Contrastive Causation

Making Causation Contrastive

- What this talk presupposes...
  - The counterfactual account of causation
    - ... and its discontents (counterexamples)
- Recently, some philosophers have tried to solve counterexamples by making causation contrastive...

The contrastive theory

- *C* rather than *C** causes *E* rather than *E** if
  - *C*, *E* are actual, distinct events
  - *C**, *E** are alternative possible events
  - *E** counterfactually depends on *C**

Thesis

- *Contrasting can solve paradoxes of the counterfactual account of causation – except in the most simple cases – only if an account of admissibility of the chosen set of contrasts is given*
- *It is the context of making the causal claim that determines admissibility*
- *Once contextualised, contrasts are redundant*

Problems contrasting can handle: Emphasis

Leonike's bike (Dretske 1977). Leonike is interested in purchasing either a bike or a scooter she has seen in the window of a nearby store. She lacks the money to buy either, so one night she breaks into the store and steals the bike, the easier vehicle to take. Later that night she is arrested by the police.

- Did Leonike's stealing the bike cause her arrest?
  - Yes: Leonike's arrest depends on her *stealing* the bike
  - No: Leonike's arrest does not depend on her stealing *the bike*
- Solution: specify c = Leonike's stealing the bike; e = her arrest; E_1 = Leonike remains free
  - Alternative 1: C_1 = Leonike buys the bike
  - Alternative 2: C_2 = Leonike steals the scooter

Lesson 1

- Claim: Contrasting helps with paradoxes of the counterfactual account
- But only in cases where the intuitive causal judgement is ambiguous
- Analysis (given by contrastivists): causation *is* contrastive; the intuitive judgement is ambiguous because there are several equally legitimate implicit alternative events; contrasting explicitly resolves this by disambiguation

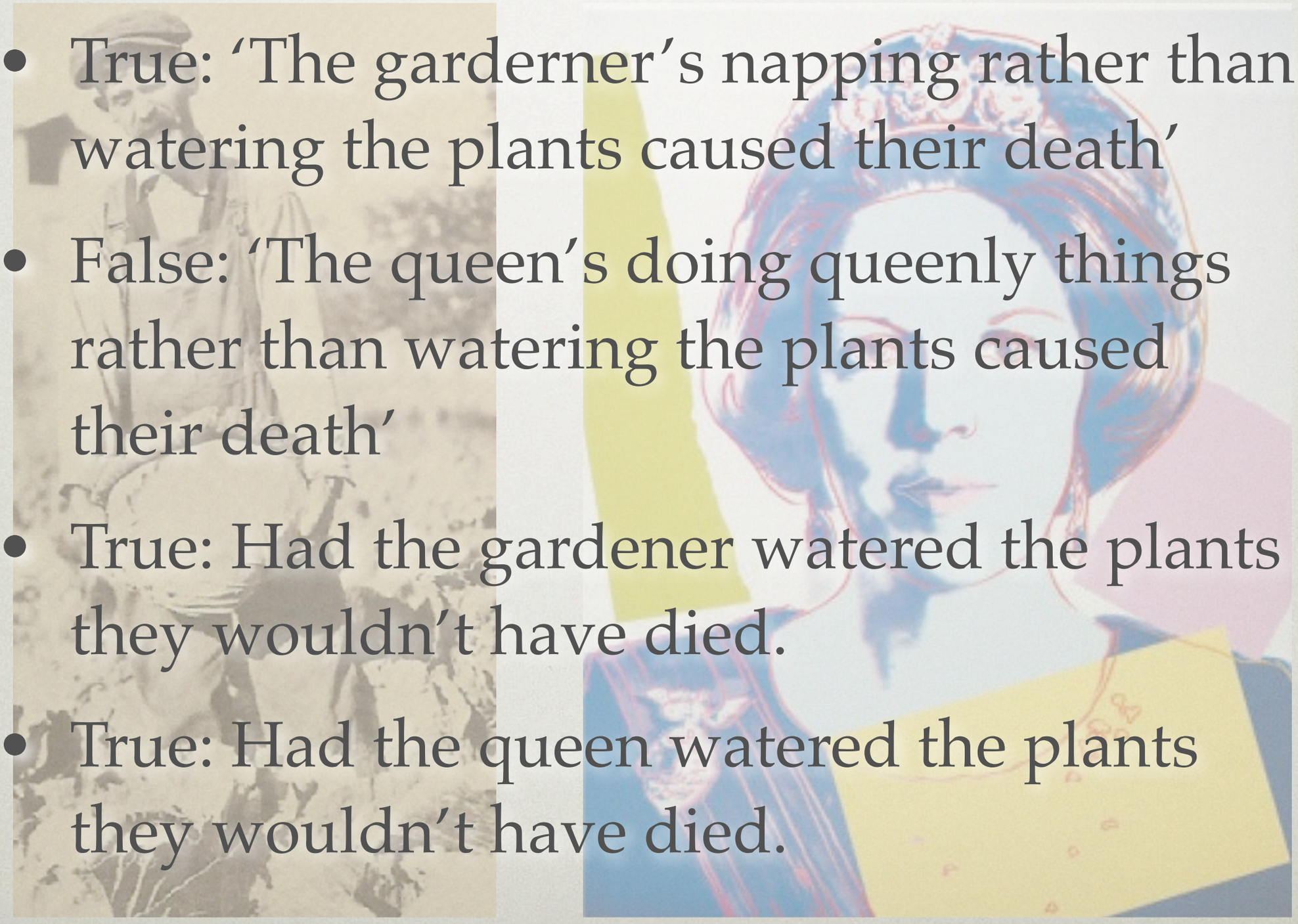
Lesson 1

- Claim: Cor radoxes of the counterfact
- But only in ive causal judgement
- Analysis (g causation *is* contrastive nt is ambiguous eral equally legitimate i nts; contrasting explicitly r iguation

Contexts?

- Schaffer 2005 argues that 'the context determines the contrasts'
- He offers a two-stage theory of causation:
  - counterfactual dependencies determine the truth value of causal claims
  - pragmatics (e.g., presuppositions) determine what causal claims are appropriate to make

Hard cases: Omissions and Preventions



- True: 'The garderner's napping rather than watering the plants caused their death'
- False: 'The queen's doing queenly things rather than watering the plants caused their death'
- True: Had the gardener watered the plants they wouldn't have died.
- True: Had the queen watered the plants they wouldn't have died.

Hard cases: Omissions and Preventions

The potent breakfast. I had a full English breakfast this morning. Now I'm giving a talk.

- Did my having a full English breakfast cause my giving a talk?
  - Intuitively, no. However, here are some alternative events that make it a cause: C_1 - my eating of the poisoned porridge; C_2 - my perishing in a meteorite shower
- Call this the problem of spurious preventers.
- (This may be less a problem for Lewis than it is for the contrastive account)

Lesson 2

- Other cases (the majority!) can only be solved if an account of admissibility is given
- This account should tell us for a given causal claim, what are the appropriate alternative events?

Contrasts in context

- Northcott: C/C^* and E/E^* have to be 'nomologically incompatible'
- Better: assume that there are functions from context X to contrast:
  - f: $\mathbf{X} \rightarrow \mathbf{C}^*$, where $\mathbf{C}^*$ is the set of cause contrasts
  - g: $\mathbf{X} \rightarrow \mathbf{E}^*$, where $\mathbf{E}^*$ is the set of all effect contrasts
- My question now: what are the kinds of contextual features that determine alternatives?

a) Situational features

b) Analyst's features

‘Situational’ Features

Captain and trainee assassin (Hitchcock 2003; Northcott 2008). Captain yells ‘fire’, trainee fires. Upon hearing the command, victim ducks. The bullet misses him and victim survives unscathed. Did the command cause victim’s survival?

- Contrasting allows us to disambiguate:
  - No: C_1 - captain gives no command
  - Yes: C_2 - captain gives silent command

‘Analyst’s’ Features

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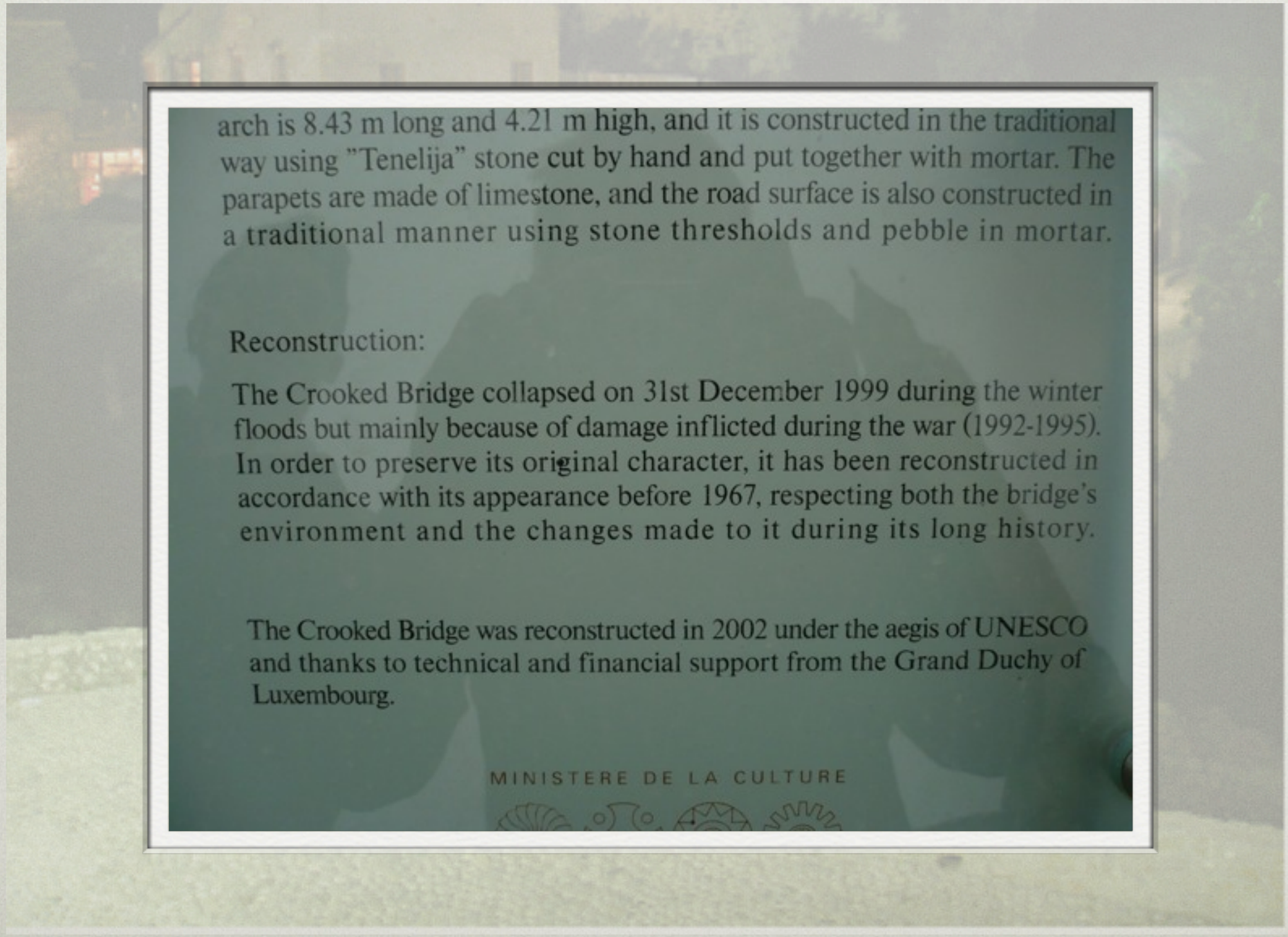
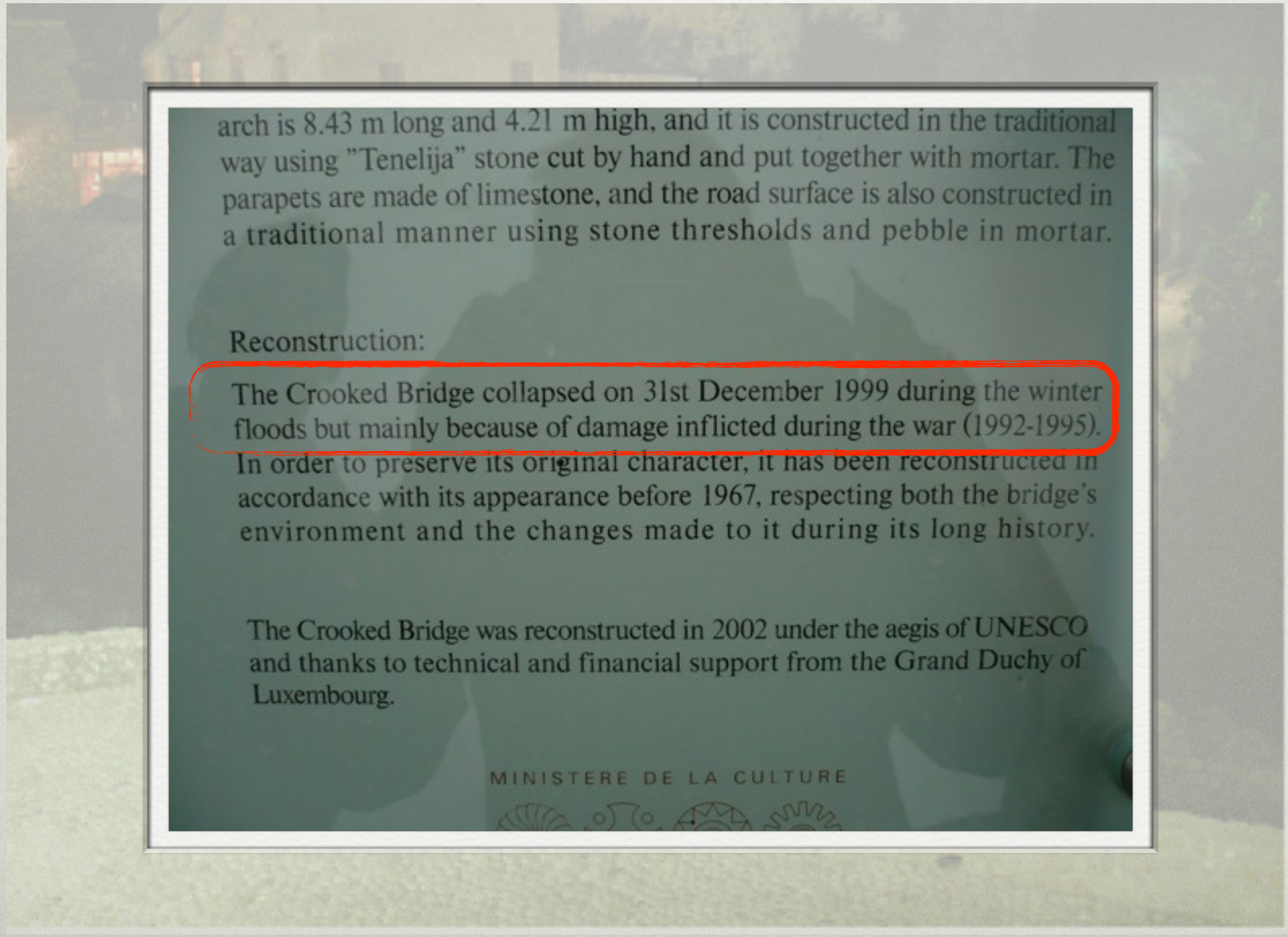


‘Analyst’s’ Features



‘Analyst’s’ Features II

- Hart and Honoré provide a contrastive account of causation in which causation is relative to some ‘normal’ state of affairs
- This normal state of affairs is often given by ‘lawful action’ of the agents involved

The Empire Jamaica (Hart and Honoré 1985; *cf*. Schaffer 2005). The owners of the ship sent it to sea without properly licensed officers. The ship was later involved in a collision. The pilot, though unlicensed, was generally competent but napping at the time of the collision. Did the owners’ action *cause* the collision?

- Here the relevant contrast event is given by the owners’ lawful action, which may or may not have been in their range of options; in particular, to determine causation, it is unnecessary for the defendant to have known the law (*ignorantia iuris non excusat*)

Contrasts in Context

- The context is thus: $\mathbf{X} = \mathbf{B} \times \mathbf{D} \times \mathbf{O} \times \mathbf{P} \times \mathbf{N}$
  - Situational beliefs (**B**), desires (**D**) and opportunities (**O**)
  - Analysts' presuppositions (**P**) and normative commitments (**N**)
- Contrasts are admissible in so far as they result from applying functions *f* and *g* to the context at hand
- The context is part of the *semantics* of causal claims
- Is causation then 5-place? No!
  - Once contextual, contrasting is redundant
  - Contrastive causal claims are clumsy
  - The surface grammar of causal claims is not contrastive

Contextual Causation

- In $\mathbf{X}$, C causes E if
  - C, E are actual, distinct events
  - $\mathbf{X}$ is a context
  - f, g are functions from context to alternative events
  - $g(\mathbf{X} = \mathbf{x})$ counterfactually depends on $f(\mathbf{X} = \mathbf{x})$

Asymmetry of delayers and hasteners

- Delayers and hasteners are special kinds of modifiers that affect only the time of the event
- Typically, hasteners are called causes whereas delayers are not: assassins kill and doctors save lives
- Asymmetry is typically understood to lie in some objective difference:
  - Hastening 'closes off options' whereas delaying doesn't (Schaffer)
  - Preventing only by causing is causing whereas causing only by preventing isn't (P. Mackie)

Hasteners and Delayers in Contrast

- Constrasting cannot mark out that difference:
  - **True**: Assassin shot rather than kissed victim, which *caused* him to die rather than blush (*i.e.*, live)
  - **False**: Assassin shot victim rather than put the gun down, which caused him to die at t_0 rather than at $t_1 > t_0$ (while it would be correct to say: Had the assassin not shot, victim would have died later)
  - **True**: Doctor performed the tracheal intubation flawlessly rather than improperly, which *prevented* the patient's death
  - **False**: Doctor performed the tracheal intubation flawlessly rather than improperly, which caused the patient to die at t_0 rather than at $t_{-1} < t_0$ (while the counterfactual statement is true)
- That is, the contrastive treatment is exactly parallel while the judgement is reversed ('causes' versus 'prevents')

Hasteners

- But things get worse: though hasteners are usually causes, this isn't always the case

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Bob Marley. I shot the sheriff – and thereby caused his death at *t*:
*C** - I put the gun away; *E** - the sheriff died (by gunshot) at a time later than *t*

Hasteners

- But things get worse: though hasteners are usually causes, this isn't always the case

> **The disinterested doctor**. A doctor induces labour in a becoming mother – and thereby affects the timing of the birth without causing it

Hasteners

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> **The considerate doctor**. A physician induces labour and thereby prevents the child from having to fight in the Vietnam war (because only men born between July 1 and December 31 are drafted)

Hasteners

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> **The considerate doctor**. A physician induces labour and thereby prevents the child from having to fight in the Vietnam war (because only men born between July 1 and December 31 are drafted)

- Lesson: we sometimes call hasteners causes, sometimes preventers, sometimes mere modifiers

Delayers

- The same is true of delayers:

Delayers

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> **The evil doctor**. The luckless draftee will blame (causally and/or morally) his having to serve in the war on the doctor's action or any other delayer if that's what caused the late birth

Delayers

- The same is true of delayers:

> **The forest fire** (Bennet 1987). The April rains *did not* cause the forest fire in June

Delayers

- The same is true of delayers:

Saving lives. Most actions that delay someone's death (e.g. a physician's intervention) prevent that person's death

Objective delaying/ hastening?

- It is clear that normative considerations play a role in determining what's a cause, for instance whether certain events are desirable or not and whether or not someone's action was appropriate
- Hasteners and delayers are more likely to be called causes when they involve intentional and morally relevant action
- Dying early is undesirable and therefore hastening is causing and delaying preventing; being born early is usually evaluatively neutral; but if being born late is undesirable, then a delayer can be a cause
- These cases show that pragmatic/contextual elements are required for more than just to determine contrast events: they also influence whether a factor is regarded as a cause, a preventer or a modifier

Conclusions

- Suitable refined, understanding causation as contrastive solves various problems of the counterfactual account
- The costs of this maneuvre are appeal to a vague notion of 'context', which determines admissibility of specific contrasts
- Even with an account of admissibility, contrasting underdetermines causal judgement; pragmatic elements are required over and above picking out the right contrast events
- This concept of cause is relevant for history and the law
- Future work: making precise what is meant by X, f and g such as to be able to use the account for causal inference