singular event) e?" (46)

- culpable causes are (often/typically) 'mundane events' (the kind of events people cite when asked about the causes of some particular event) (46)
- 'culpable' causation concerns singular 'real' causes (though, as Kutach suggests, it stems from bringing in certain principles from general causation to the particular case, 284)
- (in the same way as the 'ordinarily used' notion of singular cause) culpable causes differ in important characteristics from contributors (especially with respect to 'discrimination' vs. 'egalitarianism', direction of causation direction of time, reflexitivity of causation, coarse-grained character), (265 f.) thereby either a worry about incompleteness or about divergence from our ordinary concept of cause for Kutach

#### c) Chapter 8

- aa) Culpable causation plays no essential role in the metaphysics of causation and is empirically irrelevant. This does not mean, however,
- that claims about causal culpability are not (also partially) about the external world, BUT: the extent to which they are exactly matches the extent to which these claims are parasitic on facts about terminance and prob-influence (i.e. the issues relevant for causation on the 2 lower levels) (269)

NOR

- that it should be abandoned as a useless tool BUT rather, that its treatment can be assigned to other disciplines which have a relaxed (rather than strict) standard of adequacy (267)

Why is culpable causation empirically relevant?

- empirical irrelevance for singular causation: once we hold fixed all the fundamental details of some fragment of history, there is no further fact of the matter that can be checked to assess whether C is genuinely culpable for E (272)
- empirical irrelevance for general causation: whenever we try to evaluate whether some instance of will bring about an effet E, and already have general dynamic laws at hand, it is these laws that provide our best estimate of whether E will occur, not what happened in the particular fragment of history (in which we have identified the culpable cause) (273)

#### bb) however culpability

- is a useful heuristic for learning about promotion, for creatures such as us who have limited ressources for collecting data and conducting experiments and therefore must rely on rules of thumb (rock-throwing case) (275 f.)
- serves as an explanatory device (esp. by ruling out fizzles, which are not ruled out by naming

### promoters alone)

- serves as a proxy for terminance and promotion, and often debates about culpability include (come down to just) debates about aspects of terminance and promotion (however: once the discussants agree about all the facts at the fundamental level, and to the extent that they look at the same hypothetical contrasts, there is nothing "left of substance" to argue about, 280 f.)

#### d) The Psychology of Culpable Causation

"belief in culpable causes is reasonable because there exist (metaphysically fundamental) terminance relations and (metaphysically derivative) prob-influence relations, and our intuitions about culpability serve as cognitive shortcuts for dealing with them." (282) [Why is this necessary? Potential corrective function?]

Toy psychological theory which shows how it can do this (and shows (i) how culpable causation is torn between considerations about singular and general causation (ii) how we can develop rules for mitigating this tension)

Key idea of culpable causation:

"An event is a culpable cause of E iff it successfully induces E" (285)

'inducing' = (roughly) promoting

'successfully': four candidate interpretations which lead (step-by-step) to four distinct formulations of culpability (Kutach suggests we vaciallate between the last 2)

(i) An actual event c (as C qua \_C) is culpable\*1 for an actual event c (as E) iff -\_C is a salient, signficant promoter of E.

Salience: people do not tend to ignore it as part of the causal background Question: by which considerations do we single out salient factors? Explanation of irreflexitivity, asymmetry and flexibility of significance

Problems: failure to account for precise charater of the effect, overlapping causation and probability-lowering causation

#### (ii) Culpability\*2: Introducing contrastive effects

An actual event c (as C qua  $\sim$  C) is culpable  $\mbox{$\stackrel{\triangle}{\boxtimes}$}$  for an actual event e (as E) iff a region R (including and surrounding e) has a contrastive effect  $\sim$  E imposed on it that significantly promotes E. (296)

Problems: cases of fizzling (where a process is 'heading towards' the effect but does not fully get there), saved fizzling and preemption

(iii) Culpability\*3: excluding fizzling + considering larger area

An actual event c (as C qua  $\sim C$ ) is culpable for an actual event e (as E) iff a region R (including and surrounding the process leading from c to e) has a contrastive effect  $\sim E$  imposed on it that significantly promotes E and includes no fizzling of this process. (299)

# (iv) culpability\*4

An actual event c (as C qua  $\sim C$ ) is *culpable* for an actual event e (as E) iff there is a chain of culpability relations running from c to e. (300)

We do seem to use both criteria (train case and its variant, 300 f.)

Conflicts between criteria (iii) and (iv), and consequent messiness of dealing with certain causal questions (305) – relavance of the relaxed standards of adequacy