The Irony of Chance: On Aristotle's *Physics* B, 4–6

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ABSTRACT: The diversity of interpretations of Aristotle's treatment of chance and luck springs from an apparent contradiction between the claims that "chance events are for the sake of something" and that "chance events are not for the sake of their outcome." Chance seems to entail the denial of an end. Yet Aristotle systematically refers it to what is for the sake of an end. This paper suggests that, in order to give an account of chance, a reference to "per accidens causes" is not sufficient. Chance occurs as a parody of teleology; it is a "for-no-purpose" that looks like a purpose. The notion of "irony" is suggested as a way of accounting for a situation that keeps an ambiguity open. The fact that chance is thought of in relation to teleology does not mean that it is "reappropriated" by teleology. Rather, chance reveals a hiatus that betrays the limitation of a language concerned with substances to account for events.

IN BOOK B OF THE *PHYSICS*, Aristotle introduces the discussion of chance immediately after the analysis of the four causes. He does so, apparently, because "chance" and "luck" name ways in which certain things come to be. Yet the connection between chance and causality is not self-evident. Is chance itself a "cause"? If so, does it mean that chance events are "re-appropriated" by teleology? Or do they, on the contrary, mark the limit of a discourse on causality and teleology? The location of the discussion of chance right after the so-called "theory of the four causes" presents us from the outset with a difficulty. On the one hand, Aristotle seems to propose an account of chance in terms of causality; on the other hand (and on the basis of Aristotle's own indications), one might wonder whether chance does not, in fact, constitute an irreducible factor.

Coming-into-being calls for a cause. Since "nothing" can only beget "no thing" (ex nihilo nihil fit), what comes into being must also come "from" being. What comes-to-be follows its origin, and yet departs from it; it follows it but also differs from it. To search for a "cause" is then to search for an "origin," a "source," a determinate starting-point that is accountable for the outcome. If this is so, the distinction in contemporary epistemology between "causes" (necessary or sufficient conditions) and explanations (relative to the inquirer's interest and context) that has been regularly imposed upon Aristotle's text might prove not only

anachronistic but also irrelevant. Is there anything like a pure cause that would escape the narrative structure of explanations? Can a necessary and sufficient condition be apprehended independently from any interest and context? " $Ai\tau i\alpha$ " was originally a judicial term referring to a "charge" or an "accusation." It was a matter of pointing to whoever or whatever is "accountable" for a given state of affairs. Aristotle's concern then is not so much a matter of providing an explanation as of determining accountability. But to be accountable for an outcome, the causes must themselves be *something*, they must refer to some determinate form, matter, end, or efficient force; or, more precisely, they must refer to a determinate *conjunction* of these elements. Yet, if we include "chance" among the causes, do we pick up anything? Is anything still held accountable?

Exploring this question will lead us to propose that (a) the attribution to Aristotle of a "statistical account of contingency and chance" remains insufficient, (b) that no *particular* cause is responsible for chance, and (c) that Aristotle's confrontation with chance remains essentially aporetic. This last point, however, is not a matter of reporting a "failure" of the *Physics*. It might be a misunderstanding to assume that philosophy is a matter of "resolving problems" in the way one answers a quiz or resolves a math problem; it might be a misapprehension to assume that the task of philosophy is to provide explanations that aim at reducing and silencing wonder once and for all. Rather, (d) the aporetic character of Aristotle's account can be understood as the acknowledgment of a tension in the encounter with chance that can only remain unresolved—and we shall suggest that the notion of "irony" provides a paradigm of this situation.

A survey of contemporary interpretations does not need to be exhaustive to demonstrate the divergence (at times drastic) among the readings. A question as basic as whether Aristotle admits the existence of chance is an object of disagreement. The regularity of the Aristotleian cosmos could lead one to consider that "chance" is but a superficial "name" (a "manner of speaking" mentioned in an inquiry concerned with *how* things are *commonly said* to come into being) but behind which there is, in fact, no reality.³ Aristotle would then condemn chance and luck as *illusory*. If, on the other hand, we assume that Aristotle does indeed make room for chance in natural processes and for luck in human actions, does this mean that he envisioned them as "causes," or are they rather mentioned as an "irreducible obstacle"? If we entertain some version of the second solution, we could grant an ontological weight to "chance" (it is not "nothing" *simpliciter*) while resisting its

¹"It is a great improvement to cease to think of *aitia* as a cause and to treat it instead as an explanation." Julia Annas, "Aristotle on Inefficient Causes," *Philosophical Quarterly* 32 (1982) 319. Jonathan Barnes, Julius Moravcsik, and Bas van Fraassen also defend this view. For a defense of the real "causal" theory see Cynthia Freeland, "Accidental Causes and Real Explanations" in Lindsay Judson, ed., *Aristotle's Physics, A Collection of Essays* (Oxford: Clarendon Press, 1991) pp. 49–72.

²Jules Vuillemin, *Necessity or Contingency: The Master Argument* (Stanford: CSLI Publication, 1996) in particular pp. 161–67.

³See Friedrich Solmsen, *Aristotle's System of the Physical World: A Comparison with His Predecessors* (Ithaca: Cornell University Press, 1960) pp. 103–04 in particular. This is also Bechler's position: "He [Aristotle] would be ready to concede, I suggest, that just as it [the coincidental] is strictly the cause of nothing, so it is, strictly, nothing." Zev Bechler, *Aristotle's Theory of Actuality* (Albany: SUNY Press, 1995) p. 65

identification with a natural "cause." But then chance could only stand in *opposition* to natural finality since it denies the possibility of an end and seems to be an "obstacle to natural activity." There is something scandalous in chance, for its eruption is manifest and yet it remains essentially "contrary to reason" (197a18). In this case "chance and fortune . . . are not and cannot be considered as causes in the primary sense of cause" but should be understood as "descriptions of the character of certain specific events." Or again we could attempt to harmonize chance and teleology and consider that "chance-events contain a teleological component, one which is, however, not a primary but a secondary end." In such a case chance and finality could be essentially related rather than opposite terms. There is, however, some difficulty in stating what this "secondary end" or "non-primary cause" exactly is. Would it be an end of a different kind or an end of a lesser strength? Would it be a difference of object or a difference of degree?

Given this situation, how can we proceed? If the difficulty at hand were merely a reflection of contemporary divergence or subjective preferences, it would simply not matter. But the true difficulty springs from Aristotle's text itself. It is therefore to this text that we must return in order to grasp these manifold understandings of chance.

Aristotle's discussion has been praised for bringing clarity to this issue by offering precise definitions of the terms ("luck is an accidental cause of things done according to choice and for the sake of something"), thereby providing the conceptual tools that allow for a scientific analysis of chance occurrences (if any). Yet Aristotle's discussion not only leaves the *aporia* open but also intensifies it. In spite of the technical definition and explanations that Aristotle has provided, a fundamental obscurity remains, and to talk of chance as, in a sense, "nothing" is "correct and well said." On the one hand, the existence of chance is affirmed ("it is manifest that luck or chance is something," 196b15); but, on the other hand, Aristotle admits that "in view of all this, luck seems to be something indefinite and not revealed to man, and there is a sense in which nothing would seem to come to be by luck" (197a10–11). How can these two claims appear in the same chapter? Did we not just learn (and precisely "in view of all that has been said") that chance and luck *are* something and that indeed things do occur by chance? Yet Aristotle maintains that chance is ultimately $\mathring{a}\delta \in \lambda o \varsigma$ ("obscure," "not revealed," "hidden"). But

⁴Auguste Mansion, *Introduction à la physique Aristotélicienne* (Paris: ISP Vrin, 1946) pp. 282–302. Marjorie Grene talks of chance-events as: "the stray bits which nature need not keep tidy" in *A Portrait of Aristotle* (Chicago: Univ. of Chicago, 1967) p. 150. R. Smith writes that: "These [chance and luck] really are not causes or explanations for events, but rather denials of causality" in "Filling in Nature's Deficiencies" in *Essays in Ancient Greek Philosophy, V: Aristotle's Ontology,* Anthony Preus, George Kustas, and John P. Anton, eds. (Albany: SUNY Press, 1992) p. 300. Also James G. Lennox, "Aristotle on Chance," *Archiv für Geschichte der Philosophie* 66 (1984) 52–60.

⁵James E. Magruder, "Notes on Aristotle's View of 'Chance' and 'Fortune'" in *Kinesis* 1 (1969) respectively p. 81 and p. 76. Also, Julia Annas, ibid.

⁶Marcelo D. Boeri, "Chance and Teleology in Aristotle's Physics," *International Philosophical Quarterly* 35 (1995) 88. Also Wolfgang Wieland "The concept of telos is so conceived that in itself it leaves open the possibility of chance" in "The problem of Teleology" in *Articles on Aristotle, Volume 1: Science*, Jonathan Barnes, Malcom Schofield, and Richard Sorabji, eds. (London: Duckworth, 1975) p. 143.

how can it be "correct" to say that "nothing comes to be by luck" just after demonstrating that the physicists of old times who upheld this thought were wrong—or, even worse, "absurd"? What is even more surprising is that this remark comes immediately after the so-called "definition" of luck. It would then be a definition that delimits nothing since it keeps its object indefinite: "the causes of things which might come to be by luck are of necessity indefinite" (197a10).

Further, Aristotle states that "chance events are among the things that are produced *for the sake of something*" (196b33, also 197a6 and 197b21–22), thereby admitting not only their "reality" but also their causal import. Nevertheless, he intimates that chance processes are "*not* for the sake of their results" (196b34–35, 197a16, 199b21), thereby rejecting them from the realm of final causes. How can we account for this situation? Should we just denounce an "inconsistency" and close the book? Or is there a sense in which this inquiry is *necessarily* aporetic? That is, is it conceivable that "aporia," far from being a mere "defect" in need of a philosophical resolution, comprises what philosophy investigates? Is it possible that ambiguity constitutes the "essence" of this phenomenon without essence? Could it be that the progress accomplished by Aristotle lies precisely in this recognition of the "indefinite" and the "not revealed," that is, in the recognition of the play of the anonymous in what comes into being?

Wonder is the natural element of chance. In the concise introductory chapter dedicated to this question (Physics B 4), Aristotle repeats the words $\theta \alpha \nu \mu \dot{\alpha} \zeta \epsilon \iota \nu$ twice (196a12, a28) and $\dot{\alpha} \tau o \pi o \nu$ four times (196a7, a19, b1, b2). Enquiring about chance is to stumble on amazement and to confront impossibilities, both with respect to what chance is and to the *accounts* of what it is. Wonder surrounds the emergence of chance-events and seems to reduce the physicists's discourse to an incoherent stammering. We begin, therefore, with a catalogue of absurdities. Previous thinkers (Democritus, Leucippus) either rejected or simply ignored it. To the wondrous emergence of contingent outcomes corresponds an amazing silence, an absurd denial, or (as with Empedocles, according to Aristotle), a flagrant contradiction; and this apparent lack of wonder is even more wondrous. How could they not have noticed it? Or if they did, why did they remain silent?

None of the ancient thinkers thought that luck was something such as friendship, or strife, or intelligence, or fire, or some other such thing. And this is certainly strange $[\tilde{a}\tau\sigma\pi\sigma\nu]$, whether they believed that luck is not, or thought that it is, but neglected to talk about it for they sometimes used it, as did Empedocles. (196a18–21)

The point is not simply to acknowledge chance *occurrences* or lucky *events*. "Strife," "intelligence," "friendship," "fire," and so on are ancient words that named "principles and causes." Thus the question concerning chance envisions it as a ground of being, as a source of what comes into being.

But next to the absurdity of those who deny chance altogether is the absurdity of those who take the opposite position and claim that "chance is a cause both of the heavens and of everything that is in the universe" (196a25). This certainly places chance among the causes, yet those who entertained this thought did not simply

contradict themselves; they inverted the order of the universe. For they admit that it is not any chance thing that is generated from a given seed, but an olive tree from such a kind of seed and a man from a man; and yet they grant the most divine (thus perfect) region of the visible realm (the heavens) with chance. The proper order of observation, however, reveals the contrary: "we observe nothing generated by chance in the heavens and many things generated by luck <in the sublunar world>" (196b5).7 Universal contingency is impossible then, for chance already presupposes a distinction of regions that is both cosmological and modal: it is only *by contrast* with the necessary celestial order or the regularity of natural phenomena (the "always" or the "for-the-most-part") that the haphazardness of earthly existence can be perceived. Chance is exceptional, but the exception confirms the rule; chance presumes the regular order of the universe. If we did not see necessity and eternal order when we look up, we would not be struck by chance when we look down. Neither everything nor nothing, chance occurrences are essentially "rare."

The wonder of chance turns into an *aporia* when we start asking about it in terms of causality. To say that something occurred "by chance" is, after all, a way of answering the question concerning its cause. The question "How did it occur?" asks the same question as "What caused it?" and yet this appeal to chance seems to defy the concept of cause since it suggests that a causal relation might remain *indeterminate*. When something occurs "as it chances," the happening of the event remains unqualified. "It happened by chance" is a way of saying that it happened for "no reason," that it "simply" *happened*. This, however, is taken as a way of *not* answering the question concerning the cause or, maybe, as a way of rejecting causality altogether. For how could there be such a thing as an "indeterminate cause"? Is it not the case that even what *is said* to occur by chance must have some determinate cause? Hence, we could as well reason thus: whatever comes to be requires a determinate cause; luck, by definition, is not a determinate cause; therefore luck cannot be the cause of anything.

The ancient physicists who defended this argument and denied the existence of chance noticed (according to Aristotle) that "it would be strange $[\check{\alpha}\tau o\pi o\nu]$ if there were such a thing as luck" (*Phys.* 196a7). There seems to be no room for chance then; it is $\check{\alpha}\tau o\pi o\nu$: it cannot "take place." Such a denial presents us with a more serious trial than its universal affirmation. The cause of the man's fractured skull is the fact that the eagle dropped a tortoise.⁸ This event causes wonder among the witnesses, and yet the cause is no less *determinate* than any other one (falling off a horse, or receiving a mortal blow in battle, for instance). It seems that as soon as we decompose the event into its causal chain, nothing wondrous remains. We might

⁷At this point, Aristotle has not yet introduced the technical conceptual distinction between "luck" $(\tau \dot{\nu} \chi \eta)$ and "chance" $(\alpha \dot{v} \tau \acute{o} \mu \alpha \tau o \nu)$ and uses the terms interchangeably.

⁸This is Eudemus's account of "the old argument which does away with luck," according to Simplicius's commentary. The story alluded to takes various forms. Here is one of them: the oracle tells a man that he shall die when a roof collapses on his head. Afraid, he decides to live in the outdoors, refusing to cross anyone's threshold or enter any building. One day however, an eagle carrying a tortoise and flying through the sky drops its prey that falls on the man's head, causing his death. The shell, of course, is the "roof" of the tortoise.

simply be faced here with an extremely "rare" occurrence, an incidence that goes "against the odds," but if the so-called chance-events must nevertheless be as determinate as any regular ones, then chance seems to vanish altogether. Its only place is in discourse, in tales, in narrations, and these are no "places," for only what is causally determinate can take place.

And yet, insists Aristotle, how could chance not be? Is it not after all a manifest dimension of our world? But to appeal to what is manifest is not sufficient, for what is manifest concerns only certain *outcomes*: we see the *things* that come to be by chance; their occurrences are rare, exceptional, or unusual. "Since among things that come-to-be, there is, beside these, also others which all say happen by luck, it is clear that luck and chance are *something* $[\ell\sigma\tau\iota \tau\iota \dot{\eta} \tau\dot{\nu}\chi\eta]$. For we know that such things come to be by luck and that things that come to be by luck are of this sort" (196b14–16). Chance and luck belong to the unruly, the un-orderly, and the irregular. Since this sphere manifestly exists, luck and chance must be something. Aristotle, however, does not claim that luck is "something" in the sense of a substance, an end-result, or an outcome, but that it finds its proper realm of manifestation "among the things done for the sake of something $[\partial \nu \tau o \hat{\iota} \varsigma \delta \nu \epsilon \kappa a]$ " (196b30). It is therefore insufficient to discuss chance *events* in terms of degrees of frequency; the true difficulty is to account for chance itself; that is, for the *cause* (if any) of these occurrences. Such a "cause," however, is none of the things that occur less often; and a calculation of probabilities, no matter how precise it might be, has nothing to say about it.

Chance is a disturbing phenomenon, or rather a *disturbance* in the phenomenal order. Like time, it does not fit within the categories of discourse, and yet it imposes its presence to all that is. As Simplicius saw it, to account for these chance-occurrences is to account for a "lack" or indeed a "failure":

Luck is to be found where the products of both art and nature display deficiencies; for example, in the case of medicine, luck skips in where skill fails to reach. Therefore the results of luck count for much with poor craftsmen, but for very little with excellent ones and with the most precise of crafts. It does not figure at all in the foremost and noblest of the things that exist according to nature (for they always abide unchangingly by their nature), but it does figure in the realm of coming-to-be and passing away, in so far as nature does fail, where it does so.⁹ (Simplicius, *In Phys. II*, 334, 29–34)

Chance is a privation of nature and luck is a privation of $\tau \dot{\epsilon} \chi \nu \eta$. In the realm of nature, chance belongs to what is "unnoble" and in the realm of human activities luck shows up when things are poorly done. Thus, Aristotle reports approvingly of Polus's words: "experience has produced art, but inexperience only luck" (*Met.* A 981a5). Luck smiles upon the incompetent doctor who sees his patient recover *in*

⁹Simplicius, On Aristotle Physics II, trans. Barrie Fleet (London: Duckworth 1997) p. 94.

¹⁰"The principles . . . are regarded as indefinite because they are privative" (*Phys.* G, 201b26). "Art is principle of a thing other than that which is generated, nature is principle in the thing itself, and the remaining causes <chance and luck> are privation of these" (*Met.* L 1070a7–9).

spite of his ignorance. Similarly it takes a *failure* of nature to produce a monstrous exception. Two questions arise at this junction: (a) if nature does nothing in vain, how can it fail? and (b) in what sense can a *failure* be accounted for in terms of "cause"? For a cause is a principle, an $\partial \rho \chi \dot{\eta}$, but only "anarchy" can apparently respond to a privation that has "no reason."

"It is clear that luck is a cause by accident of things done by choice for the sake of something; and so, both thought and luck are about the same thing, for choice is not without thought" (197a6-8). In order to understand this definition (or rather to understand whether this is a "definition"), we need first of all to envision what comes to be "for-the-sake-of something" ($\tau \dot{\alpha} \in \nu \in \kappa \alpha$). But this is not limited to "luck" in the narrow sense of the term. What occurs "for-the-sake-of" something encompasses both nature and the sphere of human activities. Aristotle is not saying that the final cause *produces* chance-events, but that chance occurs as an accident in relation to the final cause, that is, when considering (in the realm of nature or in the realm of these activities done "by thought") what comes about for the sake of something. A tripod thrown up in the air falls down because, as a heavy body, it falls "for-the-sake-of" finding its proper place ("down") that is its natural $\tau \tilde{\alpha} \in \nu \in \kappa \alpha$; but it is a matter of chance if it happens to fall on its feet (as if for-the-sake-of providing a seat), for such an end is not within the *nature* of the tripod. Furthermore, the fall brings neither good nor bad fortune to the tripod itself. By contrast, luck belongs to these actions where we have choices to make (rational activities) and where events make us fortunate or unfortunate. Luck is a cause by accident of things done by choice for the sake of something. Luck supervenes on a choice; it reflects back on the agent, bringing him or her an advantage or a disadvantage that was not sought; it changes someone's life in some respect. It is found where good fortune is found, for the end of our rational activities is happiness and good fortune is the accidental analogue of happiness. "Analogue," however, does not mean "equivalent," since true happiness is "steadfast" whereas good luck is uncertain.

A classical problem occurs with respect to Aristotle's so-called definition. If luck and chance are indeed causes, *which one* of the previously established four causes contributes to the outcome? Some (with Alexander of Aphrodisias¹¹) understand that it is the *final* cause (for it is the *outcome* of luck that seems indeterminate). Others (Simplicius) insist that it is the *efficient* cause. Others again have pointed to the *material* cause (inasmuch as matter is the subject of indeterminate accidents). Others again have suggested that, although Aristotle calls "chance" a cause, it cannot be a primary but only a secondary one. Among those who insist that Aristotle admits chance to be among the causes, the debate still goes on to this day. Yet it has occurred in vain. For it is not simply such or such a cause but *causality as*

¹¹This according to the testimony of Simplicius. Alexander's commentary is, for the most part, lost. We know of it through Simplicius's rival commentary that contains large excerpts from Alexander's.

¹²"It is not the final causes of lucky outcomes that are indeterminate, but the *efficient causes*, since it is from these that the outcomes of luck might result" (Simplicius, *In Phys. II*, 341, 5).

¹³"Matter is an accidental cause capable of being otherwise than for-the-most-part" (*Met.* E, 1027 a14). ¹⁴Magruder, ibid., and Boeri, ibid.

such that chance and luck put to the question. The accidental factor does not belong to any specific cause but to the relation of the conjoined causes to the outcome. The issue is not to know which cause produces chance, but whether there could be something indefinite in causality *itself*. Even when essential (and therefore definite) causes are related, accidents (and therefore indefinite) outcomes may occur. Chance is nature operating with indeterminate causality, just as a monstrosity is contrary to nature with respect to its generality and yet not contrary to nature in its entirety (*De Generatione Animalium* 770b10). By virtue of its privative character, chance is indefinite ($\partial \phi \rho \tau \sigma \tau \sigma \nu$), but for this reason (as a "per accidens" cause) it has no proper locus. It properly belongs neither to this nor to that cause and is rather a mobile cause.

The argument of those who deny the existence of chance (Democritus, Leucippus) was then grounded on a true premise: in things that are said to happen "by chance" there is indeed always some definite cause; yet these physicists missed the point. 15 Wherever chance happens, an outcome that *in itself* is definite (for instance, to receive payment) is *indefinitely related* to a cause that in itself is *also* definite (for instance, going to the marketplace for the sake of purchasing some goods). The outcome occurred randomly, but the causes could have been indefinitely many. *Conversely*, the cause (going to the market to purchase some goods) is determinate, yet the outcome in relation to this cause is indefinite. In other words, the indefinite does not spring out of some *one* definite cause but from the indefinite coincidence of two definite terms. In such cases the confusion bears not so much "in" the final or "in" the efficient cause but on the indeterminate and accidental nature of their *conjunction*.

However, Aristotle's answer to the ancient thinkers is not a matter of playing the indeterminate against the definite but, on the contrary, of holding them together. This is achieved through an analogy between substance and causality: "Just as being is by essence $[\kappa a\theta' \ a\dot{v}\tau o]$ or by accident, so it may be with a cause" (196b25). Whereas an intention is the per se cause of an action (buying goods is the "real" cause of going to the market in the first place), the end result does not happen "in keeping with the essential description." $^{1\bar{6}}$ What was the per se cause of something may turn out to be the *per accidens* cause of something else. The recognition of accidents does not entail the negation of essential attributes; and conversely, the existence of essential attributes does not prevent the occurrence of accidents. There is no contradiction in the fact that an architect—per se cause of the house also happens to play the flute (in such an instance, a flute player is per accidens cause of the house). This analogical relation between "substance/accident" and "cause/chance" has a fundamental consequence: accidents depend upon substances and as such, they are necessarily posterior to them. Thus, the acknowledgment of accidents entails *ipso facto* the recognition of the priority of substances. "However true it might be that chance is the cause of the heavens; intellect or nature must of

¹⁵One of the major difficulties one can find in Solmsen's and Bechler's interpretations is that they must attribute to Aristotle the very thesis of Democritus that Aristotle explicitly rejects.

¹⁶Simplicius, ibid., 337, 4.

necessity be prior causes of many other things, and particularly of the universe" (198 a10–11). Just as an accident is posterior to a substance, luck presupposes $\nu o \hat{\nu} s$, and chance $[a \dot{\nu} \tau \delta \mu a \tau o \nu]$ presupposes nature. The analogy with the substantial order allows us to reconcile chance with the regular and the always. Both may coexist in the same universe without contradiction if the former is necessarily ordered to and dependent upon the later. One might even suspect that chance is in fact absolutely needed in order for the regular to become a visible rule. To say that the architect is a flute player and thus that a flute player is the accidental cause of the house is to point to the realm ("indeterminate in number" 196b28) of assertions that are true and yet irrelevant (they may be true "at the same time," but not "in the same respect").

Yet, this analogy does not by itself fully account for what is proper to chance. Indeed we encounter in sub-lunar phenomena things that admit to being other than they are, but what falls short of necessity is not for this reason a matter of "chance." For instance, according to Aristotle, for the most part crabs' right claws are larger than the left ones (HA, D 527 b6); an exception would then certainly be rare though not impossible, but would anyone see this as a matter of "chance"? "Chance" certainly gains some degree of intelligibility through an analogy with the accidental. But an analogy brings together things that remain different in nature. If the so-called "definition" of chance refers it analogically to accidental causes, then it fails to define its *proper* object, which still remains other than the term to which it is analogically related.

Let us first consider the case of what comes into being "by thought" (which, properly speaking is called "luck"). An "agent" is someone who acts in such a way that she has "something in mind." Whether it succeeds or fails, the act comes "through a thought" ($\delta\iota\acute{a}\nu\iota\iota a$). Here, an action is done "for-the-sake-of" something that is anticipated or expected at the very moment one engages in the act; and yet, it becomes *per accidens* the cause of something else. A man goes to the market place for the sake of buying some goods, and happens to meet his debtor who pays him back; someone digs a hole for the sake of planting a tree and happens to find a buried treasure. This is how the final cause would have been related to the efficient one. Everything occurred as if the creditor had gone to the market for this purpose "had he known; but he went there not for the sake of this" (196b35). Luck is an unexpected opportunity, a coincidence that nevertheless is met as if it had been intended. The verbal form that corresponds to luck commands the use of a past conditional: " $\epsilon i \ \eta \delta \epsilon \iota$." Everything occurred "as if he had known" while at the same time, this is precisely *not* how the event occurred. Luck comes about when the result that was *not* intended happens as if it had been intended. Luck is then a simulacrum of teleology; a random conjoining that nevertheless *mimics* causality.

In this respect, luck and chance differ from "events" or mere "coincidence." The occurrence of an "event" may also cause some surprise, of course, but events do not occur as if they were for some purpose. Chance and luck, however, are a parody of teleology; they supervene to a real "for-the-sake-of" and substitute for it the appearance of an end; they mock both nature and thought by, precisely, looking

like them. Yet, just as a caricature differs from a portrait, this way of "looking alike" must also maintain a visible difference (otherwise chance would be unnoticeable). To define chance we need to consider that its object, *without* being intended, must be *capable* of being intended.¹⁷

To account for this essential feature, I would suggest considering that chance and luck are *ironic* in that they do not simply mock our pretension of knowing the order of the world but come about by imitating this order without ever being identical to it. "Irony" here does not denote a rhetorical device: the actors or the spectators of chanceevents are not themselves engaged in making ironical statements about the course of events; rather they are caught in them. Yet the events themselves are ironic in that their occurrence caricatures the normal course of nature and actions, as when we say of a turn of events that it is a form of "poetic justice," or that luck "smiles" upon someone (we might indeed suspect that such a smile is not a mere sign of benevolence, but rather a mocking smirk). Even when luck turns out to be "good fortune" (thus fulfilling our desire), it is never luck as such that we desire. Luck cannot be sought or intended; if it occurs to us it never occurs because of us, but rather in spite of us, of our efforts or merit. In this sense, as Martha Nussbaum suggests, the notion of $\dot{a}\mu a\rho\tau i\alpha$ in the *Poetics* can be understood as demonstrating the gap between "being good" and "living well," since it comes about independently from a wickedness of character and still transforms the overall significance of a life.¹⁸

To resolve the classical problem of the evolution of the notion of irony from " $\epsilon i \rho \omega \nu$, $\epsilon i \rho \omega \nu \epsilon i \alpha$," meaning originally an intention to *deceive* (thus a "lie," a "hypocritical posture"), to our modern understanding of it as a trope "in which something contrary to what is said is to be understood" (Quintilian, *Institutio Oratica* 9.22.44), Vlastos suggests that we look not at rhetoric, but rather at Socrates as the creator of a *way of being*, of a new *form of life*. ¹⁹ If it is so, as Quintilian already suggested, there is no need to limit the concept of "irony" to the realm of rhetoric. ²⁰ But in both cases (intention to deceive and intention to teach through a riddle), irony presupposes a distinction between what is latent and what is manifest. Where there is irony, the literal must not be taken literally, the patent must not be taken for what it appears. What the ironist *really* means is non-manifest, and yet it is suggested; it is an untold secret that nevertheless can be understood. The intention (which is the *real* meaning) is always other than the actual statement.

¹⁷For this reason, I cannot accept Miller's view according to which the fact that chance events "are counterfactually analyzable in terms of final causation" is without value and unwarranted. Without this feature, on the contrary, there would be no chance or luck. See Willard Miller, "Aristotle on Necessity, Chance, and Spontaneity," *The New Scholasticism* 47 (1973) 212.

 18 Tragedy concerns "people who come to grief not through defect of character or wickedness but through some $\dot{a}\mu a\rho\tau ia$ " (*Poetics*, 1453a9). See Martha Nussbaum, *The Fragility of Goodness: Luck and Ethics in Greek Tragedy and Philosophy* (Cambridge: Cambridge Univ. Press, 1986) in particular pp. 382-85.

¹⁹"He [Socrates] changes the word not by theorizing about it, but by creating something new for it to mean: a new form of life realized in himself which was the very incarnation of ϵ lρων ϵ lα in that second of its contemporary uses." Gregory Vlastos, "Socratic Irony" in *Socrates: Ironist and Moral Philosopher* (Ithaca: Cornell Univ. Press, 1991) p. 29.

²⁰Quintilian (*Inst. Or.* 9.2.46) remarks that *ironia* may characterize not just a speech but an "entire life" (Vlastos, p. 33).

Chance manifests itself as an unresolved tension between what it is and what it appears to be. But as soon as the tension is resolved in some way or other (either by disclosing a "for-the-sake-of" or by denying it altogether), chance vanishes. If there is a sense in which our encounter with chance and luck can be understood in reference to "irony," it would be as an inversion or a doubling of its rhetorical use: In chance events, everything occurs as if an intention (with respect to actions) or a purpose (with respect to nature) were lurking behind some manifest occurrence; and yet, it is this hidden secret that is an illusion. Whereas rhetorical irony manages to communicate an intention against the signs it employs (thus forcing us to look beyond the literal), the irony of chance seems to signify an end where nothing of the sort was intended (there is nothing else beyond the occurrence). Whereas in order to detect an ironic discourse we must assume that it conveys more than what it says; with chance, we must assume that the event reveals *less* that what it seems to show. The secret of chance is that it holds no secret. The man who dug a hole really just meant to plant a tree; the one who went to the market really just went there to buy some goods. What seems most purposeful is at the same time for no purpose. No one or nothing (neither an agent nor nature) planned what occurred. Yet, an indefinite accidental relation arises as if it was intended—the indefinite occurs as if it was definite.

The paradox of luck then is not that something indeterminate occurs, nor is it that an indeterminate cause produces something determinate; rather it is *as if* the unintended had been intended all along when, *at the same time*, it could not and must not have been intended. If we were to regard chance events as true occurrences of a final cause, we could not see them as a matter of chance anymore; but neither would we if we did not refer them to an end. In other words, chance indeed needs a reference to the final cause, but it refers to an end as what is *in excess* of the event.²¹

If we attend to this dimension of Aristotle's analysis, then the sense in which $\tau \dot{\nu} \chi \eta$ "remains within the framework of teleology" should be reconsidered. It seems clear that indeed there is a "proximity" between chance and teleology; but the problem is to specify its form and account for it. Wieland suggests: "Aristotle seeks to show that . . . where we speak of chance, teleological structures are already presupposed"; but to account for the agreement of chance and finality, Wieland appeals to a Kantian interpretation of $\tau \dot{\epsilon} \lambda o \varsigma$ construed in terms of "concept of reflection." In this case however, $\tau \dot{\epsilon} \lambda o \varsigma$ would neither be a law prescribed to nature, nor one that we learn from it, but a subjective principle (maxim) of the judgment²⁴ and I doubt this could in any way agree with Aristotle's understanding

 $^{^{21}}$ Let us notice that just as $\epsilon i \rho \omega \nu \epsilon i \alpha$ the second (Socratic) sense leaves open the *possibility* of deception although it is absolved of any *intention* to deceive (as when Euthyphro, for instance, does not pick up any irony in Socrates's compliments about his knowledge of the divine), chance is also open to the possibility of deception when the appearance of a "for-the-sake-of" is taken literally.

²²Wieland, p. 144.

²³"If we see in Aristotle's conception of *telos* a concept of reflection...then the possibility of disturbances, of chance, and of necessity is already implicitly admitted in his position.... It would become clear that in his work teleology has no greater (and to be sure, no smaller) importance than it has in Kant's philosophy" (Wieland, p. 159).

²⁴Kant, Critique of Judgment (Introduction V), trans. J. F. Bernard (New York: Hafner Press, 1951) p. 22.

of cause and principle. On the other hand, should we talk of teleological "reappropriation"? Derrida notices that: "We had to privilege this Aristotelian concept of $\tau \dot{\nu} \chi \eta$ for reasons essential to the structure of the gift and the *pas de don*, the gift step/no gift. For in that structure chance is constantly, in advance even, re-finalized, re-intentionalized and regularly re-appropriated by a teleology." Indeed the sudden eruption of chance is necessarily thought *from* the consideration of teleology; but it does not follow that it is (or even can be) reduced to teleology. Rather, it calls for and rejects the final cause, ironically maintaining both terms together.

"As if": the whole problem resides in this expression. Going to the marketplace could have been "for-the-sake-of" recovering money. But this is precisely not why one went to the market. This last point has a fundamental consequence for, as Simplicius mentions, it is understandable only if "the expression 'for-the-sake-of' $[\tau \dot{\alpha} \ \ddot{\epsilon} \nu \epsilon \kappa \dot{\alpha}]$ includes both what might have been by intention and what might have occurred naturally, even if it was not done so, but could have been" (In Phys. II, 335, 20). As the instance of the tripod suggests, what occurs by chance or luck is not within the nature of the agent. In that case what is "for-the-sake-of" encompasses not only what occurs necessarily or for the most part in the order of nature or action, but also what is purely possible—"purely" in the highest sense of the term: i.e., what is "for-the-sake-of" must be open to possibilities that do not actualize. The ambiguity of Aristotle's account springs from his keeping with what shows itself, i.e., with the ambivalence of what occurs "in-either-of-two-ways" or "as-it-chances" ($\delta\pi\delta\tau\epsilon\rho$ ' $\tilde{\epsilon}\tau\nu\chi\epsilon$). "For-the-sake-of" operates both in reality and in fiction. The lucky outcome is something actual, but the causal path that brings it about is fictitious.

It has been suggested that Aristotle's aim is to find a middle way between the endoxa, "to do justice to the idea that chance is something and the idea that it is nothing."26 But what could be a "middle" between something and nothing? Could chance be an appearance of causation that is *neither* a *per se* cause, *nor* nothing? In such a case, if the "for-the-sake-of" crosses the difference between reality and fiction, it never simply cancels it. In crossing, the difference must at the same time be maintained. Everything occurs as if the end was intended, when at the same time it was not intended. It "could have been" for such or such purpose, but it was not. Chance $[\alpha \dot{v} \tau \delta \mu \alpha \tau o \nu]$ is not "really real" and as such it is close to what occurs "in vain" $[\tau \dot{o} \mu \dot{a} \tau \eta \nu]$. Whether the etymology Aristotle suggests at this point is philologically legitimate or not (apparently, it is not) is irrelevant. What matters is rather to understand the *proximity* of these terms. What is "in vain" occurs for no purpose, for no end; yet, it is with respect to an end that chance can be perceived. Thus Aristotle does not simply identify what is "for no purpose" with chance. For what is "in vain" is such that while the means is accomplished, the result does not follow, whereas what is by chance is such that while the means is accomplished,

²⁵Jacques Derrida, *Given Time, I: Counterfeit Money*, trans. Peggy Kamuf (Chicago: Univ. of Chicago Press, 1992) p. 133.

²⁶Lindsay Judson, "Chance and 'Always or For the Most Part" in L. Judson, p. 75.

another end ensues. In both cases, however, the cause and its outcome are out of joint. In chance-events and lucky outcomes nothing indeterminate ever *appears* (since both the cause and the effect are in fact determined). The fall of a stone did not occur in order to hit the passerby, but this lack of purpose looks like a purpose. For chance to occur, a causal gap must look like a causal relation.

In the context of the analysis of being in the sense of "accident" (*Metaphysics* E, 3), Aristotle discusses the question of the "principle of what occurs by chance."

It is manifest that there are principles and causes which are generable and destructible apart from the processes of generation and destruction. For if this is not the case, everything will be of necessity, that is, if there must be a non-accidental cause for whatever is being generated or is being destroyed. (*Met.* E 3 1027a28–b2)

The fact that not everything is of necessity has fundamental consequences for causality. The cause of a coincidence must be instantaneous; it is an eruption without antecedent. When we regress into the causal chain (investigating the cause of a cause of a cause, etc.), we eventually stumble upon a moment of disruption where the chain stops, when the process of causation is interrupted (otherwise everything would be of necessity). The $a\dot{v}\tau\dot{o}$ - of $a\dot{v}\tau\dot{o}\mu a\tau o\nu$ does not indicate the autonomy of what is "by itself," but a lack of any further antecedent reason that disrupts causal continuity. Chance occurs "all of a sudden," and as such it is a cause without a cause. Let us consider the following case: A man is murdered by a mob of thugs he met at the well. He left his house and went to the well because he was thirsty; he was thirsty because he ate spicy food, etc. Given the cause, the effect necessarily follows: "Will A come to be or not? Yes if B is being generated or is being destroyed; otherwise it will not. And B will exist if C occurs" (idem). To say that an accidental conjunction enters into the causal chain, however, is to say that at some point (the meeting with the murderers) the causal chain breaks down.²⁷ This chance event has itself no further cause (as Aristotle puts it: "it does not run back to something else.") And yet, it is this "lack," this "deficiency" that precisely produces chance. The answer to the determinists is then a matter of distinguishing the property of being mortal from the *manner* of death.

For example, he who lives will die for something that has already happened, *i.e.*, the presence of contraries in the same body. But whether he will die by disease or violence is not yet <necessary>, unless so-and-so occurs. It is clear then that the process runs back to a principle but this *no longer runs back to something else*. This then will be the principle of what occurs by chance $[\dot{o}\pi\dot{o}\tau\epsilon\rho'\ \check{\epsilon}\tau\nu\chi\epsilon\nu]$ and nothing else will be the cause of its coming about. (*Met.* 1027 b10–14)

We need to stress here the temporal character of accidental causes: as the Greek expression $\kappa a \tau \dot{a} \sigma \nu \mu \beta \epsilon \beta \eta \kappa \dot{o} \epsilon$ already suggests, a coincidence is a matter of simultaneity, of things that spontaneously "fall together." In one and the same instant

²⁷See Richard Sorabji, *Necessity, Cause and Blame: Perspective on Aristotle's Theory* (London: Duckworth, 1980) in particular pp. 7–13.

two things that do not belong by nature to each other nevertheless coincide. Only time holds them together. The cause of death is something that came to be without going through a *process* of coming into being; it is a cause without a cause. In naming chance as a cause, the inquiry comes to a stop; explanations fail to explain. "Luck is contrary to reason [$\pi a \rho \acute{a} \lambda o \gamma o \nu$]; for reason is of what is always or for the most part, while luck is present in events that are outside of these" (*Phys.* 197a19). The coincidence of simultaneity has no rule and no other unity than the instant of its occurrence. Since there is no knowledge of the indeterminate, a science of the accidental is not even possible.²⁸ Here, scientific inquiry keeps silent.

Aristotle's consideration of chance as a "cause" is not a "logical" or "categorical" mistake; rather it reveals the limit of causality itself. Causality is appropriate in order to account for subsistent entities. By placing chance among the causes, however, we do not merely reduce chance to the all-embracing order of causal explanation, we do not "re-finalize" chance. Rather (and this constitutes a fundamentally aporetic moment for Aristotle), the causal approach to understanding the coming into existence of beings encounters its limit. Chance-events are many and manifest, but chance itself stands back. The wonder with chance is that it never appears as such, since it is indefinite (just as irony is a showing that hides itself). When we talk of chance, nothing determinate comes to the fore; or rather only what is determinate comes to the fore while chance is a cause that remains concealed.

The well-known (and positive) result Aristotle establishes is to demonstrate that inasmuch as it is an accidental cause, chance and luck presuppose the antecedence of a substantial and necessary order. Chance is thus essentially secondary and accidental; it depends on the antecedence of nature, just as luck depends on $\nu o \hat{v} S$ and accidents depend on the ontological priority of substances. Yet, even if we grant the necessary priority of this order, is it not the case that in chance-events and lucky outcomes, the accidental takes preeminence over the essential? The coincidence leading to the murder is without further explanation, but the death it causes is not itself merely "inessential." The accident becomes, on the contrary, what matters the most (it is what changes *everything*). The analogy between substance and cause, accident and chance breaks down here; or rather, we must remember than an analogy is never an identity. A chance-event is an event, not a substance. Chance is nothing—a failure, a coincidence without reason; a cause without a cause—yet it is a nothing that changes everything.

²⁸"For every science is of that which is always or for the most part, but the accidental is of neither of these" (*Met.* K 1065a4).