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Luck as a Narrative Category

DISSERTATION

submitted in partial satisfaction of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

in Philosophy

by

Michael James Duncan

Dissertation Committee:
Chancellor's Professor Duncan Pritchard co-chair
Professor Aaron James co-chair
Associate Professor Sam Cumming UCLA

2018

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Curriculum Vitae

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Abstract of the Dissertation

Luck as a Narrative Category

By

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Doctor of Philosophy in Philosophy

University of California, Irvine, 2018

Chancellor's Professor Duncan Pritchard co-chair

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In the *Physics*, Aristotle motivated his discussion of chance by linking it, not to knowledge or agency directly, but to explanation: often we use chance as though to explain, but how can we, if chance is not a cause? We might express the hope as follows. There might be a way of conceiving luck such that it emerges as a novel explanatory modality, albeit a deficient one, not superficially akin to an excuse. Just as a person's agency is a way of explaining something; a person's knowing something, too, marks the closure of a cognitive openness, where coherence is improved, and the world explained. Moreover, the presence of luck appears to undermine both kinds of explanation at once. The search, then, is for a novel explanatory kind that can perform all of these tasks at once.

After reviewing the available accounts on offer (Chapter 2), I develop my positive account in three stages as follows: the relevant sense of explanation, to which luck is opposed, appears to be a version of the relatively little-understood category narrative

explanation. *An event is lucky in virtue of playing a central role in a deficient narrative explanation.* I explore this idea in Chapter 3.

In the second stage, I analyze the explanatory deficiency by thinking of luck-reports within an inferentialist paradigm: understanding luck-reports as assertions (i.e. as speech-acts) what are their felicity conditions? I argue that luck-reports can be understood as self-acknowledging explanatory failures.

In the third stage, I attempt a representationalist version by understanding a luck-report as a state of (in)coherence on a piece of multi-sentence discourse.

Lastly, after having the developed theoretical account in hand, I return to compare my account with Pritchard's modal account (Chapter 5). Pritchard's account appears to be wholly metaphysical, whereas the broadly semantico-pragmatic account laid out in the foregoing chapters would appear anything but. I undertake the experiment of exploring the tensions placed on both conceptions under the hypothesis of their compatibility.

Chapter 1. A Plea for Luck-Reports

“If ordinary language is to be our guide, it is to evade responsibility, or full responsibility, that we most often make excuses... But in fact “responsibility” too seems not really apt in all cases: I do not exactly evade responsibility when I plead clumsiness or tactlessness, nor often, when I plead that I only did it unwillingly or reluctantly, and still less if I plead that I had in the circumstances no choice: here I was constrained and have an excuse (or justification), yet may accept responsibility. It may be, then, that at least two key terms, Freedom and Responsibility, are needed: the relation between them is not clear, and it may be hoped that the investigation of excuses will contribute towards its clarification.”

– J.L. Austin

Not unlike Austin’s philosophy of excuses, the philosophy of luck can be motivated by its relation to grander philosophical concerns. The contemporary luck discussion grew out of a certain epistemological strategy, known as anti-luck epistemology, e.g. DeRose (1968), Nozick (1976), Pritchard (2005). First, we observe from Gettier-style examples that lucky knowledge is impossible; knowledge and luck, of some sort at least, are opposed. The task, then, is to analyze luck and get a necessary condition on knowledge. If this methodology is sound, the theoretical payoff for analyzing luck is huge.

Luck also has interesting connections to ethics and the philosophy of law. Why might unsuccessful attempts receive lighter punishments and less moral stigma than their successful counterpart, supposing that the only difference is a factor due to luck? A

possible response might be to offer a rigorous account of luck that yields a promising theory.

The epistemological, moral and legal discussions have sparked a small literature about the nature of luck in isolation. Luck is *prima facie* interesting because it appears to be opposed to several deep human modalities. Philosophical accounts of luck yield a surprising amount of divergence. The recent philosophical discussion of luck has produced a series of putative necessary conditions on the concept.

- i. Subjectivity “All lucky events are lucky *for* someone (S)”
- ii. Significance “All lucky events are significant to S”
- iii. Improbability “All lucky events are improbable.”
- iv. Control “All lucky events are beyond the control of S.”
- v. Fore-Knowledge “All lucky events could not have been foreknown by S.”
- vi. Modal Fragility “All lucky events could easily have failed to obtain to S.”

Virtually every published account of luck is a conjunction of (some version of) i. and ii. plus one or more of iii.-vi. The consensus is that luck is subjective and significant; the disagreement is about which non-evaluative modality (iii.-vi.) luck expresses.

Compelling counterexamples have been advanced against the necessity of all four conditions iii.-vi. Rescher (1994) Steglich-Peterson (2010) Lackey (2009). The disagreement is not only about which condition(s) are extensionally correct, but which are intensionally prior. It has been advanced by Pritchard (2005) that Control, Fore-Knowledge, and Modal Fragility are all necessary, but hypothesized that the former

conditions hold *because* of the latter one, making Modal Fragility the prior condition. Levy's (2011) account by contrast asserts the same conditions but does not attempt to prioritize them.

Far from a trivial or merely verbal dispute, I believe it is the substantiveness of the philosophy of luck that explains the lack of consensus about the concept. Any thesis about the priority of the platitudes presupposes a priority among major philosophical heavyweights, and so asserts a substantive philosophical thesis, about action, morality, or knowledge. Many of the contentious cases about luck are likely to be so because they are contentious cases of knowledge, agency, or responsibility.

Not unlike Austin's parallel observation about excuses, the naïve analytic question "What is luck?" finds no shortage of philosophical motivation; indeed it prompts so much motivation that the motivational task consists in selecting which greater philosophical task one wants luck to address. The prime directive of this dissertation is to press on in that direction, by exploring the link between luck and explanation.

In the *Physics*, Aristotle motivated his discussion of chance by linking it, not to knowledge or agency directly, but to explanation: often we use chance as though to explain, but how can we, if chance is not a cause? Of course, although we might say, 'it was *by* sheer chance' or 'a matter of sheer chance', we don't earnestly use chance or luck to explain, but to describe. However, the description is at least explanation-related, since it is always invoked in an explanatory mood. So, if we think of a luck-explanation as a single thought, we can ask what the content of that thought is. That is, if we think luck has *something* to do with explanation, a philosophical analysis of that something is warranted.

We might express the hope as follows. There might be a way of conceiving luck such that it emerges as a novel explanatory modality, albeit a deficient one, not superficially akin to an excuse. Just as a person's agency is a way of explaining something; a person's knowing something, too, marks the closure of a cognitive openness, where coherence is improved, and the world explained. Moreover, the presence of luck appears to undermine both kinds of explanation at once. The search, then, is for a novel explanatory kind that can perform all of these tasks at once.

Luck, on this conception, is not a total explanatory lack. Events that happen by luck have causes sufficient to furnish them with *some* explanation. And yet there is still something deficient about the story that recounts them. The strategy then is to articulate this deficiency that emerges in cases of luck and see if the correlative ideal yields a novel account of explanation.

After reviewing the available accounts on offer (Chapter 2), I develop my positive account in three stages as follows: the relevant sense of explanation, to which luck is opposed, appears to be a version of the relatively little-understood category narrative explanation. *An event is lucky in virtue of playing a central role in a deficient narrative explanation.* I explore this idea in Chapter 3.

In the second stage, I analyze the explanatory deficiency by thinking of luck-reports within an inferentialist paradigm: understanding luck-reports as assertions (i.e. as speech-acts) what are their felicity conditions? I argue that luck-reports can be understood as self-acknowledging explanatory failures.

In the third stage, I attempt a representationalist version by understanding a luck-report as a state of (in)coherence on a piece of multi-sentence discourse.

Lastly, after having the developed theoretical account in hand, I return to compare my account with Pritchard's modal account (Chapter 5). Pritchard's account appears to be wholly metaphysical, whereas the broadly semantico-pragmatic account laid out in the foregoing chapters would appear anything but. I undertake the experiment of exploring the tensions placed on both conceptions under the hypothesis of their compatibility.

Chapter 2 – Luck: Extant Accounts

In this chapter, I review what has recently been said about the concept of luck. Attempt to diagnose the disagreement, and propose steps forward.

2.1 What is uncontroversial: The analytic task, subjectivity, eventivity

The philosophy of luck is not first-and-foremost a metaphysical discussion. We are not interested in whether luck exists as a force in nature or if persons can be the bearers of luck in any mystical sense, independent of the *de facto* nature of events that befall them. The investigation appears to be about the meaning of such locutions that squares with a non-mystical view of things, and sheds light on the philosophical contexts that make use of the concept nonetheless.

All luck is luck *for* some subject. If there is such a thing as luck *that* – “lucky that there are two seats available!” – it is surely reducible to a claim about luck for some subject, singular or plural – “lucky for us!”.

The things that bear the predicate ‘is lucky’ are events. Under this heading include such variants as happenings, outcomes, incidents, moments, befallings, comeuppances, tragedies, happenstances, etc. Should any of the latter fit the necessary bill, they may count as lucky. Persons, by contrast, we shall exclude from the target domain. Lucky events *befall* persons, but persons are not themselves lucky, or so we would like to think. Perhaps one could undertake a separate discussion of personal luck.

2.2 What is controversial: The significance condition

Most writers on the topic have held that all luck has valence; that all luck is good luck or bad luck. On such accounts, what might appear to be non-valenced luck – “We have the same birthday! How about that.” – is explained away in terms of other modalities like accident, coincidence or chance. The term luck is reserved for that kind of coincidence that has (dis)value of some sort.

Pritchard (2015) has recently questioned the motivation for this step. There is no reason to think that this feature of our commonsense concept of luck should remain the target of philosophical analysis. What is of primary interest in Pritchard’s discussion, in particular, is the core modality present in cases of veritic epistemic luck – cases in which one’s belief comes out true by luck, holding fixed what else one believes. And whether one knows in such cases does not seem to be a value question at all.

In previous writing, Pritchard had used the general term *significance* to denote the value condition on luck, since epistemic luck is the central case of interest. Hence it might be significant for the purposes of epistemic assessment that one knows, even if it is neither good nor bad nor otherwise consequential that one does know. In the cases where things go ‘right’ epistemically, and my beliefs happen to line up with the truth for ‘no good reason’, or in defiance of my lazy epistemic practices, or against all odds... such outcomes may not be good, but would at least be significant for the purposes of epistemological interpretation, i.e. whether I have knowledge or not.

One might say that such a minimum significance condition is present in cases of good luck as well: the fact that the event satisfies the non-evaluative conditions of luck has interpretive consequences for the immediately surrounding discourse. For example,

the fact that an event happened by accident makes it more naturally isolated as a salient occurrence. This is because too many accidents can undermine the coherence of narrative; hence, the report of one can compel the premature closure of that narrative, or even limit the scope of the narrative to being solely *about* the accident and nothing else. Often too, the accidentality of events can force an author to describe events differently, to rehabilitate coherence, generating the appearance of meaning, or perhaps the real thing.

It is uncontroversial that these conditions – subjectivity and significance – are not sufficient for luck. Not all significant outcomes that befall me do so as a matter of luck, like the ones that I bring about myself. Thus, there is a further condition – a modality – that the luck locution expresses. The heart of the disagreement about luck appears to focus on this.

Perhaps this move – bracketing the valence and subjectivity of luck from its peculiar modality – is part of the reason why luck is so elusive. It appears harmless at first: “Luck is subject-centered because value is. So the modality that is left over when we shave off the value condition can be perfectly objective.” However, this forces a distinction between significance and explanation.

2.3 What is controversial: Improbability is necessary for luck

On a simple view, the luckiness of an event varies directly with $1 - p$, where p is the probability of the event. A lottery win is extremely lucky because the odds of winning are extremely small, and this is a matter of definition. This account has the virtue of resonating with a well-developed probabilistic semantics, complete with a computational

calculus. Hence any account of knowledge, say, in terms of probabilistic luck, would emerge as a probabilistic account of knowledge, and the formalistic work is already done.

However, straightforward counterexamples show that not all lucky events are proportionally improbable. Rescher (1994) offers the following example: Suppose that Jones desperately plays Russian Roulette to relieve a large gambling debt. He loads a single cartridge into the revolver, spins the cylinder, puts the gun to his head, pulls the trigger, and *click* – Jones is still alive, and for *no good reason*. If in general such events were always of low probability, then Jones's probability of living should be very low. And yet, the probability of his living was 5/6 (assuming a six-gun), which is by no means 'low'.¹

Surely the probabilistic account affords the possibility that luck is purely a matter of degree. On this account, Jones is sort of lucky to be alive, because there was a chance he might have died. This account is reductive because there is no reason to stipulate an arbitrary threshold between how improbable something has to be in order to genuinely count as lucky versus not lucky at all. Luck is nothing other than improbability, on this view.

Yet in the Rescher case, there is a high amount of luck and a low degree of improbability. That is, the judgments of luck and improbability are *qualitatively* at odds. So the scalarization of luck cannot respond to this classic example.

Perhaps what is driving the intuition of luckiness in Rescher's example is the high stakes of Russian Roulette. Given that the stakes in Russian Roulette are so high, virtually any uncertainty would make a success lucky. So luckiness depends not only on

¹ Rescher 1995

probability, but on relative risk. More formally, the luckiness of an outcome varies with the difference between the value of the outcome and its expected value:

$$\begin{aligned} &\text{ValueOutcome}(\text{play Russian Roulette}) - \text{ExpectedValue}(\text{play Russian Roulette}) = \\ &(\text{Value of life}) - [(5/6) * (\text{Value of life}) + (1/6) * (\text{Value of death})] = \\ &(1/6)[\text{Value of life} - \text{Value of Death}] \gg 0 \end{aligned}$$

Assuming that the Value of Death ≤ 0 , the above expression would be appropriately high, accurately predicting a high amount of retrospective luckiness in the Russian Roulette game. Moreover, this would still be true, even if the co-efficient (here (1/6)) were much smaller. That is, this account correctly predicts that winning at Russian Roulette would still be very lucky, even if the odds of winning were much higher than they standardly are. If the stakes are high enough, virtually any uncertainty makes for a lucky outcome.

Risk aside, there are a number of problems with understanding luck in terms of expected value. First, the appeal to the technical notion of expected value begs the question about the value condition cited above. It would prematurely rule out cases of luck in which value is beside the point. It is hard to see how the more general notion of significance outlined above could be captured by it, since the latter is generally attributed qualitatively and in retrospect, and perhaps cannot be identified and quantified in advance of the outcome.

Second, an expected value account would appear to bind all luck to a context of decision, implying that for an outcome to be retroactively lucky for someone, they had to make a prospectively risky *decision*, which was somehow related to that outcome. But surely lucky events can lack the prospective element and surprise us entirely. It is bad

luck to be struck by a small meteorite, even if the person had no relevant choice that would allow her to avoid it. In order to make every case of luck fit the decision model, we would have to frame every case of luck as a decision problem, which would distort the unanticipated cases.

It is partly for this reason that Pritchard (2015) has claimed that we can abandon philosophical discussion of luck for a discussion of risk. The two come apart and risk is better at getting the facts right in the Roulette case. Moreover, as he has shown, the concept of risk can be tailored to yield a promising externalist theory of knowledge, which was the purpose for studying luck in the first place. Gettier cases can be reframed from cases of luckily true belief to cases of risky believing, where the latter disqualifies the subject's belief as knowledge, so that the strange twist of fate that makes the Gettier subject's belief come out true becomes appropriately irrelevant to the question of whether she knows. However, this point only concerns epistemic luck proper, and doesn't obviously extend to luck in general, which has its own motivation.

It is an interesting insight about luck that it goes hand-in-hand with risk. As Pritchard states – a lucky outcome is retrospectively what at-risk possibilities are prospectively. But the expected value account outlined above will only be tenable if risk is appropriately captured probabilistically. Pritchard defends a convincing counterexample to any probabilistic account of risk. He imagines two parallel cases:

“Case 1: An evil scientist has rigged up a large bomb, which he has hidden in a populated area. If the bomb explodes, many people will die. There is no way of discovering the bomb before the time it is set to detonate. The bomb will

only detonate, however, if a certain set of numbers comes up on the next national lottery draw. The odds of these numbers appearing is fourteen million to one. It is not possible to interfere with this lottery draw.

“Case 2: An evil scientist has rigged up a large bomb, which he has hidden in a populated area. If the bomb explodes, many people will die. There is no way of discovering the bomb before the time it is set to detonate. The bomb will only detonate, however, if a series of three highly unlikely events obtains. First, the weakest horse in the field at the Grand National, Lucky Loser, must win the race by at least ten furlongs. Second, the worst team remaining in the FA Cup draw, Accrington Stanley, must beat the best team remaining, Manchester United, by at least ten goals. And third, the queen of England must spontaneously choose to speak a complete sentence of Polish during her next public speech. The odds of this chain of events occurring are fourteen million to one. It is not possible to interfere with the outcomes of any of the events in this chain.”

The intuition is that, in Case 1, there is a real risk that the bomb will explode, whereas in Case 2 there is no real risk that the bomb will explode, even though the probabilities are identical. Hence risk cannot be a matter of mere probability. The lesson of the Rescher counterexample is that some cases of luck are a matter of luck, not because of their intrinsic probability, but because they involve a great deal of prospective risk in the making. The lesson of Pritchard's counterexamples is that prospective risk is never a matter of pure probability. So, improbability is not necessary for luck, and the

probabilistic account of luck cannot be saved by defining luck in terms of risk, which is then defined probabilistically, because the latter move cannot be made.

It might be objected that there is a risk of equivocating between the relevant notions of risk in the two cases. This point would be valid if there was some reason for thinking that the risk imposed by playing Russian Roulette is fundamentally different from that imposed by the evil scientist in Case 1. Then one could not infer from the claim that the former risk is non-probabilistic to the claim that the latter is. To defend against this claim would require a positive alternative account of risk that explains the intuitions in both cases. I discuss Pritchard's account in further detail Chapter 5 below.

2.4 What is controversial: Control accounts

On a control account of luck, in any case of luck, the subject cannot have control over the obtaining of the target event: hitting the jackpot was lucky, in part *because* it was out of my control, Statman (1995), Pritchard (2005), Levi (2012). I may have intended to produce the jackpot (if one can intend that which is uncertain) but for all that the outcome was not under my control. So in general when I get lucky, we cannot say that I *made* it happen. This appears to be necessarily the case, whether analytic or no.

Be that as it may, Lackey (2009) has constructed a counterexample to refute the platitude that lucky outcomes are beyond the agent's control. Consider,

“DEMOLITION WORKER: Ramona is a demolition worker, about to press a button that will blow up an old abandoned warehouse, thereby completing a project that she and her co-workers have been working on for several weeks.

Unbeknownst to her, however, a mouse had chewed through the relevant wires in the construction office an hour earlier, severing the connection between the button and the explosives. But as Ramona is about to press the button, her co-worker hangs his jacket on a nail in the precise location of the severed wires, which radically deviates from his usual routine of hanging his clothes in the office closet. As it happens, the hanger on which the jacket is hanging is made of metal, and it enables the electrical current to pass through the damaged wires just as Ramona presses the button and demolishes the warehouse.”

The intuition is that the explosion is controlled, paradigmatically and genuinely a matter of the agent’s control, and yet the outcome is still a matter of luck. Hence the subject’s lack of control over an outcome is not necessary for its being a matter of luck. Paradoxically, it appears possible that lucky outcomes can be under a person’s control.

An initial response is that Lackey leans too heavily on the paradigmatic status of a controlled demolition – or just the appearance of the word ‘control’ – as being under the control of the subject. Perhaps this just serves as a case in point that not all controlled demolitions are genuinely controlled.

But it seems that there is something deeper going on here. Perhaps what we have is a case that illustrates how agency doesn’t require full-on control. Ramona doesn’t *make* the explosion go off, she blindly causes it to. If this sounds counterintuitive, it’s because of what she could reasonably expect to happen, given what she does do. If the coat hadn’t been hung on the hanger, she couldn’t be held responsible for the bomb failing to go off. So while her pressing the button is not quite analogous to pulling a slot machine lever,

since she could reasonably expect the outcome that obtains, they are analogous in that the real cause of the outcome is irrelevant to the ultimate explanation of what happened.

This highlights a virtue of the control account that was missing from the probabilistic account. When an event happens by luck, there is always a sense in which it happened *for no good reason*. A Russian Roulette win obtains for no good reason, and I experience a euphoria, since my survival suffers from a lack of explanation. The sharp contrast is between two opposed things: something deeply significant and something not appropriately grounded. The notion of human control is a natural candidate for that which appropriately grounds that which we value most. One reason for this, is that, when control is present, it always counts as a relevant explanation for what the action yields.

While I believe the control platitude holds water against Lackey's example, it doesn't constitute a final analysis of luck. What Lackey's case shows is that luck-related cases can cast light on a discussion of what constitutes agency or control. But if control were the target of analysis, of course we wouldn't want to define luck in terms of it, but vice versa. Moreover, there are cases of luck in which control is not only relevant would-be explanation for the outcome, indeed there are cases in which control would be irrelevant to the overcoming of luck.

2.5 *What is controversial: Epistemic accounts*

Another possible missing explanatory element is *epistemic*: Hitting the jackpot was lucky because the winner had no way of knowing beforehand she would win, Rescher (1995) Steglich-Petersen (2010). This only has to be true of the person playing the slot machine. Perhaps the pit-bosses at the casino are in a position to know the

machine is about to pay out. Perhaps these slot machines are 100% predictable, as long as you keep track of their payout histories and utilize a complicated mathematical formula. So when the pit boss pulls the slot lever to empty the machine, she is not lucky, because she *knows* what she's *doing*. Knowledge and agency can individually or jointly serve to explain away apparent luck.

But suppose that a pit boss decides to play slots on her day off. If she wins the jackpot on accident, then that's still very lucky, even though the day prior she was in a position to know that it would pay out. This calls for a temporal restriction on the epistemic condition. Steglich-Peterson suggests that the following is necessary for luck:

Epistemic 4: *S* is lucky with respect to [an event] *E* at *t* only if, just before *t*, *S* was not in a position to know that *E* would occur at *t*.

The leisurely pit boss satisfies this condition. 'Just before' the casino employee pulls the lever, she is not in a position to know that she will win.

However, the restriction 'just before *t*' is left unanalyzed. What might constrain it? Presumably it has to do with some facts about the subject's situation at the time – she was not working that day, so she didn't have access to the machine's payout information that day – so, in this case, the relevant temporal interval is roughly a day. It would be longer or shorter depending on what epistemic facts about the agent could serve to explain her win. Accordingly, we can side-step Steglich-Petersen's temporal constraint, and just build directly into the account the relevant epistemic facts:

Epistemic 5: *S* is lucky with respect to an event *E*, only if what *S* knows is insufficient to explain *E*.

Epistemic 5 is stronger than Epistemic 4, since the appropriate temporal interval, dictated by ‘just before’ will be determined by whatever epistemic facts could serve as an explanation. Appeal to the modality ‘*could* serve as an explanation’ in Epistemic 5 obviates the need for the loose temporal parameter in Epistemic 4, because *S*’s knowledge about the slot machine could only explain her hitting the jackpot, if she had that knowledge at the appropriate temporal interval.

We can say a parallel thing about control:

Agential: *S* is lucky with respect to an event *E*, only if *S*’s agency is insufficient to explain *E*, i.e. only *E* was not a produce of *S*’s control.

We can summarize these two suggestions as follows: an event involving a human action is not lucky for you if you *know* what you are *doing*.

Epistemic 5 and Agential are often taken to express *analytic necessary* conditions on luck. Even if they express necessary truths, there are meta-philosophical reasons to avoid taking them to be analytic truths. For, if one wants to use luck to define knowledge or agency, one cannot have a conception of luck that is epistemic or agential, respectively, on pain of circularity. Moreover, a final analysis that included both conditions would be less elegant than we might hope for – e.g. Levi (2012). Moreover, interesting as luck is, knowledge and moral agency are more interesting; we should not

squander either concept on ‘luck’, without a more specific task in mind. We should seek an alternative definition of ‘luck’ that accounts for the necessity of Epistemic 5 and Agential. If all goes well, we can apply those insights to grander concerns.

2.6 Modal Fragility (v.)

Pritchard’s (2005) modal account of luck is neither epistemic nor agential, so it stands to furnish anti-luck epistemology or anti-luck ethics with non-circular accounts of knowledge or agency. In short, lucky events are modally fragile, where

MF: An event *E* is *modally fragile* iff *E* occurs in the actual world, but does not occur in a wide class of nearby possible worlds in which the relevant initial conditions are held fixed.

The fragility metaphor captures the idea that lucky events could *easily* fail to obtain, where this metaphor is explained by the proportion of not-*E*-worlds in the relevant modal neighborhood.

Furthermore, it appears to be capable of explaining the anti-foreknowledge and anti-control platitudes. If I know that *E* will obtain, then it cannot be modally fragile. For, if I know that I will win the lottery, then I must have obtained this belief on the basis of something well-grounded, say, a reliable source informs me say that the lottery is rigged and the winning numbers will be XYZ. Subsequently I buy the ticket with numbers XYZ. We might assume that any causal connection between the subject’s attributes and the event *E* become relevant to the determination of luck, so they are fixed across the nearby

worlds. So the only relevant nearby worlds in which I fail to win the lottery, will be those sparse ones in which a reliable source is incorrect, or I am somehow unable to purchase a \$1 winning lottery ticket. Presumably, there will be no wide class of these. So, my lottery win will not be modally fragile. By contraposition, if my lottery win is modally fragile, then I cannot know in advance that it will happen. Hence the modal fragility condition accounts for the fore-knowledge condition.

Similarly, if the occurrence of some event E is modally fragile, then its occurrence cannot have been under my control. Suppose I have honed my skill at the game “spin the bottle”, and I can reliably make the bottle land wherever I want it to land. So when I spin the bottle to make it point toward my crush, the event of the bottle landing just-so is under my control, that is, there is sufficient agency to cause the bottle to land just-so and not otherwise. Again, those agential factors are relevant to the outcome, because they are causally linked to it. So every relevant nearby world will contain those agential factors. The only nearby worlds in which the bottle will fail to land just-so, are those in which there are intervening causal factors, say, a quantum anomaly causes a nuclear blast. We may stipulate that the conditions of experimentation are pure and there will be no wide class of these. So when the bottle lands just-so it will not be modally fragile. By contraposition, if something is modally fragile then it is not under my control; the modal fragility condition accounts for the no-control condition.

Of course, neither of these arguments assumes a modal account of knowledge or of control, on pain of circularity. One might say that, when I know that E will happen, the *reason* there are few non-E worlds nearby is simply because the instantiation of human knowledge that E will happen automatically populates the modal neighborhood with

exclusively E worlds. Similarly, if an outcome E is under my control, the reason there are few close worlds in which E fails to obtain is that human control, like knowledge, also has the power to populate the modal neighborhood with E worlds. However, if Pritchard's aim is to use the modal account of luck as a leverage concept to generate modal accounts of knowledge and agency like this, the latter cannot be used to motivate the attendant conception of luck, on pain of circularity.

Rather the two arguments above presuppose a weaker pair of theses. The modal insurance that fore-knowledge of E and control over E provide for the occurrence of E may not be immediately presupposed by the modal nature of fore-knowledge and control respectively, but rather is mediated by underlying causal connections between the lucky subject S and the lucky outcome E. Modally fragile events are never fore-known nor are they ever under our control, not *because* foreknowledge and agency are modal, even if they are, but because foreknowledge and agency presuppose causal connections that are automatically relevant to the determination of luck.

2.6.1 The Centrality of Relevance to the Modal Account

Pritchard (2005) emphasizes the essential appeal to the notion of relevance. Lucky events have a frame of relevance, a starting point in which they are couched, relative to which their happening is circumstantial. Part of what makes the arguments above work is that knowledge of outcomes and control of outcomes presuppose underlying sufficient causes of those outcomes, *and* that the causally sufficient conditions will always be relevant to the outcome, and so will always be present in the worlds under consideration. It remains to consider what else may be relevant.

Take the classic Fake Barns case. You are driving through a countryside littered with barn facades for the production of a film. You do not know that they are barn facades; from the road they look like real barns. Suppose also that among them is a single real barn that looks identical to the rest. You happen to look over at this barn and think “that could hold a dozen horses”. The truth of this belief turns out to be modally fragile, since you could have easily looked at a barn facade and thought the same thing, forming a false belief. Since it is modally fragile, there must be a wide class of possible worlds in which the relevant initial conditions are held fixed. If those conditions are restricted to what causes my belief, namely my looking over at a barn and having a thought about it, then the sphere of relevant nearby worlds will include worlds in which there are no barn facades at all. Though causally distant from your perceptual apparatus, the fake barns, in virtue of their similarity to the actual barn, or their potential to influence your perceptual apparatus, become relevant to the determination of modal fragility, and hence luckiness.

Hence, the definition of modal fragility hangs substantively on that of relevance, at least of the relevant sort. Certain counterexamples appear to bear this out. Take Lackey’s *Buried Treasure* case:

“BURIED TREASURE: Sophie, knowing that she had very little time left to live, wanted to bury a chest filled with all of her earthly treasures on the island she inhabited. As she walked around trying to determine the best site for proper burial, her central criteria were, first, that a suitable location must be on the northwest corner of the island—where she had spent many of her fondest moments in life—and, second, that it had to be a spot where rose bushes could

flourish—since these were her favourite flowers. As it happens, there was only one particular patch of land on the northwest corner of the island where the soil was rich enough for roses to thrive. Sophie, being excellent at detecting such soil, immediately located this patch of land and buried her treasure, along with seeds for future roses to bloom, in the one and only spot that fulfilled her two criteria.

“One month later, Vincent, a distant neighbor of Sophie’s, was driving in the northwest corner of the island—which was also his most beloved place to visit—and was looking for a place to plant a rose bush in memory of his mother who had died ten years earlier—since these were her favourite flowers. Being excellent at detecting the proper soil for rose bushes to thrive, he immediately located the same patch of land that Sophie had found one month earlier. As he began digging a hole for the bush, he was astonished to discover a buried treasure in the ground.”

Lackey’s original purpose of the example is to show that modal fragility is not necessary for luck. The coincident causes of Vincent’s discovery – the talents and dispositions of himself and Sophie, the semi-permanent horticulture of the island they inhabit, etc. – are all modally robust, so the resulting discovery is modally robust. Yet, because treasure finds are paradigmatically lucky, it nonetheless counts as lucky.

Pritchard and others have objected to both claims. Lackey’s appeal to the paradigmatically lucky status of event-types like treasure-finds is surely not sufficient to establish luckiness, any more than a bare comeuppance or metaphor of a crossroads, say.

For such appeals are outclassed when levied against a developed metaphysical conception of luck, and therefore need further substantiation.

Conversely, Pritchard argues, we cannot be sure just how guaranteed Vincent was to find the treasure, and hence we cannot determine how robust the discovery was. If the treasure was buried sufficiently deep, perhaps Vincent could have easily missed it, making the find modally fragile after all. That is, if full information were given, it is not clear whether the resulting narrative would yield Vincent's treasure-find robust or fragile.

Suppose we grant that Vincent's digging in spot X is modally robust and the existence of treasure in spot X is also modally robust. How do we know that the composite event of Vincent finding treasure in spot X is also modally robust? That is, why think that composites or coincidences of modally robust events are also modally robust? In general, modal robustness is not closed under conjunction. There are 5,049,321 people who regularly vote in California elections and they all intend to vote on Tuesday. For each of these people, the event "So-and-so will vote on Tuesday." is modally robust. But the composite of all such events "All 5,049,321 regular voters will vote on Tuesday." is not modally robust. For each voter, there will be a few sparse possibilities that could prevent them from voting. In the aggregate, these possible worlds will constitute a wide class of nearby possible worlds, over 5 million in number, in which the composite event "All 5,049,321 regular voters will vote on Tuesday." fails to obtain, making it fragile.

Above we find that the conditions for modal robustness for the composite event are stronger than the sum of the conditions for modal robustness for each composing event. Since coincidences can generally be represented as composite events, and perhaps

all lucky events can be too, with some force, we must ask under what *further* conditions modal robustness will transfer to the composite of two modally robust events.

I suspect this to be partly symptomatic of the fact that modal fragility itself is defined by the concept of relevance, which opens the door to these alternative tellings. The difference between the two versions of that story is a difference between two sets of relevant initial conditions. In the modified version, the initial conditions include explanatory details designed to make it *clear* that Vincent could have missed the treasure. These are taken to be central to that story on the basis of their relevance. But relevance to what? They are no doubt relevant to the determination of fragility, because the judgment of fragility stands or falls with them. But it is not clear whether they are relevant to the determination of luck, whatever that could mean. Again, to settle the latter question by fiat would appear to beg the question.

2.7 Lessons and Desiderata

If only one of the above conditions – improbability, lack of control, lack of fore-knowledge, modal fragility – survives analysis. Then we are done. But unfortunately there appears to be a deep impasse in this regard. Alternatively, we accept more than one condition as necessary for luck. From here, there are three logical options.

- i. We admit that luck is an hybrid category, straddling categories of value and seemingly disparate modalities. (Levy 2012)
- ii. We give a further account of the conditions in terms of just one, say a modal account of knowledge and agency, and argue that the epistemic and agential

conditions hold *because* of the modal one. Perhaps one such a rendition, this will force the value or subjectivity conditions to be omitted, refocusing the discussion on the modality of interest.

iii. Treat the conditions as desiderata and start from scratch.

The first option, no doubt the most exotic, is the least theoretically satisfying. One would at least need independent argumentative support for such a categorization, and as yet one finds none. In particular, it remains to be seen whether the significance of lucky events is an *ad hoc* condition on top of some non-evaluative modality. The control and fore-knowledge accounts highlight that the attribution of luck appears to have an explanatory flavor; to say something happens by luck is to simultaneously rule out at least two explanatory possibilities: the subject didn't do it, and she didn't know it would happen. These claims do not obviously reduce to modal ones. But it is also not obvious that they are devoid of significance, in the broadest sense of that term. In the next chapter, I want to explore the possibility that these two features – significance and explanatory lack – may be part of a common one.

The second, I have discussed above in relation to the prime candidate of modal fragility. However, exploring that option is beyond the scope of the present work.

This suggests that the first step toward the resolution of the luck debate is what its intuitive category might be, such that it could ever be so well-connected. Given its cognitive similarity to the neighboring literary tropes of coincidence, serendipity, irony, comeuppance, etc. one wonders if its categorization isn't something entirely novel.

3 – Luck as a Narrative Category

Aristotle's account of chance suggests a novel motivation and conception of luck, which contrasts with those currently on offer in the current literature on luck. In this section I do three things. First, I motivate this conception, using a version of Aristotle's own metaphysical problematic. Second, I recognize Aristotelian luck as a modification of narrative explanation. Lastly, I explore its connections to other conceptions of luck in the current literature.

3.1 Aristotle on chance

Aristotle's discussion of chance occurs immediately after he offers his doctrine of the four causes, or in our verbiage, *explanatory kinds*. Chance appears as a problem for this list, because it is often invoked to explain things, and yet the term 'chance' does not appear on his list. The question is twofold: i. what do these alleged chance-explanations really claim? and ii. does this qualify them as explanations?

Aristotle thought he could answer the second question with the first: he says "chance is an accidental cause in the sphere of those actions that are for the sake of something." (Aristotle 2010, 197 6-8) An accidental cause turns out to be a kind of defective cause, and as such it falls short of a genuine explanation. He then elaborates. There are two operative notions here. First, accidental causes are opposed to causes *per se*. (196 27-33) All object-kinds have causes *per se* – 'a house-builder is in virtue of itself the cause of a house, while the pale or the musical is the accidental cause'. When the *per se* cause defaults and is replaced by another, we call that the accidental cause – 'but the pale or the musical is the accidental cause' (196 26-7).

Conceived as a metaphysical distinction, the accidental/per se distinction might strike the modern reader as odd. Aristotle appears to be claiming that there are different causal kinds, some more natural and fitting to their effects than others. Accidents happen, but when they do, they are mistakes of nature, monsters, as he called them. On a modern empiricist picture, ‘accidents’ are only exceptions to nature *as we currently understand her*, not to nature herself. How might this distinction be read in a way that does not commit us to monsters of nature? A straightforward interpretation is that accidental causes are really two or more distinct causes with no common cause. Call this the *causal-coincidence* account. A lottery win consists of a ticket-buying and a ticket-drawing; it is an accident if these two events are not causally related and have no common cause. Chance, then, will designate a purely structural feature of the causal nexus: the chance events are precisely the events at which the causal nexus bifurcates pastward.

Moreover, the causal-coincidence account provides an answer to Aristotle’s problem. The events that constitute a lottery win may have good causal explanations individually, - say, I bought the ticket because I am superstitious and those are my lucky numbers; and, those numbers were drawn because of a series of uninteresting flutters in the lottery machine. But that is compatible with the observation that, *if we simply concatenate both explanations, the resulting discourse is deficient as an explanation*. This is precisely because the underlying causal chains bifurcate. When a causal chain bifurcates, the resulting causal explanation suffers.

The second condition, ‘...in the sphere of those actions that are for the sake of something’, we might interpret as a significance condition (See 2.1). In general, a chance event is the result of a causal coincidence that would have been fully caused by a

purposing agent, except that it was caused by something else. Hence, chance signifies *partial* agency (See 2.2).

However, the causal coincidence account of chance cannot be still too simple to account for modern luck, for several reasons. First, it appears to privilege the *effect* of the coincidence as the saliently lucky event, whereas this is not generally true. Often, we will say one of its horns it was lucky, as in ‘lucky that I played the lottery this time!’ And this would be true, not because that horn of the coincidence is itself the effect of another coincidence, the horn is lucky because it participates in a lucky coincidence. In general, we have some latitude (though not total) to choose which event, causally related to a coincidence, that we want to call the lucky one.

In order to accommodate this, the proponent of the causal coincidence account would be forced to say that all parts of the coincidence – causes and effect – are equally lucky. We would have total latitude in choosing which event to isolate as the lucky one. Yet this is too permissive. Consider the following case:

Bison. Suppose you awake and find yourself tied to an isolated stretch of railroad track. This isn’t so bad, you think, as you notice that you will only encounter a train if a separate lever, located a quarter mile away is pulled, and there is no one around for miles. You see a train approaching in the distance and breathe in relief. However, to your bad luck a rare stampede of bison approaches that will certainly trip the lever, causing the train to divert onto your stretch of track. You look on in horror as you witness your doom unfold.

The causal coincidence account predicts that both causal trajectories – the train and the bison stampede – are equally (un)lucky. However, this is incorrect: the rare stampede of bison is saliently more unlucky than the other events.

This is because, as one might put it, the bison stampede is out of the ordinary; the other events in the story are relatively circumstantial. In this story, there is a sharp contrast between which events are circumstantial and those that are cast as mere happenstance. Luck, chance, and coincidence appear to be sensitive to the way events in a narrative *unfold*.

Recent experimental research shows that people are more likely to judge an event lucky, if it has not been antecedently established as lucky. Hales et al (2014) demonstrates that people judge events to be luckier when the event that is cast as the lucky one occurs *later in the discourse than earlier*. This suggests that which event in a story we isolate as ‘the lucky one’ can be manipulated by ad hoc narration, simply by postponing it within the story.

A surprise too can sharpen the sense that something lucky has happened. In the story above, the bison appear late in the telling, and that can come as a surprise, in part, because the bison are revealed at the end of the discourse, but also because the author didn’t spoil it, say by intimation or foreshadowing. Suppose, alternatively, that I had begun the story with a long preface about the history of bison migration in that region, then proceeded to tell of your unfortunate predicament on the railroad tracks. When I reached the part about the stampede, not only will you be less surprised, the judgment of luck on reflection will be diminished, simply because the luck event was *anticipated*.

The second problem with the causal coincidence account stems from a more general problem with causal explanation. Causal explanations are generally understood to supervene on underlying causal facts Kim (1981), Carroll (2001). We may assume that between the two versions of the story – the original and the historically augmented version – the relevant causal facts are the same. So if explanation supervenes on reported causal facts, there should be no difference in the explanatory status of any events. And yet there does appear to be such a difference. Somehow acausal facts are doing explanatory work in virtue of the fact that they are asserted in the same breath of storytelling.

Finally, the two components of the causal account – accidentality and thwarted purpose – remain hopelessly independent. Ideally, an account would explain how the two conditions relate. This is also a problem shared by contemporary accounts (see 2.7), and it is easier to explain in terms of them. Suppose that lucky events are nothing more than beneficial low-probability events. What do the two properties – low probability and benefitting me – have in common such that I have a readily compelling label for both at once? What is the tie that binds these disparate judgments to render a unified judgment of sheer luck?

In sum, our desiderata are threefold: we want an interpretation of accidentality that explains (3.2) how chance can fail to explain, (3.3) how the chanciness of an outcome can depend on acausal facts and (3.4) how the two conditions – accidentality and thwarted purpose end up in unity.

3.2 Explanatory Deficiency

Three further data points will be of help. First, we may observe that any putatively lucky event can be re-described as a coincidence of two or more events, where a *coincidence* consists of two or more events lacking a common explanation. A lucky lottery win can be re-described as a ticket-buying plus a ticket-drawing – that happily coincide in someone’s favor. That is, there is nothing that explains *both* co-incidents that co-constitute the lottery win.

Of course, this suggestion about coincidence only reframes the problem, because it is still unclear what kind of *common* explanation is missing. Again, it’s not causal explanation. For suppose that my lottery win takes place in a world in which the entire causal order stems from a single first event – the Big Bang, or a single act of God’s Will, or whatever. Then no two events would lack a common cause. But surely my lottery win would still count as a coincidence, even in a Big Bang world, Aristotle’s friends could still have met in the market by coincidence.

The reason the Big Bang Theory doesn’t undermine every coincidence – doesn’t explain them all – is that it rests unreasonably far in the past. We might say that, in ordinary contexts of assertion, such ancient events become irrelevant. It seems beside the point of an ordinary explanatory story to offer up explanations of a cosmological sort, when we are talking about everyday, or even not-so everyday, things. Some stories place a statute of limitations on what can explain away a coincidence; and we might conjecture this is a matter of various contextual factors. Hence, whether there is a common explanation or merely a defective one is a contextual matter. Luck appears to thrive in an everyday conversational context in which explanatory standards are relaxed, and

explanatory possibilities restricted to the local and ordinary. But this barely moves beyond Aristotle's initial insight that chance is not in the category of 'neither of which is by necessity and always, nor by that of which is for the most part' (196b12-13). So again, what *sorts* of constraint does everyday storytelling place on reports of chance and luck?

The second observation is that luck and coincidence respect what we can call *explanatory transmission*: If A explains B, then B is lucky (or coincidental) only if A is lucky (or coincidental). If your lottery win was lucky, then it was also lucky that you bought that lottery ticket, etc. If you are lucky to be happily married, then it was lucky that you decided not to stay in the night you met your future spouse.

The consequence is that the kind of explanation that transmits luck is the same kind of explanation that lucky events ultimately lack. Because those explanations bottom out somewhere, the explanatory transmission of coincidence does not threaten an infinite regress of coincidences into the past. It would be a different story if luckiness always transmitted along causal lines. But it will not in general. This is because of the previous point. While we can say that, because you won the raffle, you were lucky to have played; we cannot say that for this reason you were lucky to be born.

Third, notice the possible addition of 'as it happened' (or a synonym, like 'lo and behold' or 'wouldn't you know it') in any story of something lucky. I play the first slot machine in sight with my bottom dollar, and wouldn't you know it, I hit the jackpot. Assuming there is no more to a luck-story – I haven't left out any relevant details – there is no way to retell it without appealing to happenstance, at some point or other. Because of explanatory transmission, there is some flexibility as to where I locate the report of happenstance, whereby I terminate further explanation. I could locate the happenstance in

the fact that I happened to pick that particular slot machine, which was bound to pay out. Or, somewhat more oddly, I could attribute to happenstance my choice to gamble with my bottom dollar at all. At some point, I will hit the explanatory bedrock, which transmits luck everywhere up the explanatory chain, but no further down.

In sum, lucky events are lucky partly in virtue of the fact that the appropriate explanatory story will have to bottom out in an appeal to happenstance, that is, the denial of further explanation. So luck is not a feature intrinsic to isolated events, like lottery wins, but a global feature of, implicit or explicit, explanatory stories. In particular, an essential feature of luck is an internal narrative constraint on how far back the explanation can go. In short, coincidence, happenstance, and therefore luck, are tropes of narratives that fail to offer a complete explanation on their own terms.

3.3 Luck as 'deficient' narrative explanation

Hence a prime candidate for the target explanatory category is what Velleman and others have called 'narrative explanation'. Roughly, for an event to be narratively explained is for it to 'make sense' by means of a narrative, where a narrative is, roughly, a string of two or more eventive or stative clauses with minimal coherence. The more coherent the narrative, the better it stands to explain; and vice versa. A report of a simple coincidence is a special case, where the narrative consists of the two horns of the coincidence. The reader can infer that the two statements are related, but not causally. So the discourse contains enough coherence to count as a narrative, but not a full-on narrative explanation.

Because narrative explanations are semantically more complex than causal ones, they can be defective in more ways. With causal explanations of a single event, the explanation can only fail by omitting a sufficient cause. But that is not what is wrong with lucky events. With causal explanations of event-multiples, the explanation can again fail by omitting a common cause. But when we ask for an explanation of an event-multiple, we are simultaneously asking for a narrative explanation. To ask with one question why two things happened, is to ask for a story that makes sense of them both. When no such story is possible, the two things are coincidental.

Luck reports appear to characteristically lack narrative explanations, not just causal ones. When all relevant causes are included, a coincidence still leaves the reader wanting. Narrative explanations are explanations, which depend for their status as such on more than reporting the causes. A luck report, then, would seem to be like a converse of a narrative explanation.

Incidentally, philosophical discussion about narrative explanation has concerned itself with the very issue of how an explanation can fail to supervene on the underlying causes. Carroll (2007) claims that there is no new category here, that the explanatory force of a narrative is entirely owing to the causal facts recounted by the narrative, so that a narrative explanation is none other than a causal explanation, couched in a narrative form. By contrast, Velleman (2003) highlights the affective dimension of narrative modes of sense-making: through stories we learn to feel how events make sense.

It is possible to see this disagreement as derivative of a disagreement about the cognitive status of explanation. Carroll's view is motivated by a strictly causal conception of explanation; narrative explanations are nothing over and above causal

explanations, because the latter exhaust the explanatory possibilities. Velleman, on the other hand, sees narrative explanation as a motivating case for denying the uniformly causal nature of explanation. A strong cognitivist account of explanation in general motivates a reductionist view of narrative explanation in particular; a non-reductionist view of narrative explanation, in particular, motivates a non-cognitivist view of narrative explanation, in general.

As we saw above, a strictly causal interpretation of explanation will not fit the present account of luck, because luck reports are semantically richer than mere causal denials. And yet a non-cognitivist account of narrative explanation may yield a subjectivist account of luck, which would violate the objectivity desideratum (2.10). First, we need to see the extent to which this is the case.

It is precisely cases like *Bison** where acausal factors appear to do explanatory work that motivates the non-reductionist view, Velleman (2003) Rosati (2005). While the two versions of the bison narrative may not differ vis-à-vis causal explanation, they do differ vis-à-vis narrative explanation. The prologue, though causally unrelated to the story, somehow makes an explanatory contribution. The name 'narrative explanation' is warranted, perhaps, because the details that allegedly make the explanatory difference are included with an aim to narrative coherence.

For Velleman, although narrative explanation is a novel mode of sense-making, it is so, because it operates on a non-cognitive plane. What differentiates narrative explanation from causal explanation is how the explanations are processed by us – which comes down to a simple cognitive/non-cognitive distinction. The paradigm case of narrative-produced understanding that is narrative emotional learning. Emotive habits are

often lived, learned, recalled, through narrative. They need not be understood representationally, symbolically, or propositionally. Call this kind of view a *non-reductive non-cognitivism* about narrative explanation.

So the narrative account of luck, indeed its motivating case, appears to require a non-reductivist picture of narrative explanation and yet, there is *prima facie* motivation for a cognitivist alternative to Velleman's non-cognitivism. The first problem with a non-cognitivist account of explanation is to doubt its reason-giving status. In *Bison**, once the reader has encountered the long preface about Bison, she has good reason to expect that some bison will show up at some point, even if nothing in the preface renders this probable. There may be a psychological story to tell about how well-functioning minds properly connect semantic signifiers between earlier and later parts of stories and are less surprised when they do so connect. But for such a story to explain why luck is surprising, there would have to be a symbolic account of luck with which to formulate the hypotheses.

A crucial issue here is whether narrative explanation is properly so-called – whether the added non-causal narrative details contribute any cognitive explanatory status to the events in the story, on top of the underlying causal facts. No doubt the story itself hangs together better, is rendered more internally coherent, when the bison event is anticipated by the narrator. We may assume moreover that the historical prelude made the bison stampede no more likely. Nonetheless their presence in the discourse made that event more anticipated, and the judgment of coincidentality diminish. (This question is happily separable from the epistemological question of whether the added historical details make an epistemic difference – that is, whether they provide sufficient evidence

for predicting a stampede. The apparent difference in discursive coherence can be reproduced at any level of epistemic credence, sufficiently high for knowledge.)

A second issue with the non-cognitivist account is that explanatory efficacy is essentially a psychological matter, so a narrative's capacity to explain is entirely dependent on the way the story is told. This has an advantage of explaining why time-ordering matters: e.g. if you tell the story in a way that surprises an audience, they will be more likely to judge. Can such a theory be accommodated with further constraints to resolve this?

3.4 Narrative qua Narrative

So described, narrative explanation appears to only be 'some kind of explanation or other', so what makes it specifically narrative, what makes it its own brand of explanation?

Accordingly, I leave luck for a moment to make some remarks about narrativity in isolation. I will not give a complete account of narrative. My proposal will only require an answer to the following sub-questions:

- i. What makes a concept a narrative concept?
- ii. What constrains the boundaries of the narrative itself, such that certain events are beyond recount?
- iii. What constrains the employment of narrative explanation, such that certain things cannot be explained or invoked as explananda?

3.4.1 Narrative Concepts

It is a fashion common to both the philosophy and the social sciences to employ the term ‘narrative’ to describe a domain. It has been used to describe personal identity (Dennett (1992); consciousness, Flanagan et al (2003); human action and how we make sense of it, Velleman (2009); the course of a human life, and the conditions of a valuable one, Rosati (2013).

It may come as a surprise that, in these contexts, the term ‘narrative’ is *not* used pejoratively; when applied to an entire category like this, ‘narrative’ is typically meant positively, suggesting something both deep and humanly meaningful about the account on offer. In particular, a narrative categorization is not always intended to ‘subjectivize’ or ‘relativize’ the target phenomenon. Rather – and this *is* surprising – the alleged narrative character of human consciousness, action, or whatever, are supposed to deepen our understanding of these phenomena.

Common to many of these discussions is a certain intuition – that the phenomenon in question has an *irreducibly* narrative character. Often what ‘narrativity’ means is taken to be so intuitive that the theorist doesn’t attempt to give a definition. But there has been some devoted philosophical scholarship to this very question, which I presently review.

A major task of the ‘philosophy of narrative’ has been to identify the necessary characteristics of what Noel Carroll calls ‘the narrative connection’: What is it for two events to be connected ‘narratively’? Carroll claims that the narrative connection requires a causal connection, upon which the narrative connection supervenes.

Against this, Velleman argues that events can hang together narratively, even without reporting causal chains. He holds that narrative understanding, so different from our understanding of causes, is specifically emotive. Learning how to understand a narrative is like learning how to feel about events of a certain sort befalling characters of a certain sort. Nonetheless, both maintain that the chief function of narrative is to explain events, even if it calls for a more general explanatory modality than causal explanation.

Rosati's account appears to be still more general: She defines the narrative relation as a diachronic transfer of *meaning*: Two events are connected narratively if the meaning of one depends on the occurrence of the other. I say 'appears', because it is not obvious whether the kind of meaning conferred by her narrative relation is intrinsically explanatory in character. Her ultimate purpose is to claim that the good life has the structure of a coherent narrative. So it might be important that a narrative relation be not only meaning-conferring, but explanatory. A person might ask what her life has meant, and to answer this, she might have to ask *why* she is the way she is.

With Rosati's account in hand, it appears that coincidences present paradigmatic cases of narratively connected events that lack an explanatory connection. There are some stories, called coincidence narratives Dannenberg (2003) that consist of nothing more than a single coincidence. In such narratives, there should be a bare sense in which the co-incidents depend on one another for their meaning. All I have in mind here is how buying a lottery ticket can contextualize the lottery drawing, which occurs on the other side of the state, but somehow altering its meaning in the lottery narrative.

The narrative relation suggests a natural account of what it is to be a narrative category:

An eventive (or stative) predicate is a *narrative category*, if true predication of an event (or state) E entails that the event (or state) bears a narrative relation to another event (or state).

If the narrative relation between events is just a matter of a meaning dependence or the relevant sort, then the claim that luck is a narrative category just amounts to the claim that lucky events depend for their meaning upon other events. Every lottery win, every lucky guess, every advantageous mutation, can be meaningfully retold as a sequence of events that bear this kind of dependence. And the necessary connection between luck and coincidence makes this narrative connection explicit: a lucky event is narratively connected to the other constituent event(s) in the coincidence to which the lucky event is necessarily connected.

We can get a sense of the nature of the narrative relation by exploring its formal properties as a relation.

First, the narrative relation is *assymmetric*: Two events in a narrative might depend on one another for their meaning, but they need not. Paradigmatic meaning-transfer will take place with the flow of narrative time. Earlier events confer meaning on later ones by providing a background context. Usually the meaning of the earlier events will not so depend on the occurrence of the later ones.

Second, however, it's not necessary that meaning transfer with the direction of narrative time. Meaning-transfer can be retrospective. When a person re-watches *The Sixth Sense*, with full knowledge that (spoiler alert) Bruce Willis's character was dead all along, the antecedent storyline takes on a new meaning, retrospectively. In a very different way, a person can reflect back on her *own* life and generate new meaning in

light of posterior events. (That is, only if these moments of reflection are taken to be parts of the very narrative – the life – upon which they reflect, do they serve to make this illustration.)

Third, it is also *intransitive*. If A and B are narratively connected and B and C are narratively connected, it does not follow that A and C are narratively connected. For example, two events might be narratively connected within a subplot of the narrative that is, as it were, *free-standing*: only the first event of the subplot depends for its meaning on events outside the subplot (say to provide a context), but the later events of the subplot do not so depend, and so are disconnected from the rest of the narrative.

These negative properties are modest when taken individually, but taken together they yield an important consequence: the sum of narrative relations are insufficient to determine the boundary of the narrative. It might be tempting to think that events in a narrative ought to be at least *indirectly* connected by a meaningful relation, so that two events would be a part of the same story if and only if they bore the narrative relation, whether directly *or* indirectly. But, while disconnected stragglers and red-herrings may be a sign, even the hallmark, of bad writing, we should not rush to build this judgment into an account of what constitutes the bounds of a narrative. Bad stories are still stories.

Indeed, it is often possible to charitably assimilate stragglers into the story somehow. When a character from *Family Guy* makes a non-sequitur reference to some television obscure, we need not infer, as suggested by the *South Park* parody, that the episode was written by a random process². Instead, we could interpret the *Family Guy*

² In the *South Park* parody, the “*Family Guy*” episodes were “written” by manatees that would push beach balls into basketball nets, to designate which television reference would be juxtaposed with which situation.

non-sequitur as a self-aware commentary on the ubiquity of meaningless juxtaposition in comedy writing. Here we are *forcing* a meaning onto an apparently meaningless event sequence, to ‘round out’ the story.

So while the formal properties of the narrative relation do not determine the narrative boundary, there are further constraints that may be of help. In particular, it places normative constraints on what can be included *as an explanation*. So if I am telling a story about how you ran into your friend at the Atlanta airport, it would be rendered incoherent if you were to add, ‘but of course there are no real coincidences, since everything is predetermined from the beginning’. This is an instance what Hobbs (1993) refers to as content coherence; what a previous statement is *about* – its content – can rule out certain succeeding statements on pain of incoherence.

Because stories can misrepresent the explanatory structure of the story-world, they can also accurately represent it. This suggests a realist metaphysical picture under which narrative explanations are snapshots of an objective explanatory order – which we could visualize as a timeless map of events connected by explanatory relations. This would be different than the story-board of the narrative, which would only show the order of events as presented *de dicto* in the course of narration. Rather it would be the *de re* force that backs and guides narration. It would also be distinct from the causal order itself. One difference is that the objective explanatory order might include *possible* explanations that were not explicitly given by the narrator, perhaps for reasons of relevance or coherence. It would not fall short of the total explanatory order that could be given for any possible event in the story-world. The narrative explanatory order is both objective and story-bound, making it a sort of complete pseudo-account of the world.

3.4.2 *Contours of Narration*

Luck attribution is sensitive to the narrative framing of a discourse, or rather to the contours of any discourse that are specifically diachronic. The contours in question are specifically narrative in the sense that they are only permissible in free-range narration – e.g. non-sequitur, foreshadowing, flashback, etc. If luck-discourses were restricted to strict causal sequences, no such sensitivity would emerge.

Consider this short coincidence narrative ‘Aristotle goes to the market. He runs into an old friend.’ If that is the end of the story, then we can suppose that the meeting was a coincidence. That much is suggested by the ‘runs into’ locution, and the lack of further detail. The coincidentalness of the meeting could be undermined, but only if there is more to the story.

What is more, we can suppose that the friend came to the market for some reason that would not narratively explain their meeting. That is, we can fill in the objective explanatory order in a way that is consistent with the story as it is told. That the meeting was a coincidence must be held fixed, but other than that, we have quite a bit of latitude. On the original telling we have:

N(arrative strand): Aristotle goes to the market.

C(oincidental event): → He runs into an old friend.

Which we might augment into two separate narrative strands that meet,

N1: Aristotle goes to the market.

N2: A mysterious man arrives at the market on business.

→ C: Aristotle runs into an old friend.

Now we have two explanatory chains N1 and N2, which jointly account for the meeting, but which do not hark back to a common chain. Our augmented version, or a prequel, can trace these two chains back as far as we like, as long as they never meet, and preserve the coincidence of the original.

Here's the upshot: a narrative rendition of a coincidence narrative is constrained to respect the original coincidence, because *that's the point of the story*. If the story were longer, it might have been about something else, and then perhaps this particular coincidence would be insignificant to the overall narrative task. In that case, an alternative rendition would be within its interpretive bounds to explain the coincidence away. This imposes a teleological criterion on the usage of coincidence in narrative:

Teleology: An event E in a narrative N is a *coincidence* only if no retelling N* of N could give a coherent narrative explanation without altering a primary purpose of N. (e.g. explaining your wealth, or presenting life as chaotic, etc.)

This condition accounts for why the Big Bang theory needn't explain away everyday coincidences. The point of those everyday stories is to indicate that something remarkable has happened; to retell the story by bringing in the entire backstory of the universe would distort the story's purpose beyond recognition. On the other hand, if the purpose of the story is to call into question the very possibility of coincidence, then of course the Big Bang explanation is the one to go with.

Much more needs to be said about the purpose(s) of a story. The virtue of this notion is that it is constrained by so many aspects of the narrative, that it runs a low risk of giving a circular account of coincidence. The final analysis of what ultimately constrains coincidence will be quite rich. I will not attempt an exhaustive list, but here are

a few constraints on the purpose of a narrative, to get a sense of how the use of coincidence becomes necessary.

Relevance would place one restriction. The explanation of your wisdom tooth story is of no relevance to the explanation of my wisdom tooth story. Most of the events in your story will not be included on my explanatory map.

The central characters in the story can influence what is relevant. Events that occurred before the lives of the characters were born are probably of no relevance. The film *Adaptation* begins with a time-lapse montage showing the emergence of life on planet Earth, the rise of civilization, and finally the birth of the protagonist. But that's like a student essay that begins with "Since the dawn of civilization mankind has pondered about a panoply of philosophical issues." It's bad form.³ The story-board and the objective explanatory order are normatively constrained to stick to events that concern the subject of the story, and usually this includes its main characters.

The subject of the story could also be a single event around which the rest of the story is structured – like the assassination of Robert Kennedy in *Bobby*. The film traces the final day in the lives of those caught in the crossfire of the senator's assassination. When the shooting occurs at the end of the film, our familiarity with the characters' lives adds a new significance to the event.

This appears to be the case with most coincidence narratives – narratives whose purpose is to recount a coincidence. *Bobby* attempts to recast the senator's assassination as a coincidental intersection of so many fates. In order to pull this off, the film would have to make it plausible that all of the deaths held comparable significance. This calls

³ In *Adaptation* the faux paus is made wittingly, as the film is about the writing process of its own screenplay.

for a drastic reinterpretation of a major historical event, not only to upplay the significance of the deaths of the bystanders, but to downplay the significance of Robert F. Kennedy's own death (he is the only victim whose backstory is *not* portrayed). I am not sure if *Bobby* manages to pull this off in the end, and it is hard to see how rivaling the received historical interpretation of that event could be successful.

3.4.3 Narrative Explanation

This requirement is telling: for a set of events to count as a coincidence in a narrative, the events must be cast as comparably significant: we need a reason to think that their common occurrence matters.

I think this explains why *lucky* events also lack narrative explanation: lucky events are always fortunate for some protagonist, so the corresponding coincidence will always be narratively significant enough obviate an explanation. The reason you're left at a loss for *why* it should have happened to you is that a fortune is life-changing. Importantly, coincidences can warrant this kind of significance without the help of fortune. Bare coincidences need only be barely significant, like when on the ride to a funeral of someone I barely knew, I happen to hear their favorite song on the radio.

To summarize the account: lucky events are fortunate coincidences. Coincidences are multiples of events that lack a common narrative explanation in the objective explanatory order, where this order is normatively constrained *inter alia* by the purpose of the narrative itself. When the purpose of the narrative is just to recount the coincidence, the narrative explanatory order unproblematically lacks an explanation of that coincidence.

3.5 *The problem of chance revisited*

Aristotle's account of accidentality is alone sufficient to solve the problem of chance in isolation of the second condition. The problem of chance is the question of how we can use the locution 'by chance' to explain, even though chance is not a genuine cause. The answer is that accidentality marks a certain deficiency on a piece of otherwise explanatory discourse, an incoherence that appears to be imposed by *the limited range of admissible descriptions, of both cause and effect*.

Now, in the course of his discussion, Aristotle treats a fairly broad range of descriptions, including natural and artificial concepts drawing from formal and informal categories. Whether an individual is a housebuilder does not appear to be a natural fact *per se*, though it may supervene on some. Hence Aristotle's concept of accident is generally an informal notion, capable of applying to anything we can describe in sensible terms. In general, the range of admissible descriptions will not only be fixed by the world, but by a host of other discursive constraints, including what has been established, what is appropriate, and what are within cognitive grasp.

This is especially important for the second part of the definition of chance, where the *per se* cause in question is an intentional human action. Aristotle's formulation – 'in the sphere of those actions that are for the sake of something' – might be read as a conjunction of a subjectivity condition and a significance condition (ii.). Chance outcomes are relativized to a purposing agent; it has to be something the agent would have pursued. Aristotle gives the example of a man who 'is engaged in collecting subscriptions for a feast. He would have gone to such and such a place for the purpose of getting the money, if he had known. He actually went there for another purpose, and it

was only accidentally that he got his money by going there.’ (197 34-36) The story suggests that chance is a mild brand of irony. An outcome is defined as being desired by someone, and it is necessarily brought about by some other means.

3.5.1 Significance as Acausal Coherence

This suggests a continuity between luck and lighter modalities – like the uncanny – or heavier ones – like poetic justice. The uncanny would be an accidental cause where the significance were not endowed by an intention, but by a meaningful signifier, whose meaning is partly constructed by the narrative itself. Suppose that all day I have been seeing the number 14 everywhere. Just then, 14 children walk in front of me. Here the common meaningful signifier has two instances ‘14 = the number I have been seeing all day’ and ‘14=the number of children who just walked in front of me’. In this context, the corresponding description-pair

{‘the number I have been seeing all day’, ‘the number of children who just
walked in front of me’}

counts as an accident. It also counts as uncanny, because they both fall under the narratively constructed motif ‘14’. Poetic justice happens when the common signifier carries the weight of retribution, like when a statue of Mitys falls and kills Mitys’s murderer, Velleman (2003).

3.5.2 The Unity of the Conditions

Observe how elegantly Aristotle’s two conditions on chance coalesce. When the chance outcome is described as the object of the agent’s desire, this naturally identifies

the agent's intention as the *per se* cause of that outcome, since the description of the outcome already makes reference to the agent's desire. Finally, the desired outcome is brought about by some other means, i.e. some accidental cause, i.e. 'chance'. Chance, then, is a name for any cause other than the intentional action of a would-be desiring agent. Contemporary accounts of luck, by contrast, posit a value condition and a non-evaluative modal condition, without explaining how the two conditions co-substantiate the account. The 'significance' that is necessary for luck is essentially figurative, inherited from the very modality that is also necessary for luck.

To summarize, a chance event is one with an accidental cause, whose accidentality is defined in spite of a human aim. This is shorthand for the following narrative archetype: a person desires something, this identifies her action as the cause *per se* of the something, then the person obtains the something through other means.

3.5.3 Improbability (iii.)

On a simple view, the luckiness of an event varies directly with $1 - p$, where p is the probability of the event.⁴ This account is *consistent* with the observation that luck designates an explanatory lack, but they are not synonymous conditions. Low probability is only perhaps *evidence* of an elusive explanation. In general, the probability of a phenomenon is a placeholder for a pending explanatory assessment.

⁴ Pritchard 2005 can be read as offering a precise modal version of this. His account is tailored to the theory of knowledge, so I discuss the finer details of his account in the epistemology section below.

3.5.4 *Lack of control*

If an outcome is by-chance for an agent, then she cannot have controlled its outcome. For the agent's intention, if reasonable, is always the *per se* cause of the desired outcome, so if the actual cause is the agent's control, then she had a reasonable intention to bring it about, the *per se* cause and the actual cause are the same, the outcome is not accidental, and so not by chance.

The narrative account also rebuts a standard challenge to the control platitude, Rescher (1994). Imagine you are being chased through the desert by vampires, and they finally have you cornered. As the undead plague descend upon you, you breath your last sigh of hope. Just then, the sun rises over the hill, igniting the lecherous horde, and saving your mortality. Of course, here the fortunate outcome, the sunrise, occurs beyond your control. And yet it cannot be a matter of chance that the sun rose.

There is admittedly something artificial about selecting the sunrise as the putative lucky event. We could equally well select a consequence of the sunrise that is fortunate. This is a general feature of luck – it transmits up and down causal chains, at least to a certain degree. Unfortunately, there seems to be no principled way to determine which event we isolate as the lucky one in this chain, so the counterexample stands.

The interesting moral of this story is not that lack of control is insufficient for luck, but that, in general, 'luck' does not properly predicate events in isolation, only ever narrative strands or archetypes. Here, we can say that the vampire narrative contains both element of chance and non-agency, *and* add that the former is true because of the latter. The narrator establishes that the protagonist has an interest in escaping the vampires, this sets up her agency as the *per se* cause of that escape, then she escapes by other means.

The fact that the ‘other means’ were bound to happen anyway is compatible with the fact that the story fits the Aristotelian archetype. It is a corollary that Aristotelian chance is compatible with determinism, since explanatory narratives are not bound to recount full causal chains.

Recall from the previous discussion (2.2), the counterexample to the *necessity* of non-agency for luck, due to Lackey (2009). A demolitions expert has rigged a building with explosives. However, the wire that connects the trigger to the explosives rests behind a wall, where a rat has eaten through, just enough to short the circuit. Should the demolitions expert press the trigger button, the explosion would not occur. However, a few seconds before she presses the button, a coat is placed on a wall-mounted hook that moves a nail into the precise spot behind the wall where the wire had been eaten, completing the broken circuit, and allowing the charge to pass through, destroying the building, and the coat-wearer. The intuition is that the controlled demolition is under the demolitions expert’s control, but the demolition occurs as a matter of luck; lack of control is not necessary for luck.

As the story goes, it is a matter of Aristotelian chance that the explosion goes off. The explosion happens due to an alternative cause to the intentions of the orchestrator – namely some fortuitous circuitry in between the walls. However, this part of the story is so contrived that one might worry that it violates normal constraints on narrative relevance. The narrator could omit those behind the scenes details, and still avoid any charge of explanatory malice. This is because the modified story that omits the behind the scenes details contains everything that is relevant for determining the agent’s *responsibility*. The added bits are *ad hoc*.

But which version is the right one for determining whether the explosion was *really* a matter of luck? I'm not sure there is a good answer to that question. Narrative relevance is so pragmatic, guided by such a vast panoply of considerations that a full account is not in the offing. A complete account of luck requires a substantive method of answering questions like this, and hence a complete poetics of narrative relevance.

In the *Demolition* case, it is instructive to flag the pragmatic forces at work, because they help explain the intuitions. For one, the storyteller has the task of determining moral responsibility, a task so heavy that, when met, may render other details *ad hoc*, whether they be explanatory or no. What the demolitions expert could reasonably be held responsible for depends on what she could reasonably have been expected to know, and, we may stipulate, this excludes what happens behind a wall. Maybe she triple-checked all of the wiring the night before, and the rat only ate through in the meantime. Responsible preparation cannot guarantee success. What is apparent from this is that the relevance constraints flow from those that determine fore-knowability to agency to responsibility, and finally to luck, but not vice versa. So that our intuitions about what is lucky have little non-question-begging success in determining what we are responsible for, what we have done, or what we might have known.⁵

3.5.5 *Fore-knowledge*

Steglich-Peterson argues that there must be a temporal buffer, of non-specific but non-zero length, between the occurrence of a lucky event and the subject's state of

⁵ I say this with reservation. There might be an analytic philosophical paradigm of narrativity sufficient to sustain stories that accommodate arbitrary *ad hoc* explanatory elements. Call this trend common to philosophical thought experiments the *minimal poetics*. When are causal details narratively relevant? Always.

foreknowledge that it will happen. If the agent is in a position to know the event will happen *just before* it does happen, then the event cannot be lucky. Generally speaking, if the outcome is something to be desired or avoided by a subject, it will become instantly relevant whether the subject can pursue or avoid that outcome, and hence whether they are in a position to *know* that it will. So, generally speaking, Aristotle's account gets the answer right.

The *Bison* example doubles as a problem case here. As the bison approach the lever that will direct the train to the track, you see your doom unfold. You know that you are going to die. But this is also a matter of chance: since there are no agents around to pull the switch, its pulling cannot have a *per se* cause, and so must be an accident, contrary of course to your wishes.

However, this interpretation attributes foreknowledge and chance to different events – your death, say, and the bison approaching. You have foreknowledge of each event, because you have present knowledge of a determining cause, which functions as a cause *per se*. Once you see the bison approaching the switch, you know it will be pulled, because one of them is *bound* to trip over it. So now it's no accident that the switch is pulled. Once the switch is pulled, you know the train will run you over, because its *bound* to follow the track. So now your death is no accident either. This would not be so, if the train had somehow caught you by surprise. If there is a salient by-chance event to isolate, it has to come before any determining cause that the protagonist ascertains.

We might ask: can one fore-know something that is not determined in this way? If so, there is room for fore-knowledge of chance events. But I think we can sidestep this involved epistemological question, by noting the following. The unrefined narrative does

not provide us with a tension between two crisply defined concepts. The narrative simply stipulates that the events are bound to happen, using the metaphor of a train as a paradigm for determination. Then we ask naïvely – well was it an accident? – assuming we have some narrative-independent grip on the notion. The intuitive answer is: No. But there is no reason to think that the feature of the story the intuition consults to make this answer is any different from the one that supplies the intuition about the presence of fore-knowledge. So there is no reason to think that stories like these can offer non-question-begging insight into the nature of chance, let alone knowledge.

The fore-knowledge platitude, while intuitively compelling in all cases considered so far, remains unexplained in the absence of a competing account. As it stands, the narrative account offers no help, since the storytelling device that renders events accidental or happenstance is also what renders others determined. The phenomenology of open narration is insufficiently structured to furnish a proper metaphysics of chance.

3.5.6 Modal fragility

(I postpone discussion of this until Ch. 5, with the full tri-partite account in hand.)

3.6 Conclusion

The narrative account of luck has it that luck predicates not events, but pieces of discourse in which events unfold, and have the task of explanation. The luck-narratives are those that yield deficient narrative explanations. It appears to be a fruitful question to consider the objectivity constraints that can be placed on narration to ensure that luck

turns out to have objective application. In the next chapter, I consider a few other lenses under which to view luck narratively, through conversational semantics and coherence theory.

4 – Anti-Explanation

The task of this chapter is to account for the putative objectivity of our application of locutions like ‘by luck...’, ‘by chance’, etc, partially defined in the previous chapter as a deficient narrative explanations. This is done by understanding luck locutions in three fashions: i. by understanding luck reports as subject to Gricean norms on descriptions in explanatory discourse, ii. as a unique Austinian speech act made in response to an explanatory interrogator, real or imaginary iii. as a condition on coherence relations (or lack thereof) in a narrative discourse. The first two involve a detour into speech-act theory. More broadly, accident reports are explanations made in under an apologetic stance, making a conciliation for the inability to meet the conversational demand of explanation. The latter treatment involves a detour into formal discourse semantics Hobbs (1990) Kehler (2002) Cumming (ms). I argue that these two are likely two sides of the same conversational coin. *Anti-explanations*, as I call them, are speech-acts that flag an incoherence in a story and simultaneously apologize for its inability to resolve it.

4.1 Explaining by Describing

Although Aristotle’s concept of the accidental is a metaphysical one, his defining examples appear to be sensitive to the speaker’s choice of description:

“For just as a thing is something either in virtue of itself or accidentally, so may it be a cause. For example, the housebuilding faculty is in virtue of itself the cause of a house, whereas the pale or the musical is an accidental cause. That which is *per se* cause is determinate, whereas the accidental cause is

indeterminable; for the possible attributes of an individual are innumerable.”

196.24-29

The nature of the effect – a house, say – determines a unique candidate as its *per se* cause – a housebuilder, say. All other house-causers are accidents. Now suppose that a man is qualified as both a housebuilder and a musician. Then, *qua* musician, he is an accidental cause of a house, but *qua* housebuilder he is not. So it would seem that whether the house was built by accident depends on how we describe the builder. If that’s the whole story, if a man goes from being a *per se* cause to an accidental cause just by describing him as a musician instead of a housebuilder – then accidentality becomes purely arbitrary, let alone non-metaphysical.

The same applies to the related concept of chance. Here the effects are always in the category of intended outcomes, or “in the sphere of those actions which are for the sake of something”, whose *per se* cause is always the intentional action of the agent concerned. When an outcome is intended, or might have been, but happens inadvertently anyway, then that outcome is by chance. Again an ambiguity might arise with the application of intentional action, and again because the latter admits of different levels of description. A driver intentionally drives a car through a intersection, unintentionally drives through a poorly-lit intersection containing a small child.

The latter case suggests that even if the application of terms like ‘accident’ and ‘chance’ are description-dependent, they won’t be wholly arbitrary, as long as there are relevant constraints in turn on how we describe the causal relata. Truth, relevance, salience, to name a few (Lewis 1986). The salience of a description depends *inter alia* upon a series of semantic and pragmatic factors, including the history and frequency of

its mention, its association with other descriptions, and its capacity to fulfill the conversational burden of the speaker. If the above factors are sufficient to determine a choice of description, then the ‘chance’ designator will have a principled application.

In particular, insofar as the task of the discourse has been determined as an explanatory one – i.e. if the speaker has an explanatory burden – the discourse will be constrained *ceteris paribus* to invoke more explanatorily efficacious descriptions, Lewis (1979). Suppose that the primary purpose of the following discourse is to explain:

‘This man built a house.’

If the man has the description ‘housebuilder’ among his list of true descriptions, then ‘housebuilder’ becomes the most natural description to invoke in explaining the cause of the house. Why? Because it is the best choice for the explanatory task. Thus if a cause *can* be described as the *per se* cause, then, for the purposes of explanation, it *should* be. In particular, *explanatory discourses are constrained to flag any matches among the descriptions in their underlying cause-effect pairs*. When no such matches are truth-available, the discourse reports an accident.

So even the simplest cases illustrate that accidentality, chance, and luck while apparently semantic notions nonetheless carry extra-semantic constraints that make them pragmatic ones. An accident, for Aristotle, is a cause-effect relation where no available description of the cause can explain the effect. Hence, an accident marks a tension between a set of available descriptions and the task of describing things in the most explanatorily efficacious way. This tension could be partly explained by our allegiance to the following Gricean maxims.

Quantity: Give as much information as is needed (to explain), and no more.

Quality: Only give information that is true or supported by evidence. Grice (1967)

The defense of objectivity luck reports does not rest with a brute appeal to Gricean maxims. However, before we proceed to the next stage in that defense, it is instructive to identify the precise version of these maxims that constrain accident reports in particular.

4.2 Gricean Constraints on Accident Reports

In general, the best explanatory description should pick two descriptions that match in explanatory potential and actuality. Accordingly, the following pairs are ranked thus:

- {mother, child} (potential/true) (per se)
- = {swede, swede} (potential/true) (per se)
- > {child-cloner, child} (potential/false) (impure accident/irony)
- > {citizen, child} (not potential) (pure accident/happenstance)
- > {swede, germ} (not potential) (phenomenon)

Note that accidentality marks a causal relation without a causal description; whereas irony marks a causal description without a causal relation. Thus one is not constrained by the explanatory task to flag ironies, as one is to flag accidents.

In sum, whether a pair of descriptions constitutes the report of an accident depends on three features: i. their semantic potential to stand in an explanatory relation ii. the actual causal relations in the story-world, and iii. on any pragmatic constraint to flag these facts.

It is important to highlight the conversational character of these relations. When pertinent causal relations are missing from a discourse – whether because they are

unwarranted by the explanatory task, or they are ‘unknown’, or suppressed by a malicious narrator – the discourse affords the reader an assumption to the best explanation. In particular, this yields two conversational norms: suppose a pair of descriptions {‘C’, ‘E’} is asserted *in isolation* as a cause-effect pair, then

D1: If {‘C’, ‘E’} is potentially explanatory, the hearer may assume that C caused E.

D2: If {‘C’, ‘E’} is not potentially explanatory, the hearer may assume that there is no potentially explanatory pair {‘D’, ‘F’} such that C=D and E=F.

In particular, when the narrator says that a housebuilder built a house, and nothing more, we may assume in good faith that there was no intermediary contractor. When the narrator says that a musician built a house, we may assume this to be an accidental relation, that ‘musician’ is the description that best explains the building of a house, and hence that there is no better description of this person that explains his works.

Of course, these pragmatic rules are followed in the good faith that the speaker has kept nothing from us that might be relevant to the explanatory task. When our trust is violated, we might say that the speaker has been *malicious*.⁶ When the hearer has been betrayed, this is ground to suspect further malice. Often the malicious speaker has adopted an ulterior non-explanatory end – say or surprise, entertainment, or horror – and hence she must make use of this suspicion to stay a step ahead.

In this way, the two conversational rules govern one’s choice of descriptions *dynamically* in conversational narration. Hence, the accidentality of events is determined by the rules of narrative.

⁶ Analogous to the

4.3 Sidebar: A Brief Taxonomy of Literary Tropes: Luck, Accident, Irony

The above method can be used to yield a short taxonomy of related literary concepts. As a narrative discourse progresses, it may assume a dynamic set of causal regularities or laws of nature, which govern not only the unfolding of events, but the admissibility of certain cause-effect pairs. Some description-pairs will have a no potential to inter-explain, e.g. {musician, house}; while others do, {carpenter, house}, even if the objects to which they attach stand in no causal relation.

Secondly, the range of potential explanatory descriptions is contingent upon what is known about the objects in question, that is, which other descriptions are *de facto* associated with them. Consider the explanatory discourse: “a woman makes a child”. Suppose further that woman’s true descriptions consist of: ‘mother’, ‘woman’ ‘matron of an orphanage’, ‘daughter’, ‘swede’, ‘genetic engineer’; while the child can be described as ‘daughter’, ‘girl’, ‘orphan’, ‘swede’, ‘test-tube baby’. The description-pair {‘mother’, ‘child’} uncontroversially carries explanatory potential, while the description-pair {‘genetic engineer’, ‘child’} only controversially carries it, depending on the meaning of ‘genetic engineer’ in the story; while {‘daughter’, ‘child’} uncontroversially does not. So if the woman adopted the child and raised it herself, the description-pair {‘daughter’, ‘child’} would be *purely accidental*, whereas the description-pair {‘genetic engineer’, ‘child’} would be *ironic*. If it is revealed that the woman in fact gave natural birth to the child, the child becomes dissociated from the descriptions ‘orphan’ and ‘test-tube baby’. In this case, the description ‘mother’ is perhaps most apt for the purpose of explanation, because she is in fact the *per se* cause.

In these terms we can restate the account of accident, luck and irony. When an asserted description-pair has no potential to explain, it reports a *pure accident or happenstance* – as when someone who is best described as a *musician* builds a *house*. When they do have a potential to explain, but neither is the best explanation of the other, we have an *impure accident*, or a case of *luck* – as when a *genetic engineer* gives natural birth to a *child*, (qua genetic engineer she does not cause the child, but qua woman, say). When they have a potential to explain, but neither is in fact an explanation of the other, we have a *pure irony*.

4.3 The Conversational Dynamic

The question-and-answer dialogue of narrative explanation can terminate in three ways. The narrator might be out of information. The questioner might be out of reasonable why-questions. Aside from that, the narrator's information can fail to yield a full explanation. When this happens, apologies are in order. Consider the following example:

A1: Why were you late?

B1: I missed the bus.

A2: Why did you miss the bus?

B2: My alarm didn't go off. I would have caught the bus still, but I spilled coffee on my shirt and had to change.

The explanation would naturally terminate when either i. B has no further information to give, or ii. A could not reasonably press for further explanation. And yet, for all that, the explanation is still somehow deficient. An apology is in order.

So an explanation-oriented question-and-answer dialogue can terminate, on its own terms, violating no Gricean maxim: no justification of the alleged action and no successful “explaining away” of it either. Rather the explanation is deficient in the minimal sense that it does not answer the question initially posed (A1); it fails to satisfy the established conversational aim. It follows that *explanatory demands are not exhausted by conversational ones*; for here the latter are satisfied but not the former.

Furthermore, it would appear that the some explanatory demands simply cannot be met, even with full information and with no restrictions on lines of questioning.

A third person, call her C, might insert:

C3: Well, isn't person B simply inconsiderate?

If her point stands, the deficient narrative explanation B2/B1 transforms into a mere support for C3, the conjunction of which C3/B2/B1 now stands as *the* explanation. It would do so because it purports to incorporate all of the information in B2/B1 and because, if it can, it is relatively unified *qua* explanation. However, C3/B2/B1 will fail to supplant B2/B1 as the explanation, if the information contained in B2/B1 is not incorporated under the hypothesis C3. If not, that is, if B2/B1 can be convincingly cast as a genuine accident, C3 will not replace it as an explanation. That is, the unified explanation C3/B2/B1 and the accident-bearing explanation B2/B1 are at odds because of the putative *accidentality* of B2/B1.

There is a possible worry that whether or not C3 functions as a better hypothesis depends on whether the proposition expressed by C3 is *true*, and this cannot be settled pragmatically. This alone would suggest there are extra-linguistic or even metaphysical

facts-of-the-matter about accidentality, fixed by the causal structure of the eventive past or by some other objective modal facts.

We can say that, if C3's hypothesis is rejected or never proposed in the first place, then the judgment of accidentality is *assertible*. Hence, at a minimum, the conversational characterization above provides plausible assertibility conditions on luck reports, if not truth conditions.

A possible alternative solution makes appeal to the notion of coherence. As a first pass:

An hypothesis C3 will supplant B2/B1 if the resulting discourse C3/B2/B1 is manifestly more coherent than B2/B1.

In ideal scenarios, the objective coherence of one story over another should predict what the discussants will accept or reject, and hence determine the assertability of a luck-characterization anyway.

Successive failed attempts to supplant a hypothesis will reinforce its assertability but not necessarily its coherence. When this happens to a discourse that is less than coherent, this yields a tension between the assertion that requires the introduction of an artificial resolution device. That is the function of locutions as “it just so happened”, “incidentally”, “luckily”, etc. Such devices have the function of an excuse in that are meant to resolve a conversational burden but not an explanatory one.

4.4 Accident Reports as Speech Acts

Outside of the dialogical context, the same dynamics may collapse into a single speech act. The same assertability conditions can apply to an assertion of luck, even if the

interrogator is absent. *We can simply conjoin the background conditions generated by the would-be interrogator – i.e. the speaker's explanatory burden, and her manifest inability to meet it – and call them the felicity conditions of a unique speech act.* That is, when we characterize an element of B2/B1 as an accident, or happenstance, or a coincidence, or bad luck, etc. – we are admitting defeat in the face of an explanatory task, offering what we might call *anti-explanation*. It is a distinctive speech-act. It is akin to an Austinian excuse in that it acknowledges the explanatory task; distinct from an excuse in that it admits defeat in the face of it, even if the demand has never arisen Austin (1967). Conceived as an assertion, it is also a type of speech-act, the kind of thing whose character is internally defined and normative constraints are self-contained. It is only *constrained* by external forces. Such a concept, if it can be rendered sensible, could account for the explanatory impasse of accidentality, without appealing to any extra-linguistic metaphysical fact.

It is no accident that the prime example of a defective narrative explanation is an excuse. Austin distinguishes excuses from attempted justifications. They are distinguished by their conversational aim, which is not to justify or redirect blame, for they concede the inability to do this. Excuses of the latter kind are akin to apologies or perhaps they may be said to contain apologies, because they admit an explanatory burden and suffice to report only the extent to which they can meet it, yielding the verdict to the hearer.

For Austin, excuses are adverbial modifications of actions. Anti-explanations are adverbial modifications of causes or explanations. Anti-explanations, like excuses, are amenable to *offering*. As such, in offering an excuse, one renders an apology on behalf of

one's actions. In offering an anti-explanation, one attempts to apologize on behalf of the world.

Just as one can apologize without saying, 'I apologize' or any explicit cognate term, one can also offer an anti-explanation without using the label 'accident' or the like. For instance, the discourse B2/B1 succeeds in reporting an accident without labeling it as such; to leave it at that is to give up on the explanatory task that C3/B2/B1 is trying to meet. In that case, its status as an anti-explanation is determined *dialectically*, by what question is on the table, and what is left unsaid. In attempting to offer a unified explanation, we thereby recognize the relevant explanatory task. In preferring a less-unified explanation instead, we thereby make an unnamed concession to the world.

If an explanatory gap is a fault in the best possible explanation, then an anti-explanation is the *admission* of such a fault. Hence it is possible that there are no genuine explanatory gaps, and that there are no reasonable explanatory demands to generate them, while still one might *admit* to there being such. And one might even be constrained to do this. For example, if I win a fair lottery, and I have a ticket number that gets drawn as the winner, then each event has a chain leading up to it, which individually suffice as explanations. But when we concatenate both explanations, we do not get a third. And we can flag this with the word 'luck' or 'coincidence' or whatever. Now it might be that the world of the lottery win is somehow deterministic, either causally or intentionally, either way somehow closing the explanatory gap. It might nonetheless make sense to insist on the judgment of luckiness in the face of all that, hence rejecting the final deterministic explanation for an imminent albeit deficient one.

4.4.1 In Defense of Anti-Explanation

It might be argued that there is something scientifically inadmissible about the target event in paradigm cases of reasonable anti-explanation. What is a fair lottery-win after all? Isn't it merely a hybrid of two causally dissociated events – a ticket-buying and a ticket-drawing – that are conventionally-defined as one? That is an odd thing for which to ask a single unified explanation.

So too with indexically-defined events. Suppose I describe the fair lottery win subjectively as: 'The numbers *I* chose are drawn as the winning ones.' I don't want to know why this thing happened, I want to know why this thing happened *to me*. And of course there is no good reason for that.

Perhaps then what gives rise to an anti-explanation is always a similar flaw in the content of the question to which it responds, which derives from a grammatical error in the explanans. In that case, there are no reasonable anti-explanations, since their putative explananda aren't appropriately unified. Hence, there can be no rational constraint to employ the concept, and it must be rejected. While this hypothesis seems to be a bit of a stretch, it is worth pursuing to see how much it distorts our picture of explanation.

Suppose we cannot reasonably ask, with one question, why two things happened, when the two things are known to be causally dissociated, and expect a single answer. Nor would it help to repose the two things with an *anaphorum*, e.g. why were my numbers were drawn as the winning ones. For the co-reference of the two terms - 'my numbers' and 'the winning numbers' – is contingent on the coincidence of two independent events.

Now suppose that all day long, I have been seeing the number six, everywhere I look. I think it is reasonable to ask for an explanation of this, (even if the explanation should be that I am now actively *looking* for the number six). When I narrate my sequence of six-sightings to you, the meaning of each successive mention of ‘six’ will be anaphorically dependent on the previous ones in my story. And something about that – the stacking of anaphorically-derived meanings – generates the perpetual need to explain. That is, resonances of meaning across event-descriptions are necessary but not sufficient for phenomena-generation. In particular, a coincidence cannot be explained away unless it can first be described as such in an explanatory context.

So it turns out we can ask why two things happened, in the same breath. Indeed, the phenomenology of science seems to depend on it. Hence, reasonable anti-explanations might be possible yet.

4.5 Coherence Relations in Formal Linguistics

The potential for descriptions to inter-explain introduces an acausal relation of meaning among the causal relata, often termed a *coherence relation*. Whether such a coherence relation obtains between a description-pair appears to be a semantic matter, Hobbs (1990), Kehler (2002). According to a large body of formal linguistics, a piece of multi-sentence discourse, e.g. a narrative, can be assessed for coherence on two fronts: whether the eventive/stative particles can be predicted to stand in an explanatory relation when read by an ordinary observer and whether the overall discourse gives rise to any further unresolved questions. Take a simple example:

1.a. Aristotle went to the market.

1.b. A friend (there) owes him money.

These two particles apparently stand in an explanatory relation, with or without the addition of the word “there”. However, the omission or suppression of the word “there” from the discourse might generate a lingering question – “why?” – that could be resolved by the addition of further information. Hence, the expected application of an explanatory relation among the discourse particles is insufficient to resolve the explanatory task.

The target concept under this line of analysis is that of coherence. Coherence is to be understood in terms of more fundamental discursive inter-sentential relations. Several taxonomies of such relations have been produced Kehler (2002) Hobbs (1990) Hovy (1990). These taxonomies contain hundreds of different relations, but take as their starting point Hume’s tripartite taxonomy of relations of ideas from *Treatise on Human Nature*: these are *resemblance, contiguity, and cause and effect*. We might see how far we can get to understanding luck reports in these terms, and see what else needs to be added.

In the last chapter, I argued that luck is always couched in a narrative, understood as a piece of multi-sentence discourse connected by a relation of meaning-transfer. So for any case of genuine luck, there will be at least two eventive/stative particles that can be linked by a narrative connection. The presence of a narrative connection will automatically instantiate resemblance and contiguity among the relata:

i. Jones buys a lottery ticket.

ii. Then, it wins.

Here the pronoun ‘it’ supplies a connection of resemblance; and the narrative connective ‘Then’ supplies the connection of contiguity. As it stands, we can naturally infer that there is no causal connection between the events, either. So at a minimum, all luck narratives are discourses connected by resemblance and contiguity, but not cause and effect.

However, these conditions are not sufficient for a luck narrative. Consider the variant,

iii. Jones buys a lottery ticket.

iv. Then, he stubs his toe.

Here again, there is a pronoun to establish resemblance and a narrative connective to establish contiguity, and we may naturally infer there is no causal connection between them, either. But this is not a luck narrative or a coincidence narrative, only a mere incidental narrative, perhaps the minimally coherent kind.

How could the simple Humean taxonomy of discourse relations account for this difference? The only possible response is that the two examples differ as a matter of degree in one of the three respects. Cause and effect and contiguity appear to be non-scalar relations, either they apply or they do not. Hence, the only difference could be in the degree of resemblance between the two. In the first example, the two event-descriptions bear a stronger resemblance than those in the second. Perhaps when more resembling event-descriptions are conjoined in an acausal narrative like this, the discursive phenomenon of coincidentality emerges.

4.6 Relevance and the Order of Narration

The next natural step is to see under what conditions the coherence relations determine a unique narrative ordering. The simple narrative above contains three elements:

- i. Jones walked into a crowded store. *Ground/Initial Condition*
- ii. Minutes later, an alarm sounded. *Figure/Target Event*
- iii. He was the 1,000,000th customer. *Elaboration/Explanation*

These narrative roles determine the ordering as the most natural. This is because the inter-sentential coherence relations that are determined by these roles are asymmetric.

The Ground and Figure stand in an acausal Contiguous relation; while the Figure and its Explanation are linked by Cause and Effect. Presenting the statements in any other order would either present a future event before a past event or an effect before its cause.

This forces the target event into the middle of the discourse, which would seem to downplay the element of surprise and make the event seem less lucky. Hales et al (2014) predicts that, in general, events seem luckier when they are placed at the end of a discourse, rather than anticipated at any time earlier. But the contrary is the case here. If we switch the last two events, we get the explanation of the target event before its occurrence, which spoils the surprise:

- i. Jones walked into a crowded store. *Initial condition*
- iii. He was the 1,000,000th customer. *Explanation*
- ii. Minutes later, an alarm sounded. *Happenstance*

In this version, the target event is *less* surprising because coherence has not been maximized. Hence, the maximization of coherence in a discourse does not eliminate luck, but is a precondition for it.

However, this does not generalize: maximizing coherence among a certain set of relevant statements will not always determine a unique narrative. But we can see from above that the only possible culprit of this indeterminacy is a *symmetric* coherence relation, which would enable different narrative orderings without affecting the coherence of the overall discourse. In the Humean case the only such relation is Resemblance. Moreover, such cases would presumably involve resembling statements that report states of affairs, not events, since any eventive report is bound to be relevant only in virtue of its causal or contiguous relation to others. Consider,

- o. It was Friday the 13th. *Foreshadowing*
- i. Jones walked into a crowded store. *Initial condition*
- ii. Minutes later, an alarm sounded. *Happenstance*
- iii. He was the 1,000,000th customer. *Explanation*

The added statement o. frames the narrative as an anticipation of something relating to luck, and subverts the expectation as bad luck instead of good. Without too much awkwardness, we can switch the order of the first two statements:

- i. Jones walked into a crowded store. *Initial condition*
- o. It was Friday the 13th. *Foreshadowing*
- ii. Minutes later, an alarm sounded. *Happenstance*
- iii. He was the 1,000,000th customer. *Explanation*

This second telling sets up the target event a little better than the first: since the foreshadowing occurs immediately before, there is less time to anticipate the reversal. Notice also that the addition of this detail actually changes the target event from a lottery-win to a lottery-win-on-Friday-the-13th. In general, *merely resembling narrative particles like o. will be relevant in virtue of the fact that they are absorbed by the description of some event*. When it is the target event, the most natural location for the new statement is as close to the target event as possible. When the added detail absorbs into a non-target event, either it is irrelevant or the order of appearance will not affect the coherence of the overall discourse, as in:

- i. Jones walked into a crowded store. *Initial condition*
- i.* His nemesis was right ahead of him. *Initial condition*
- ii. Minutes later, an alarm sounded. *Happenstance*
- iii. He was the 1,000,000th customer. *Explanation*

The initial conditions

Hence, the simple Humean taxonomy of coherence relations is sufficiently robust to determine a unique narrative ordering among a set of relevant statements. In sum, this formalized “Humean poetics” imbues the following stipulations:

- a. Narrative order of statements must respect the temporal order of events.
- b. In particular, reports of causes must precede reports of their effects.
- c. States that modify occurrences be reported immediately prior thereto.

Next we need to check whether there is a counterpart to these principles on the modal side. Since narrative ordering is temporalized, we will need to interpret the diachronic element in the modal account.

5 Pritchard on Luck and Risk

In this chapter, I return to Pritchard's analysis of luck as *modal fragility* – the property had by events that occur in the actual world, but fail to occur in a wide class of nearby possible worlds in which the relevant initial conditions are held fixed. This metaphysical account of luck is not obviously in conflict with the broadly semantic narrative account laid out in the previous chapter. The aim here is to assess the extent of this compatibility in the case of luck, and by extension to Pritchard's modal account of risk.

5.1 Luck: Modal and Semantic Accounts

On the modal account, luck predicates events, and differentiates lucky events from the rest by the existence of a preponderance of close possible worlds in which the target event does not obtain. On the narrative account, luck predicates an ideal narrative – a report of two or more events, constrained to provide the best narrative explanation – and differentiates luck-narratives from the rest by the application of a precise set of coherence relations among the constituent statements in the narrative.

Nonetheless, the two accounts agree on simple cases as long as the narrative can appoint a salient outcome as being lucky. Consider,

- i. Jones walked into a crowded store.
- ii. Minutes later, an alarm sounded.
- iii. He was the 1,000,000th customer.

Here the final outcome iii. is the only candidate for luckiness. On the modal account, it is lucky because in a wide class of possible worlds in which the relevant initial conditions obtain (event i.) Jones is not the 1,000,000th customer, but the person in front or behind

him in the queue. Because the store is crowded, moreover, one gets the sense that anyone else could just as easily have been the 1,000,000th customer instead, and so the worlds in which they do are very close to the actual. If the store were empty, one might not have the sense that the outcome was fragile.

Assuming that the above narrative is *ideal*, in the sense that it leaves out no relevant explanatory details, satisfies all pertinent Gricean maxims, or all conversational demands with respect to the explanatory aim – it is a candidate for a luck-narrative (e.g. Jones had no inkling that he might have won). To determine whether it is in fact a luck-narrative, we need to adopt a taxonomy of coherence relations. For the purposes of illustration, take the simplest one, the traditional Humean trio: Resemblance, Contiguity, and Cause and Effect. Accordingly, the above is a luck-narrative, since the statements i.-iii. are

- a. High in resemblance. Events i.-iii. take place in the store; and events i. and iii. both involve the character Jones.
- b. They are contiguous.
- c. They are not all causally linked. Jones's walking into the store does not counterfactually cause the alarm to go off. The store was crowded. So if Jones hadn't been the 1,000,000th customer, then, someone else would have, and set off the alarm anyway.

On both accounts, the fact that the store was crowded plays a key role in making it a matter of luck that Jones is the 1,000,000th customer. On the modal account, it makes the possibility of failure *easier*; it reels in the alternative possible worlds where Jones doesn't

win closer. On the Humean version of the narrative account, the fact that the store is crowded breaks a counterfactual dependence between Jones and the wide scope event ii.

So the modal and narrative accounts line up in this case. The alarm's going off would be counterfactually dependent on Jones's walking into the store if and only if in all close possible worlds in which Jones walks into the store, the alarm goes off. But there is a wide class of such worlds in which it doesn't, because the person ahead of him already had. So this is a luck narrative because Jones doesn't cause the alarm to go off, and that is because the alarm's going off is modally fragile.

That the modal and narrative accounts line up in this case is a consequence of the fact that, along with the Humean taxonomy of coherence relations, I have helped myself to a Humean conception of causation, along with its Lewisian (1973) analysis. Had the term 'Cause and Effect' been allowed to float in this instance – say between immanent and counterfactual causation – it may have produced a tension between the accounts. In the general case, a coherence relation – say Occasion or Explanation – may be as metaphysically loaded as one likes. In such cases, however, when a metaphysical account is not in the offing or all such accounts are controversial, one may let the term float, and utilize judgments about coherence in uncontroversial cases in the service of grand metaphysical concerns.

Therefore, in order to square the two accounts, significant restrictions must be made to the narrative account. In what follows, I want to see what else happens when the accounts are forced to be friendly. A number of interesting questions emerge: First, what is the relationship between the relevance of the initial conditions of a lucky event to the coherence of the overall narrative? The initial conditions of the target event determine the

fragility of that event. But the same events can be reported in multiple ways, with varying levels of coherence. How can narration be idealized to retain a correspondence between modal fragility and narrative luck?

Second, what is the relationship between the modal fact expressed by a luck discourse and its attendant coherence status? Modal facts – structural facts about constellations in modal space – don’t obviously correspond to coherence relations in discourses that are predicable of them. In particular, an answer to the question “How easily did X obtain?” appears to get us nowhere toward an answer to questions like “Why did X obtain?” or “What accounts for X?”. However, the narrative report of luck might, in virtue of exhibiting the attendant coherence properties, permit inferences about relevantly similar alternative possibilities.

Finally, in light of the possible dimensions of compatibility between the accounts, how do they extend to the concept of risk? In certain cases, the features of luck and risk are two sides of the same story, one told prospectively, the other retrospectively. What are the limitations of this comparison?

5.2 Infelicitous Bifocal Narratives: ‘Buried Treasure’ Re-revisited

In light of the above, one might say that the narrative account is simply a pre-theoretical version of the modal account. However, the narrative account has a further virtue: the account is sensitive to certain rhetorical elements in cases that may be playing an illicit role in philosophical argumentation. Lackey’s *Buried Treasure* example is a case in point. Recall,

“BURIED TREASURE: Sophie, knowing that she had very little time left to live, wanted to bury a chest filled with all of her earthly treasures on the island she inhabited. As she walked around trying to determine the best site for proper burial, her central criteria were, first, that a suitable location must be on the northwest corner of the island—where she had spent many of her fondest moments in life—and, second, that it had to be a spot where rose bushes could flourish—since these were her favourite flowers. As it happens, there was only one particular patch of land on the northwest corner of the island where the soil was rich enough for roses to thrive. Sophie, being excellent at detecting such soil, immediately located this patch of land and buried her treasure, along with seeds for future roses to bloom, in the one and only spot that fulfilled her two criteria.

“One month later, Vincent, a distant neighbor of Sophie’s, was driving in the northwest corner of the island—which was also his most beloved place to visit—and was looking for a place to plant a rose bush in memory of his mother who had died ten years earlier—since these were her favourite flowers. Being excellent at detecting the proper soil for rose bushes to thrive, he immediately located the same patch of land that Sophie had found one month earlier. As he began digging a hole for the bush, he was astonished to discover a buried treasure in the ground.” Lackey (2009)

This is supposed to be a case of a lucky outcome that is *not* modally fragile, but modally robust. What is driving the intuition that the outcome is modally robust is that it is a

product of events that are individually modally robust – Sophie and Vincent’s common dispositions for identifying and planting rose bushes, the distribution of soil on the island, etc. Indeed, those background facts do seem relevant to the determination of luck.

The Humean coherence account of luck would appear to vindicate the judgment of luck here. There is a strong resemblance across the two stories, which lack a unifying cause and effect relation. Lackey tells two coherent narratives in parallel, which when concatenated yield a luck-narrative.

We might question the motivation for telling Sophie’s side of the story, and hence the ideality of the narrative as a whole. What makes Sophie’s story so relevant to Vincent’s? Their worlds do not come into causal contact until the precise moment that Vincent discovers the treasure. The only material link is the treasure itself. Sophie shares the traits that immanently cause Vincent to discover the treasure, and also happens to supply the conditions of the possibility of the discovery. But this need not permit the inclusion of those traits as part of the explanation of the discovery. The introduction of Sophie’s backstory as a part of the *explanation* provides no more on that front than to give the names of Vincent’s parents. Hence their introduction appears to be *ad hoc*.

On the other hand, one might respond that the two worlds bear a strong resemblance, which might furnish a weaker relevance relation. However, the resemblances noted are also solely motivated by the task of explanation for the target event. Lackey’s example includes details in the service of narrative coherence alone, which invariably distracts from the philosophical task at hand. In this case, it appears that Sophie’s side of the story only articulates the conditions of the possibility of Vincent’s

discovery, which happen to bear an uncanny resemblance to the direct causes of Vincent's discovery.

Excluding Sophie's background details, the luckiness of Vincent's discovery is much more likely to track its fragility. As Pritchard (2014) responds in defense of his own view, there is insufficient information to tell just how determined it was that Vincent found the treasure, and it seems that fragility can be determined on the day of Vincent's digging, e.g. how small the area was, how deep the treasure was buried, etc. The fragility of Vincent's discovery hangs on these immanent details. If pressed, the narrative coherence would as well.

In general, the introduction of principled restrictions on relevance of background events suffices to block the inclusion of ad hoc side-narration of this kind, and hence the plausibility of the case. No doubt this extends beyond the *Buried Treasure* case to any bifurcating narrative whose strands merely resonate with the explanation, without buttressing it. Hence, if this relevance constraint were included in the understanding of relevance in the modal account of luck, it could rule out such cases on principle.

5.4. *Felicitous Bifocal Narratives*

Some stories include two narrative strands by explanatory necessity, like when an omniscient narrator is absent or when a third-party eyewitness is absent from the scene of a collision. Consider two reports of the same collision, one from each driver involved.

1. a. I was driving down the aisle of the P lot.
1. b. I saw a car with its lights on.
1. c. So, I slowed as I approached.

1. d. Then it quickly backed up and
1. e. My vehicle ran into his.
2. a. I was backing out of my parking stall in the P lot.
2. b. I looked back and
2. c. No one was there.
2. d. As I crept out, a car slammed into me.

The two stories do not apparently conflict about the facts, modulo emphasis, about who hit whom. They also represent each driver as having exercised due caution to avoid a collision. Yet there is a significant rhetorical difference in the two stories that may influence a judgment of modal fragility of the collision itself, and this might favor the second driver. The final event in the first story (1. e.) is merely presented as the final link in a chain of causes and actions (1. a.-d.). Whereas, the final event in the second story (2. d.) is presented as a causally dissociated occasion, relative to a background setup of perceptions and actions (2. a.-c.). In Hobbsian terms, the second story exhibits a stronger *ground-figure relation* between the final sentence and the others. It appears that this feature alone is responsible for an enhanced judgment of fragility in the second case over the first. And yet they both recount the same collision.

It is important to note that the second driver, because of her limited perceptual scope prior to the crash, is compelled to structure her story this way. The “he came out of nowhere” line is not a mere excuse but an inevitable feature of any accident report that indulges the exercise of blind caution. The driver has nothing to report except what was

within her limited perspective prior to the collision, and this forces an imbalance in the causal structure of her story.

Was the collision modally fragile or not? The second makes it seem fragile, whereas the first makes it seem inevitable. Yet there appears to be a fact of the matter here. Without a third account, we can determine the modal fragility of the collision by simply concatenating the stories where they do not factually conflict (which in this case is everywhere) and applying the modal account to the resulting bifocal narrative. Since all events are relevant, by hypothesis, the relevant initial conditions of the collision include every event each side treats as circumstantial, i.e. 1. a., 2. a.-c. This leaves plenty of room (close counterfactuals in which one of 1.b.-d. fail to obtain) for the cars to miss each other.

Putting all of the pieces together, the narrative fails to yield a full explanation of why the crash occurred; in particular, it yields no clear verdict on which driver is at fault. More broadly, the bifocal narrative contains an essential appeal to a ground-figure relation, between the final event and the set of antecedent facts.

5.4 Luck and Risk: A Comparison

Narratives are perspectival, and as such they are prime lenses for representing the retrospective element of luck. But modal space, conceived *sub specie aeternitatis* does not move. In the spirit of comparison, I want to raise the question of where the diachronic element shows up on the modal picture. The modal account of luck restricts consideration to certain relevant possible worlds. One would expect a temporal restriction as well. To make this element vivid, it helps to introduce luck's sister concept: risk. Pritchard (2015)

offers a modal account of the risk of events. For Pritchard, the *risk* that an event will obtain is a matter of how modally close the risk-event is, that is the distance to the nearest world in which the target event obtains. An event is a risk-event *simpliciter* if its nearest world is sufficiently close.

Like his account of luck, Pritchard's account of risk is meant to capture the non-evaluative modality of risk. That is, there is no essential negative or positive connotation to an event's being a risk-event. No doubt, in common speech, at-risk events generally carry a negative connotation, as things to be avoided. But, since we can distinguish the closeness of a possibility from its negativity, we can distinguish the risk of an event from the altitude of its stakes. While there is a close linguistic kinship between the height of a risk and the height of the stakes, so that the higher risk is all things equal, possible outcomes are made riskier when there is more at *stake* – betting all of my chips on red is riskier when I have \$10000 than when I only have \$1 left. Yet the target concept is what metaphysical property remains fixed across those two outcomes.

Pritchard contrasts the modal account of risk to an extant probabilistic account of risk, according to which the risk of an event is simply its objective probability, *a priori* or statistical. The risk of losing at Roulette is 49%, it's a *priori* probability. The risk of death in an auto accident this year is the rate of auto-related death in your particular region, its statistical probability. Pritchard distinguishes this from the modal account, he gives the following contrast case.

Case 1: An evil scientist has rigged up a large bomb, which he has hidden in a populated area. If the bomb explodes, many people will die. There is no way of discovering the bomb before the time it is set to detonate. The bomb will

only detonate, however, if a certain set of numbers comes up on the next national lottery draw. The odds of these numbers appearing is fourteen million to one. It is not possible to interfere with this lottery draw.

Case 2: An evil scientist has rigged up a large bomb, which he has hidden in a populated area. If the bomb explodes, many people will die. There is no way of discovering the bomb before the time it is set to detonate. The bomb will only detonate, however, if a series of three highly unlikely events obtains. First, the weakest horse in the field at the Grand National, Lucky Loser, must win the race by at least ten furlongs. Second, the worst team remaining in the FA Cup draw, Accrington Stanley, must beat the best team remaining, Manchester United, by at least ten goals. And third, the queen of England must spontaneously choose to speak a complete sentence of Polish during her next public speech. The odds of this chain of events occurring are fourteen million to one. It is not possible to interfere with the outcomes of any of the events in this chain.

By hypothesis, both events have an identical probability of occurring. (If it turns out that the probability of the bizarre coincidence in Case 2 is different from 14 million, we can change the figure in the lottery in Case 1 to match it.) But *Case 1* presents a scenario, which is modally close, whereas *Case 2* does not. This is because very little would have to change about the world in order for those lottery numbers to come up, whereas the three strange events would require significant alteration to the normal course of events. Pritchard argues that the difference in modal closeness tracks a difference in the real risks

involved. In Case 1, there is a real risk that the bomb might go off, whereas in Case 2 there is no real risk at all. Hence the modal account of risk does better at capturing intuitions of real risk than the probabilistic account.

Part of the attractiveness of the modal account of risk is how it coalesces with the modal account of luck. Again, while in common usage luck and risk events are generally valenced, lucky events being generally good, risk events are more often negative, Pritchard has dropped any value condition from both accounts in order to compare their core modalities. Both concepts are analyzed in terms of the concepts of modal closeness and *relevance*, where the former is generally understood in terms of the *similarity* of worlds.

First, luck is attributed to events retrospectively, whereas risk may be attributed prospectively. Hence lucky events must occur in the actual world, whereas risk events need not ever obtain. One might say, in retrospect, that a certain action was risky, but one appears to be characterizing not an event but a decision, from whose perspective was prospectively risky.

Second, the attribution of luckiness to an event requires there to be a preponderance of close worlds in which that event obtains, whereas the attribution of risk requires that there be only one close world in which the target event obtains.

Third, luck is what Pritchard calls a *threshold* notion – either there are sufficiently-many not-E worlds in the modal vicinity or not – whereas risk is a matter of degree, based on how close the closest E-world is.

All of these differences are substantial. The first point suggests that the two concepts present complementary but opposed *temporal* perspectives – that risk is an

essentially *perspectival* notion, whereas luck can only be determined after the obtaining of the target event, making luck essentially *retrospective*. I think the perspectival nature of luck and risk highlights a number of things I have said about luck above.

One might try to dispense with the perspectival talk and analyze the difference in terms of the temporal distance between risk and luck. A risk taken always *precedes* a lucky outcome; perhaps the fact of luck is simply a reiteration of the fact of the risk, a few moments later. This would require us to relativize risk and luck to a temporal parameter (at-t) and note their temporal order. Consider the putative connecting principle:

LR1: An event E is a matter of luck-at-t if and only if E is high risk-at-t-1.

This is not quite right, since any event to which we would ascribe luckiness would have to be actual, but risk events need not. To accommodate this, we would need to modalize the occurrence of 'E' in the risk context:

LR2: An event E is a matter of luck-at-t if and only if poss(E) is high risk-at-t-1.

Here the designator poss(E) refers to the modalized event E across relevant nearby possible worlds (or an event-counterpart, if one were to avoid commitment to trans-world identity of events). For poss(E) to be high-risk-at-t -1 is for E to obtain in a very close possible world at-t.

Thus, if we temporalize risk, the temporalized riskiness of poss(E) in the actual world is to be understood in terms of the temporalized occurrence of E in some non-actual possible world. This not only forces a common referent for 'E' across possible worlds, but a common temporal parameter as well. That is how something actual at-t-1 can be analyzed in terms of its merely possible counterpart at-t.

The modal account of luck, in isolation, does not require a temporal parameter, since the time of occurrence (or non-occurrence) of the target event is the only relevant time for the determination of luck. If one were to say, an event $E(-at-t)$ is lucky(-at-t) in virtue of the non-obtaining of the event(-at-t) in most nearby relevant possible worlds, it becomes clear that the $-at-t$ designators are redundant in this picture. The modal luckiness of E comes down to a mismatch between the actual world and nearby possible worlds with respect to E , *whenever it occurs*. It would appear that such a mismatch is not simply a posterior reiteration of the antecedent facts about risk – indeed the trans-temporal facts of risk do not even show up on the luck picture – rather, the modal picture of luck is the matured or finalized stage of a risk-to-luck progression taking place across modal space, in trans-world time.

Perhaps we could try a different tack. Intuitively, *the temporal asymmetry between luck and risk depends on the fact that the risk event hasn't occurred yet, whereas the luck event has*. Synchronically, this condition translates to a difference of modal information as an event transforms from a risk event into a lucky event; namely in the latter case, we have the information that E occurs in $@$. The question remains how to capture this diachronic element of the relationship between luck and risk.

One clue is the difference in context in which risk ascriptions arise. Typically, risk is attributed to pre-imagined events, whereas lucky events can come out of the blue. The fact that an event is preconceived beforehand allows us to narrow the scope of the target event's description, so that the question – how close? – can be answered. In the case of luck, by contrast, the salient question is not the closeness of the target event, which in fact obtained, but how easily things might have gone otherwise, and this

requires speculating about a preponderance of close alternatives. Hence the diachronic element of luck and risk is mirrored in the prospective and retrospective questions - “how close is it?” and “how easily could it not have happened” – that give rise to their ascription. It might be that the shift in motivating questions of luck and risk introduces a shift in the scope of possibilities considered, sufficiently dramatic to produce the required change in temporal point of view. That is, the diachronic element of the difference between luck and risk might be captured if we consider the question at the level of narrative discourse. The latter account might not only furnish us with an account of this perspectival dimension, but also with a narrative account of risk.

5.5 The Expected Value Account of Luck (and Risk)

In Chapter 2, I echoed Rescher (1994) arguing that the simple probabilistic account of luck founders in the face of clear counterexamples, e.g. Russian Roulette, but might be salvaged if one adopts an expected value account of luck instead. Winning at Russian Roulette might be lucky, not because it is improbable (it isn’t) but because the expected value of playing is low, given the extremity of the stakes.

The resulting account of luck would be the difference between the value of the outcome and its expected value: outcomes are lucky (in retrospect) if and only if there is a large difference between their value and their expected value (in prospect). This would explain how some lucky outcomes can be highly probable: as long as the improbable alternative is sufficiently negative, it can outweigh a probable neutral or positive outcome.

It follows that lucky outcomes would be lucky in virtue of the avoidance of a sufficiently negative alternative. This account is attractive in a decision-theoretic context in which the relevant alternative possible outcomes remain constant throughout the story. In a general luck-narrative, however, the lucky outcome often hits the reader as something heretofore unimagined, so that the lucky outcome is not a relevant alternative possible outcome until it emerges an outcome. To bring the accounts of risk and luck closer, it might help to imagine a conception of risk that applies to events, not decisions to take actions.

Furthermore, there is a glaring disanalogy between the concept of expected value and luck: the expected value of an event is the same regardless of whether the event obtains; that is, expected values are assigned in advance of outcomes. Luck is generally assigned to events that have already happened; i.e. retrospectively. If anything, the concept of expected value provides a viable account of prospective *risk*, which does not require the target event to obtain.

5.6 General Problems for Modal Metaphysical Accounts

Finally here are a few general questions I had while coming to understand the details of the modal account of risk. I include them, along with Pritchard's responses, as an anecdotal addendum.

5.6.1 Question One

First, objectivity requires that the risk of an event be invariant of whether that event actually obtains. If the risk of an event is simply the inverse of the distance of the

closest world in which it obtains, then, in the case where the risk event actually obtains, the closest world in which the risk-event obtains would be the actual world, so the distance is zero and its inverse infinite. Clearly this simple reading is unacceptable, since it would make all actual future events of infinite risk to obtain. Only events not found in our future would have a finite risk of obtaining.

Of course, an exception must be made for the actual world. The risk of an event occurring, whether actual or non-, is a function of the inverse of the distance to the closest *non-actual* possible world in which the target event obtains. This should solve the problem above, as long as every non-actual possible world bears at least one substantive difference from our own.

5.6.2 Question Two

Second, in an infinite modal universe, the term ‘closest possible world’ might suffer from ill definition. It might be that the local possible worlds are so densely arranged that, for any close possible world, there is always one closer, and so on *ad infinitum*. Suppose I strike a cue ball so softly that it loses momentum and comes to rest precisely when it touches the side cushion. Now consider the infinite series of possible worlds in which everything else is the same, but I struck with slightly less force such that the ball stops short by precisely 1 inch, 1/2 inch, 1/3 inch,.. etc. The term ‘closest possible world’ does not exist in this situation, because for any world in the sequence, there are infinitely more that are closer.

Now to tie this into the risk discussion. Suppose that, in the above scenario, I have been caught hustling a sadistic drunken mobster in billiards. He will kill me if I can’t

make the cue ball land exactly on the cushion like in the previous example. To make things worse, if there is any distance between the ball and the cushion, he will cut that length off each of my fingers with a cigar clipper before he kills me. The total risk here appears to depend on the near possibility of pain and death jointly. On a frictionless pool table, with perfectly smooth surfaces, in an infinitely-divisible universe, it would seem to be arbitrarily high, since the worlds in which either event obtains are arbitrarily close.⁷

Here the question of risk seems to concern not only the nearness of the possibility of death, but its preponderance.

5.6.3 *Question Three*

Third, suppose the evil scientist in *Case 1* were to buy a second lottery ticket, and trigger the bomb if either ticket wins. Doesn't he double his risk of winning? And isn't this because he has doubled the number of close worlds in which he wins? We may suppose that he doesn't care which ticket of his is the winner, so the description of the risk event will be sufficiently broad in scope to include both possible ways of winning. In buying the second ticket, he hasn't made either win-world any closer, he's only doubled them. And hence doubled the risk, right?

However, this relies too heavily on probabilistic intuition that risk tracks probability, thus begging the question against the modal account of risk. This is especially glaring in the finite *a priori* case, where the probabilities are calculated by

⁷ Pritchard responds in correspondence: "I don't think this follows. He's doubled the probability of winning, but this won't translate neatly into close possible worlds where one wins."

simply counting the number of close worlds (or really classes of worlds). For the example to work, it has to establish that the risk not only surmounts, but *precisely doubles* with the inclusion of the second bullet. But given the metaphorical relation between the pistol cylinder the nearby modal space, its not clear whether this doubling judgment is really one about the doubling of risk, and not one about doubling the preponderance of worlds.

So, to avoid smuggling any improper modal metaphors from gun parts, suppose I add a second “Death” card into a deck of tarot cards. Don’t I thereby double my risk of drawing one?⁸

5.6.4 Question Four

If an event occurs, can this retroactively change its riskiness? On the modal account, the risk of an event is partially determined by the closeness of the closest world in which the target event *is* actual. But won’t the latter have an effect on each other in general? In the case, where the target event obtains, the closest world in which the event obtains will be the actual world, so should the risk be measured by the second-closest world? What if there isn’t one? Won’t actual risk events be riskier than non-actual risk events?

⁸ Pritchard responds in correspondence to a parallel example that, of the two Death cards, one of them will be closer to the top of the deck and its closeness determines the risk of drawing it.” The risk of drawing a death card next would then be near certain if it were on top, and near zero otherwise. “In general, closeness tracks preponderance. So we get it for free anyway.”

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