

Article

Diabolical Diagramming: Deleuze, Dupuy, and Catastrophe

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Abstract: Jean-Pierre Dupuy argues that our failure to prevent the looming climate catastrophe results from a faulty metaphysics of time: because we believe the present can proceed down one of the many branches that extend into the future, some of which bypass the catastrophe, we do not think it is absolutely urgent to take drastic action now. His solution to this problem of demotivation is “enlightened doomsaying” in “projected time”, which means that we affirm the coming catastrophe as something real in the future rather than being a mere possibility; thus, we regard it seriously enough that we are motivated to take the needed actions to prevent it. One potential obstacle to this proposal is that it requires the forming of consensus and coordination with the powerful players who benefit from our current path and whose apparently near-total grip on this catastrophic future may itself discourage action. We then consider an alternative model based on Gilles Deleuze’s philosophy of the present–future relation. Although it has the branching structure that Dupuy is wary of, it may not suffer from the same problem of demotivation on account of the way it conceives the complex structure of the present event. For this reason, the Deleuzian model may be more suited to motivating action in a world where the future must be fought for rather than unanimously agreed upon.

Keywords: climate change; catastrophe; philosophy of time; Jean-Pierre Dupuy; Gilles Deleuze



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1. Introduction

We currently find ourselves rushing headlong into climate change catastrophes, the likes, degree, speed of unraveling, and scope of which have perhaps been entirely unseen in all of human history. The amount of suffering and loss that will be endured by human civilization and by all life on the planet is almost too great to fully comprehend. That we can be quite sure of this is a conclusion spelled out, in no uncertain terms, in recent Intergovernmental Panel on Climate Change (IPCC) reports and other studies. Even if we halt all carbon emissions now, we will still face the dire consequences of “baked in” warming that will increase global temperatures to at least around 1.5 °C above pre-industrial levels [1,2]; additionally, on account of the “inertia of the system”, we can anticipate far more pollution and thus much greater catastrophe [3] (p. 578). We see all this avoidable suffering on the horizon, and yet we do almost nothing to prevent it. Why do we lack the motivation?

Jean-Pierre Dupuy, a philosopher of catastrophe, believes that “we have irreversibly entered into an era whose ultimate prospect is the self-destruction of the human race” [4] (p. 56) and concludes that the cause of our current dangerous inaction is our faulty metaphysics of time: because we think there are many possible futures, some of which bypass the climate catastrophe, we do not believe it is *absolutely* urgent to take drastic action *now*. As a remedy, he proposes that we engage in what he terms “enlightened doomsaying” or “enlightened catastrophism” (*catastrophisme éclairé*), conducted under his new model of the present–future relation called “projected time” [5] (Preface, Ch. 1), [6] (p. 30). It involves our affirmation of the forthcoming catastrophe as being something real in the future rather than a mere possibility, thereby causing us to take it seriously enough to prevent it.

For enlightened doomsaying to work, it needs to be widely adopted. However, the task of attaining this needed consensus may seem to present an enormous obstacle to its success,

which could potentially demotivate us to take the first steps. With that in mind, we compare it to Gilles Deleuze's philosophy of the present–future relation, focusing especially on the *revolutionary* nature of the drastic changes needed now in the face of the extraordinary powers opposing those changes. We might say that Deleuze's philosophy of time, similar to Dupuy's, is also a kind of "catastrophism" because it, too, inserts catastrophe into the present–future relation. However, it does so by affirming many possible futures, including both catastrophic and non-catastrophic ones, with the potential purpose of enacting certain kinds of catastrophes now that might avert climate-related ones later. As a result of this comparison, we will find that Deleuze's model may be more suited to a situation where competing interests are involved, and we must find the motivation to overcome enormous resistance.¹

2. Future Now: Shock of the Yet

The severity of the looming climate catastrophe can make us acutely aware of how tightly the future is "built into" our present decisions and actions. The anticipated climate calamities are painted quite vividly in our minds as we read about them in IPCC reports or in such works as David Wallace-Wells' *The Uninhabitable Earth: Life after Warming*, which details the myriad ways that climate change will create extreme havoc, suffering, and loss in our world, including mass migration, famine, economic collapse, widespread warfare, and mass extinction [7]. Furthermore, since many of our own normal, daily activities can be seen as contributing to the problem, we might feel this dreadful future to be tightly bound up with our current behaviors.

As a result, we face a question: how might we shape our present lives, knowing of this intimate link they have to a catastrophic future? Roy Scranton asks this in *We're Doomed. Now What?* with his responses provided there and in his *Learning to Die in the Anthropocene*: we must acknowledge our inevitable end, both of our own personal lives and of our species, and then ask serious questions about how we will live up until then [8] (pp. 21–24, 108), [9] (Ch. 1, 5, 6, 16). However, he does not call for an attitude of passive resignation to an unalterable future. Rather, he suggests that drastic—and maybe even violent—action may be required [8] (Ch. 4). The Extinction Rebellion movement also sees the coming climate catastrophe and thus the present need for political actions—specifically non-violent ones—that are strategically employed for maximum disruptive effect [10]. They write that when a government fails to protect its own people's future, it becomes "not only our right but our sacred duty to rebel" against it [11]. We might also note a recent climate novel, Kim Stanley Robinson's *The Ministry for the Future*, where an international agency by this name is tasked with protecting future generations from climate catastrophe, many of whom will not be born until many decades later [12]. Under this conception, forthcoming people might not presently exist, yet their rights and our obligations to them do. In a sense, all these cases involve us recognizing the profound intimacy between the future and the present, which calls for us to bring our catastrophic futures into our present lives in a *conscientious* way.

3. Catastrophe à la Dupuy

Dupuy's new metaphysics of time likewise puts forth a catastrophic future that bears heavily and directly upon the present. Nonetheless, forming a conception of this temporal structure is no easy task because it is foreign to our normal understanding of time, and because it intricately combines many complicated ideas. The purpose of the following attempt to carefully lay out and organize his various claims about this structure will not be for the sake of finding fault in his model's construction (although we do address some unexplained yet vital aspects missing from his account in endnote 8); rather, we do so in order to see more precisely why Dupuy thinks that his model can motivate us to action. The question we will raise, however, is whether it would have this motivating power when we take notice of certain seemingly insurmountable obstacles to implementing it.

To begin this task, we should first note his two criteria for any metaphysics: firstly, it must be consistent, and secondly, it must be “not true, but useful [. . .] for the problems that you will tackle” [13]. He appeals to how Henri Poincaré wrote that we might choose a non-Euclidean geometry instead of a Euclidean one “not because it is more *true*, but because it is the more *convenient*” [14] (p. 42) when dealing with relativity [15] (p. 38). It is on this basis that Dupuy rejected the metaphysics of the present–future relation that were useless or even detrimental for the task of staving off climate catastrophe, and he aimed to devise an alternative model that could more effectively do so. In fact, this pragmatic, “ethical”, and “political” requirement [4] (p. 10) will serve as the basis of our comparison with the Deleuzian model.

A highly problematic instance of a useless metaphysics of time, according to Dupuy, is the one that is widespread today, which he calls “occurring time”. It is characterized by its branching structure, and so for convenience, we will refer to it here as “branching time” [3] (p. 588), [4] (p. 59). He depicts it with a tree-shaped diagram that has different lines diverging and further ramifying from an earlier point (Figure 1a). (In his diagram, Dupuy does not designate a present moment but only indicates the past and the future. As he does not anywhere deny the present’s existence, we will presume that the past and future here are relative designations, with the present moment being locatable where “past” is labeled, or anywhere else along the lines). Each node is a point of decision, where the course of events may develop in one way or another, depending on what is going on at that point in time [15] (p. 37). This openness of the future corresponds to our intuition that it is not completely decided before it happens, and also that most scientific predictions can never be 100% certain [5] (Ch. 1). For instance, there is a chart in a recent IPCC report showing different possible paths that the earth’s warming can take for the rest of the 21st century, depending on the policy commitments we make in the meantime (Figure 1b). In this way, we often think that there are numerous—possibly infinitely numerous—different paths that time may or may not follow.

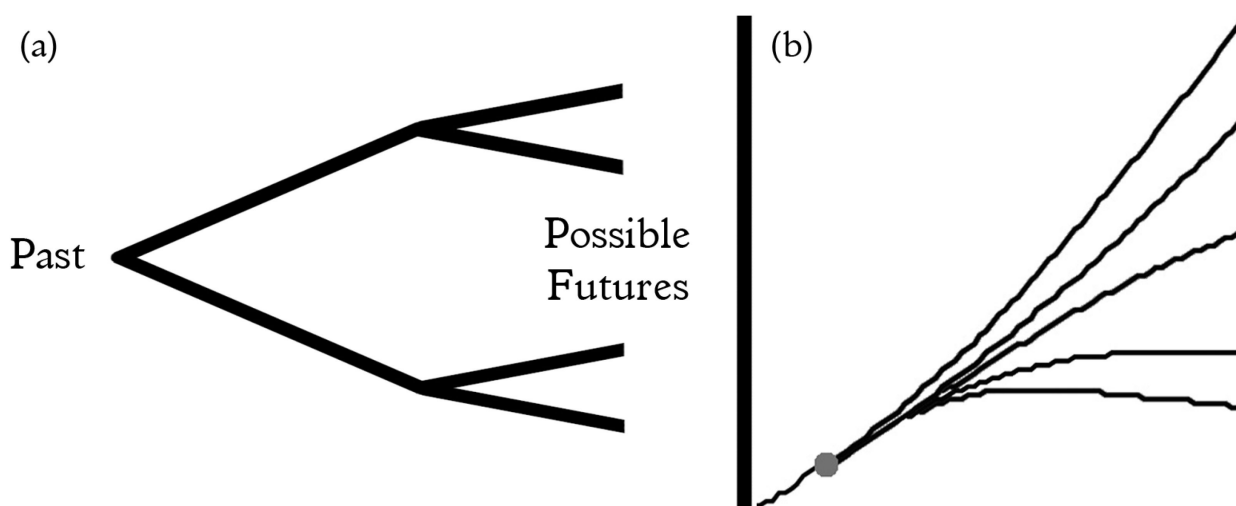


Figure 1. (a) Dupuy’s depiction of branching or occurring time.² (b) A recent IPCC chart showing possible paths of climate warming for the rest of the century, branching out from the present and spanning from about 1.5 °C in the best case to nearly 5 °C in the worst.³

On the other hand, this conception also leads us to believe that the *chance* always remains that we are going down a non-catastrophic path, regardless of our own actions. For Dupuy, this is the main danger of the branching time model, which makes it a catastrophically useless metaphysical conception. All the branches are thought to be possible futures, and none are real until one particular path is actualized. However, this lessens the “ontological force” of the prospective future catastrophe, as there is no telling which path will be realized, thereby making us less concerned about trying to prevent it [15] (p. 30):

“Denying that the future is real presents a potentially fatal metaphysical obstacle. For if the future is not real, a future catastrophe is not real either. Confident in our ability to avoid disaster, we do not consider it to be a threat” [4] (p. 59).

Dupuy thinks that along with failing the second criterion of usefulness, this model also fails the first criterion of consistency, especially when it comes to the kind of doomsaying that we need right now, namely one that makes us believe in the reality of the coming catastrophe even before it occurs in order to motivate us to do whatever it takes to avert it: “The prophet of misfortune proclaims the inevitability of a cataclysm so that it will not occur” [16] (p. 129).

Dupuy illustrates this type of “reverse” doomsaying, as we might call it, by using Günther Anders’ retelling of the Noah story [4,15,17]. In this version, Noah, shortly before the foretold flood, takes on the appearance of someone in mourning by adorning sackcloth and ashes, which “was only permitted to someone lamenting the loss of his dear child or his wife” [15] (pp. 28–29).⁴ A crowd gathers around Noah and asks him whose death he was mourning, and he informs them that there are many, including all who are present, and that they will perish on account of a catastrophic flood that will happen tomorrow. He thus proclaims prophetically, “the day after tomorrow, the flood will be something that will have been” [15]. That evening, people come to Noah to help him build an arc so that his prediction of mass death would “become false” [15] (p. 29). In other words, it was only because Noah first convinced the people that the foresaid doom was a real, true future that they made the necessary efforts to prevent it [4] (pp. 2–3), [17] (p. 203).

Dupuy further illustrates the paradoxical nature of reverse doomsaying with the story of the prophet Jonah. God commands him to proclaim to the people of Nineveh that God will punish them for their wickedness. Instead, Jonah flees and is at one point famously swallowed by a giant fish, in whose stomach he lives for three days until God caused it to vomit him out. God then compels him to prophesy to the Ninevehans that their city will be overthrown in 40 days. In response, the people repent by fasting and dressing in sackcloth and ashes, which leads to God ultimately sparing them. According to Dupuy, Jonah’s motivation for fleeing in the first place was to avoid this very outcome, namely that he prophesy one thing and yet something else happens instead (as a result of that prophesy), thereby rendering him a false prophet [5] (Ch. 10), [13], [16] (p. 32), [17] (p. 204). One of Dupuy’s purposes for inventing projected time is to find a way for prophesies such as Jonah’s to remain *true* and yet still help avert the doom they foretell.

When reverse doomsaying is understood under the branching-time conception, the foresaid catastrophes are not really prophesies but are merely warnings about the dangers of our present actions, which are leading us down the wrong path into the future [3] (p. 588): “When one announces that a catastrophe is imminent, in order to avert it, this announcement does not possess the status of a prediction, in the strict sense of the term: one does not claim to say what the future will be, only what it would have been had preventive measures not been taken” [4] (p. 8). Thus, “the announced future does not have to coincide with the actual future, the forecast does not have to come true, for the announced or forecast ‘future’ is not in fact the future at all” [3] (p. 588).

As we noted, this is why the branching conception of the present–future relation causes us to ignore the severity of the coming climate catastrophe. For decades we have been given abundant, credible *warnings* by the scientific community about the catastrophic path we heedlessly charge along, yet so far, this has led to no sufficient effect in policy. Dupuy’s response to this failure, however, is not to give up on reverse doomsaying but rather to situate it within a metaphysics of time where it could be more effective.

Dupuy’s proposal for this is his “projected time”, in which there are only two explicitly figured temporal points. The first is the past, which is set directly in relation to a second “fixed point” in the future that is being predicted and affirmed as true (Figure 2) [20] (p. 340). (For the same reasons mentioned above, we will presume that the present is locatable where “past” is labeled in the diagram). This structure does not include alternate futures; additionally, any other moments intervening between the present

and the future time points are not explicitly and determinately fixed. In other words, the present is locked onto a future moment that is likewise locked onto that present, but other moments of time are not thought to be intermeshed and determined in this highly rigid way [5] (Ch. 9, 11). Moreover, the present–future relation is bidirectional, forming a circuit: our present activities, along with other current conditions, are causally bringing about that fixed, distant future right now, all while this future simultaneously communicates to us certain things about it, which constitute our prophecies. In this way, we are now reacting to what we predict for the future, while in the same stroke, our reactions are contributing to causally bringing about that same future [13].

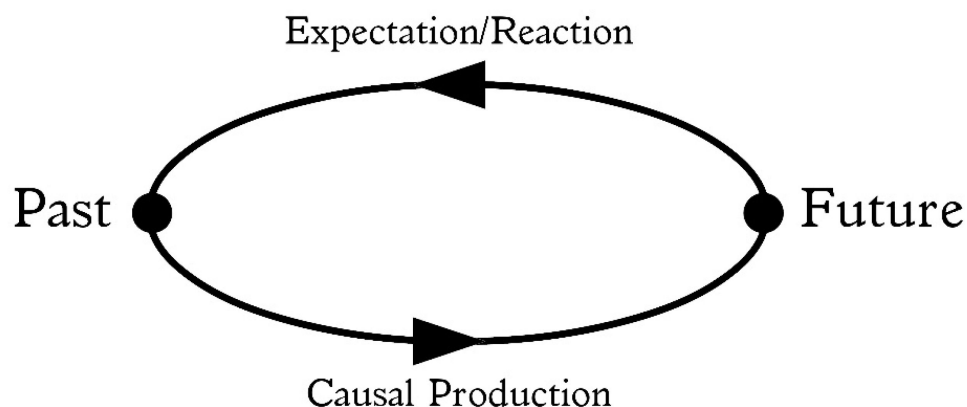


Figure 2. Dupuy's diagram for the loop structure of projected time.⁵

Reverse doomsaying in projected time becomes “enlightened doomsaying” or “enlightened catastrophism”, which presents “a form of optimism [. . .] founded on reason” [16] (p. 128). However, when explaining it, Dupuy further complicates his model with a number of elements that can prove to be challenging to combine conceptually. For this reason, I would like to first offer a “toy” version of enlightened doomsaying, which will model its basic dynamics even though it excludes many structural details.

In this simplified version of enlightened doomsaying, we regard whatever is projected into the future to be a fate that will necessarily happen at *some* later time, but its precise date of occurrence is not specified. This holds for the foreseen climate catastrophe, which looms as something completely real in our future even though we are not predicting when exactly it will arrive. We also regard our current actions as ones which will bring about that catastrophe, eventually. Nevertheless, we can act now in a way that temporarily staves off that catastrophe: “the threat of catastrophe becomes far more credible if it appears to be something that is inevitable. Once its credibility has been established, however, the same threat creates the driving force that mobilizes imagination, intelligence, and resolute determination—all the resources that must be brought to bear if catastrophe is to be prevented” [16] (p. 129). Hence, our current activities and decisions are causing this catastrophe to happen at some point in the future, but at the same time, we can choose actions that cause it to occur later rather than sooner. In other words, we always remain vigilant against it, knowing that just as soon as we “let up our guard” and stop pushing it off, our actions will begin to bring it into the present [5] (Ch. 12). As Dupuy puts it, “so long as one does not recklessly tempt fate, there is a chance that it will forget about us—for a time, perhaps a long, indeed a very long time; but not forever” [16] (p. 144).

Here, the reverse doomsaying remains true because the foretold event really is something that will happen in the future. It is thus not a branching time. Nonetheless, we are always free to choose actions that can postpone its eventual occurrence. Thus, this toy version of enlightened doomsaying still has the “loop” structure, where the present is locked onto a catastrophic future, thereby keeping the prophecy true, but it does so by always pushing the catastrophic point outside the scope of the present. Depending on how we want to conceptualize the flow of time, we might visualize this, for instance, either as the future point getting pushed further and further away from us while the circuit remains

closed, or as the loop being renewed with every passing moment, each time pushing the catastrophe further away into the future.

This toy version, although convenient, has a feature that Dupuy finds problematic. He says that in enlightened doomsaying, the future catastrophe cannot be the fixed point, for two reasons. {1} He thinks it would be inconsistent to both fix the catastrophe in the future and yet later bypass it. For, in that way it would be both fated and not fated [3] (p. 591). {2} It could also demotivate us to try to avert the catastrophe because we might think that it will fall upon us no matter what we do in the meantime, and hence, that we might as well do nothing about it at all [15] (p. 30). To deal with these problems, Dupuy introduces three other concepts to his model: the future perfect tense, counterfactual dependence, and time-indexed modal truth value.

Dupuy says that in enlightened doomsaying, instead of choosing the catastrophe as the future fixed point, we instead select a moment *after* the time when it is thought to occur. This provides some wiggle room, so to speak, regarding the temporal realization of this *supposed* catastrophe, which falls *outside* the only two acknowledged points in time. In this way, enlightened doomsaying seemingly involves a third moment between the other two when the catastrophe is supposed to have happened. Therefore, if we say that the first present moment happens at t_1 , and that the fixed point coming after the catastrophe occurs at t_3 , then the catastrophe would be found at some non-specifically located intervening moment t_2 . Furthermore, when we predict disaster at t_1 , we utter a statement about the catastrophe in the future perfect tense, perhaps taking a formulation such as:

- (1) At t_3 , the catastrophe would necessarily have already taken place (at one or another prior moment t_2).

We will see later why we need the modal operator “necessarily”. Additionally, I am using “would” here instead of “will” so that the sentence’s truth value can be evaluated at t_3 as well. However, it is still meant to capture the sense of “will” when uttered at t_1 . In this way, we affirm the catastrophe as something real in the future by anchoring it temporally to a moment that comes after it, one which we believe we have no power to alter; at the same time, we do not “fix” the catastrophic event to some determinate place within the intervening time [15] (p. 36). As Dupuy explains, the future perfect tense “reflects a negative property of the future, namely, that it is fundamentally indeterminate. The future, in other words, lacks a property that the past fully possesses: the fixity of what has already been determined by its occurrence” [17] (p. 204).

Next, we need to consider how the past, present, and future can be thought of as being either *counterfactually dependent upon*, or *independent from*, one another. A counterfactual statement often takes a conditional form (“if ... then ...”), where the antecedent (“if”) clause states things as being other than what is so. For instance, “if tonight were New Year’s Eve, then tomorrow I would not be feeling my best”. It is not New Year’s Eve while I write this, so it is a counterfactual statement about my present. This case assumes that, were the present different, the future would have to be different, too. In other words, the future here counterfactually depends upon the present because a change in the present would entail a change in the future as well [20] (p. 329). Now, consider a counterfactual statement about the past: “if I had invested in Amazon years ago, I would have a lot of money now”. (Needless to say, neither clause is true). This counterfactual statement is made under the assumption that, were the past different than what it was, then the present would have to be different, too; in other words, the present is counterfactually dependent upon the past [20] (p. 338).

Curiously, in Dupuy’s projected time, the future is counterfactually *independent* of the present or past [5] (Ch. 10, 11). To illustrate this, he has us recall the tragedy of Oedipus [15] (p. 51). Neither his natural parents’ efforts nor his own were able to prevent him from fulfilling his prophesied fate of killing his father and marrying his mother. When something is fated, nothing we do now can cause us to avoid it; it will come to pass, in one way or another. In this sense, the future would be counterfactually independent from the present

because regardless of how different the present might be, the future will still remain the same [20] (p. 333). This holds in projected time because the future is fixed.

Additionally, the past in Dupuy's projected time is *counterfactually dependent* upon the present [16] (p. 136), [20] (p. 334). This may seem odd because we might think that the past is over and done with, and nothing we do now can change it. On this matter, Dupuy employs an ingenious distinction between causation and counterfactual dependence [5] (Ch. 11). Of course, we cannot *cause* the past to be different now. However, supposing the present to be counterfactually otherwise, we might still conclude that the past would also have to be different [20] (p. 334). For instance, I am currently writing in Ankara and have been doing so for a while now. Moreover, no means available to me could get me to New York in less than some number of hours. Hence, if I were now in New York (rather than Ankara), then I also could not have been in Ankara just a second ago (instead, I would have to have been in or near New York). This does not mean, however, that my being in Ankara now also *causes* me to have been in Ankara just moments before. Nonetheless, my past location is counterfactually dependent on my present one because, were the current one otherwise, the past one would have to be as well. This distinction between counterfactuality and causation also plays a role in the future: somehow, for Dupuy, the present causally brings about the future even though, as we noted, the future is counterfactually independent of the present [20] (p. 333).

Even so, we might wonder how we are supposed to affect the future (namely, by postponing a presumed event in it) if it will remain the same regardless of the actions we might take now. While Dupuy does not describe all the ways that we can alter the future, he does specify one thing that can be changed, namely the truth values of modal statements about events that are mentioned in the future perfect tense [13].⁶ In our example, we make prediction (1) at t_1 ("at t_3 , the catastrophe would necessarily have already taken place (at one or another prior moment t_2)"). Now, recall that the past is counterfactually dependent on the present. That means, when we get to t_3 , the conditions of t_2 will have to be consistent with it. Thus, first *suppose* that we get to t_3 without the catastrophe happening at any moment before it. Then, prediction (1) *retroactively* becomes false starting from this later time: it was true when we stated it presently at t_1 but false when we get to t_3 because in projected time, "the truth value of propositions containing modal elements of possibility and necessity are indexed to the moment when such propositions are uttered" [16] (p. 140). We should remember that prediction (1), when made at t_1 , does not foresee the catastrophe itself; it is only indirectly spoken of. Therefore, what is being changed here is not a particular, predicted event itself but just the truth value of a statement about a *supposed* such event: it is *supposed* that it will have taken place before t_3 , but it itself is not foreseen as occurring at any particular time. With this being the case, (1) can remain true almost all the way up to t_3 itself, which, when it becomes the present moment, makes (1) false. As Dupuy notes, under these assumptions, our predictions can be true and yet still never come true [5] (Ch. 10). Consequently, by indexing truth values to times, Dupuy has made his seemingly paradoxical model of time logically consistent.

Now that we have outlined the main metaphysical features of Dupuy's enlightened doomsaying, we should note other important and related treatments of it. Slavoj Žižek, for instance, examines it within a religious context [21,22]. Garnet Kindervater details Dupuy's ideas and fruitfully places them in dialogue within numerous other political theories of catastrophe [6,23]. In addition, Benoît Pelopidas provides a comprehensive overview of Dupuy's philosophy of enlightened doomsaying and offers a number of criticisms of it [24]. Some of these, in fact, address the problem of demotivation, and I would like to follow upon one of them. Dupuy admits that "enlightened doomsaying is not a blueprint for political action" [4] (p. 60), and in fact, he never attempts such political "translations" of his ideas [24]. Pelopidas observes that we may even notice certain grave difficulties in implementing enlightened doomsaying, and as a result, we might simply sit back and hope we have good luck in the future, thinking that solutions should present themselves in due time [24].⁷ The way that the present study aims to add to this body of literature is

by proposing the above organization of the important metaphysical features of Dupuy's enlightened doomsaying in projected time (even though his account may still leave us confused about numerous vital issues)⁸ and by addressing the following particular matter with regard to its implementation, which may actually demotivate action rather than spur it.

Dupuy claims that our individual behaviors must become "coordinated" when fixing a predicted catastrophic future [5] (Ch. 11), [3], (p. 591), [16] (p. 145). As he explains, "coordinated collective behavior springs from a shared *conception* of the future that is capable of closing the loop between the causal production of the future and its self-fulfilling expectation" [16] (p. 141). Dupuy seems to mean that it is not enough for a small handful of people to adopt this projected time model; additionally, we must all agree on what will be our shared, projected, post-catastrophic future because doing so will help us coordinate our present actions to perpetually postpone it.

Nevertheless, is this not one of the main reasons why we find ourselves in our current, difficult predicament? Those profiting economically and politically from fossil fuels seem intent on continuing their short-term gains at any cost, even if that means causing a massive global catastrophe. Furthermore, it could be that they plan to use the profits from these climate change-contributing activities to shelter themselves from these same activities' catastrophic consequences, leaving all the rest of us to suffer. Douglas Rushkoff relates an anecdote to that effect in his essay, "Survival of the Richest". He was asked to speak to five wealthy men about the future of technology. One mentioned that he is building an underground bunker to protect him from future catastrophes, including those resulting from climate change. For the next hour, the group discussed the problem of controlling their own security forces during the societal collapse, because such mercenaries cannot be paid if the currency is worthless, and anyway, it may be to their advantage in this anarchic situation to turn against their resource-rich bosses. Rushkoff then realized that the wealthy's interests had "less to do with making the world a better place" but rather with "insulating themselves from the very real and present danger of climate change, rising sea levels, mass migrations, global pandemics, nativist panic and resource depletion. For them, the future of technology is really about just one thing: escape" [25].

Hence, what we might still ask from Dupuy's enlightened doomsaying is an indication as to *how* we are all supposed to coordinate for a shared vision of the future when such powerful, competing interests are involved. Supposing we find no answer, would we not feel disempowered in the face of such incredibly strong opposition, and would that not demotivate us from acting? We turn now to Deleuze's philosophy of the present–future relation to see how it might fare in comparison on this particular issue.

4. Disaster Diagrams: Deleuze's Diabolics

In certain contexts, Deleuze proposes a branching model for the present–future relation, but it is not so simple as the type that Dupuy is against; moreover, it may not have the same problem of demotivation. Subsequently, I will combine it with another related concept of his—the diabolical forces of the future—even though Deleuze himself never explicitly connects them in this way. This will mean taking a small step beyond what Deleuze writes, but it will allow us to consider a Deleuze-inspired model that can enter into fruitful comparison with Dupuy's.⁹

One place where Deleuze elaborates this idea is in his writings on painting. Although we are not primarily concerned with aesthetics, this will provide us with a useful, concrete illustration. Here, Deleuze examines the way that painters introduce *catastrophe* into their works, with a particular focus on Francis Bacon's techniques. Bacon would begin by painting the basic outline or "skeleton" of the image he had in mind [27] (p. 21). However, this would be too "cliché", too recognizable, for the painting to have the sensational impact he wanted for it [27] (pp. 56–60), [28] (pp. 61–63). As a solution, he would disfigure it with catastrophe: he injected uncontrolled interventions, and in that sense, affirmed the power of chance to potentially recreate the work anew. For instance, he might spontaneously

scramble a part of the early formation with a wet rag, or he might randomly throw paint upon a certain region of the canvas [27] (pp. 90–94, 107, 121, 160). Doing such things deformed those areas by bending their lines or by forcing upon them new visual elements that cover over the older parts and introduce additional shapes and colors foreign to what was originally intended. Bacon says that he then “surveys” these “involuntary marks [. . .] like you would a sort of graph” [27] (p. 56)—or, using Deleuze’s term, a *diagram*—whereby “catastrophe overcame the canvas” [28] (p. 71). He relates, for example, how he began painting a bird landing on a field. He next threw paint upon a certain area and then saw how it suggested new imagery and distributed this diagram’s disruptive influence, part-by-part, throughout the rest of the painting, “like one continuous accident mounting on top of another” [27] (p. 11). The original anatomical relations between a bird’s wings, head, and beak were deformed into completely foreign ones held between a hanging animal carcass, an umbrella, and a bloodied skull (*Painting 1946*) [28] (pp. 81, 109–110), [29]. In this way, chancy, chaotic forces introduce a “catastrophe germ, or chaos germ” into the image, which has a cascading effect that spreads out and alters all the other parts’ relations as well, thereby creating a new order in the painting [29].

Deleuze specifically defines catastrophe in this context of painting as the “place of forces” which, although they originate from the *future*, nonetheless “are already there in some way” in the present painting process [29]. He also notes certain cases in Bacon’s paintings where these disruptive, future-originating forces produce figures that seemingly cry out in anguish or horror: “the scream captures or detects [. . .] invisible forces, which are nothing other than the forces of the future. It was Kafka who spoke of detecting the diabolical powers of the future knocking at the door. Every scream contains them potentially” [28] (p. 43).¹⁰ In what sense they come from the *future* is a question we will return to later.

Deleuze also uses the term “diagram” in the context of Foucault’s analysis of power and endows it with a partly similar sense. Put briefly, we are to think of power in terms of a complex network of forces set in relation to each other, with force itself being “defined by a double capacity, to affect and be affected” [34] (p. 250). Something important to note is that for Foucault, “Power is everywhere; not because it embraces everything, but because it comes from everywhere” [35] (p. 93). Power’s distribution all throughout the network of interrelated forces then creates the conditions for power consolidations to become overturned and redistributed anew: “Power [. . .] does not express the dominance of a class [. . .] but ‘is produced at every point, or rather in every relation from point to point’. Power flows through the ruling class no less than through those who are ruled” [34] (p. 249), quoting [35], (p. 93).

A “diagram” in this context “exposes a set of relations between forces” [36] (p. 85) and thereby exhibits a particular way that the forces can be organized (or disorganized). For instance, with the feudal diagram, there were “new relationships with animals (the horse), with land, [. . .] with women (courtly love and chivalry)” [34] (p. 124), along with the “transformation of towns and cities which were progressively abandoning territorial models, the transformation of money that was injected into new circuits”, and so on [34] (p. 128). There is also a church diagram, a pastoral diagram, a state diagram, along with countless others [36] (p. 85).

This kind of diagram may appear at first to run contrary to the painting type because these examples seem to suggest the institution and maintenance of power arrangements rather than scrambling them and altering their course of development. However, it is not the diagrammatic element that fixes the force relations; instead, it is a “stratifying” component [36] (p. 85). The diagram exists “between two strata as the place of mutations which enables the passage from one stratum to the other” [34] (p. 251), similarly to how the painting diagram mutated the original formation’s relations into the new ones as a result of its catastrophic effects. Moreover, as with Bacon, where the chance elements led to a transformation of the given arrangement, the diagram here is also open to unpredictable outside

influences, “as a roll of the dice” in “a combination of randomness and dependence” [34] (pp. 253–254).

We might now detect a potential branching structure of time because chance elements open up various new paths of future development. Deleuze discusses something similar (the “aleatory points”) in his accounts of the *event* [33] (pp. 70, 119, 130, 166). One of his illustrations for an event is a sea battle. Although he is making a different point about causality in this case, his description will allow us to more fully characterize the conflictual composition of events that we are focusing on here. Deleuze notes how, in an ancient naval battle, there are many bodies acting upon—and being acted upon by—each other in what we might consider to be a system of force relations that distributes power throughout the dynamic scene.¹¹ For instance, the sailor’s body pushes the oar, which presses back upon the sailor’s arm on account of its own force interaction with the resistant sea water. Along with this are all the other interacting bodies in the battle, including the boats, projectiles, and so forth [38]. Additionally, we might think of each of the different arrangements of bodies or of force relations in a battle as striving for a different future. Each navy, for instance, is fighting to change the course of history in the direction of its own polity’s favor.

The battle will be determined partly as a result of how power happens to be distributed throughout these force relations, but also in part by chance or unpredictable factors [33] (pp. 70, 119, 130, 166). So long as it remains undecidable, “the battle *hovers over* its own field, being neutral in relation to all of its temporal actualizations, neutral and impassive in relation to the victor and the vanquished” [33] (p. 116). As such, a present event combines various force relations that are pulling the progress of time in divergent directions. This means that multiple possible future worlds, and thus multiple lines of future temporal development, coalesce within an ongoing, active present (Figure 3a).¹² Each future might be understood as corresponding to a particular power arrangement, such as how fossil fuel interests are pulling us toward a catastrophic future where they prevail, while others are trying to pull us toward the opposite direction.

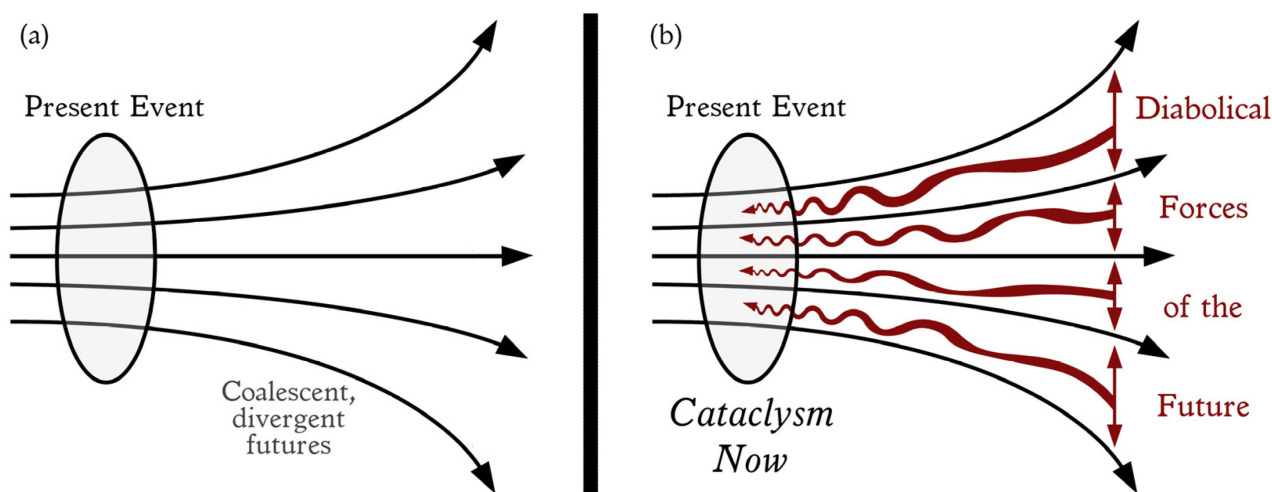


Figure 3. (a) Deleuze’s branching structure of time, with divergent futures coalescing but not assimilating, within the present event. (b) The tensions between these futures being intensified and injected into the present, causing a cataclysm now.

Deleuze says that this coalescence of divergent, future worlds operates according to a “diaboli-cal principle”, which means that it maintains their diversity rather than assimilating and homogenizing them into one path [33] (pp. 201, 332–334). Furthermore, when the distances between these coexisting yet incompatible futures are affirmed, they communicate their differences, causing the event to “resonate” throughout them all [33] (pp. 198–201). I propose that we conceive the diaboli-cal forces of the future not as ones that originate from

within one or another future path and world, but rather as the tensions that hold *between* them. This conception is not something that Deleuze expounds on, but it is based on ascribing his diabolical principle to the diabolical powers. The undecidable event affirms many divergent futures, with each one corresponding to a force arrangement that pulls us in that direction. There are thus tensions in this present conflict that have a temporal character, namely that of the present progress of time being continuously and simultaneously hauled down multiple paths that cannot comply with each other's realization. In this model, we would understand these diabolical tensions between futures as being intensified in the present event and also as having a disruptive effect on any force arrangement's current efforts to commandeer the flow of time down one particular path (Figure 3b). The question is, how might we make strategic use of these disruptive, diabolical tensions?

The alternative to Dupuy's enlightened doomsaying in projected time that I propose would be Deleuze's "diabolical diagramming" in coalescent, divergent time. It is modeled after Bacon's technique of injecting chancy, disruptive forces into a limited zone of the painting's early formation and then using that directed catastrophe to overturn the order of relations throughout the rest of the work. Diabolical diagramming in the context of climate catastrophe would then involve a similar use of such disruptive forces of the future to create a catastrophe now, directed strategically to the restricted zones of force that are related to fossil fuel powers. Those adopting this Deleuzian conception of the present–future relation could become more sensitively aware of the present conflictual tensions and "drama" between the futures that are currently at play and being fought for. In this manner, people might find the motivation to strive harder and more effectively for non-catastrophic futures. They might seek ways to intensify and redirect these disruptive tensions to where they can *increase the undecidability* of the future, by scrambling the force relations that give fossil fuel powers their potent grip on the course of events.

We should lastly address a couple of problems with this Deleuzian alternative. {1} As a branching model of time, would it not have the same problem of demotivation? In addition, {2} is it not too *risky* to leave the fate of the earth and civilization to chance factors, deeming it undecidable? Firstly, diabolical diagramming is meant for minor powers who sense the power dynamics of the situation and realize they are up against great opposing forces that have almost insurmountable control over the direction in which we are headed. Therefore, it is assumed that such participants would actually be demotivated *without* the knowledge that the event is undecidable, as the "inertia of the system" seems to be making the catastrophic future almost entirely inevitable. Secondly, when we assume that the odds are so strongly in favor of catastrophe, enhancing the undecidability of this outcome only decreases the risk of it happening.

Overall, diabolical diagramming assumes that certain types of disruptions can be strategically directed to the right zones such that they produce cascading effects that continually spread outward, similar to how Bacon's visual disruptions proliferated throughout the rest of the imagery. Hence, although it might appear to be not much more than a kind of "micropolitics" that operates on too small of a scale to have any significant effect, the assumption is that it can in fact be something more similar to a spark that ignites a raging wildfire. Although it goes beyond our focus here to propose specific types of non-violent political activities that are strategically designed to have this cascading, disruptive effect, we could at least note a section in a book by Extinction Rebellion, where they explain how to use a demonstration to halt road traffic in such a way that it would encourage the blocked travelers to join and further *spread* the cause rather than ignore or resent the protest [47] (see: [10]). Supposing that people come to see in diabolical diagramming such power in proliferation, they could become more motivated to think and act in these terms rather than assume there is little that they, as individuals, can do.

5. Conclusions

In summary, Dupuy's approach tries to keep the catastrophe always at bay by constantly affirming its future reality while at the same time denying its entrance into the

present. However, it seems uncertain—if not highly doubtful—that all those with an influence on the future, especially those with fossil fuel interests, will firstly comprehend projected time, then feel inclined to adopt it, and on top of that, coordinate with everyone else in a way that ultimately works to their detriment. Realizing this could prove to be demotivating. The Deleuzian alternative, however, is suited to a situation where the future must be fought for, *against* resisting forces that possess far more power over fate than we have. In other words, while Dupuy's model can compel some people to regard the problem with the seriousness that its catastrophic nature warrants, it may not help to empower and inspire them to *fight against* the forces that are resisting the needed changes. Here is where the Deleuzian model seems preferable: it reminds underdog parties that power is widely distributed and in flux, with the future remaining ever undecidable, and that furthermore, by injecting disruption in the right ways and into the proper zones, it may proliferate widely enough to make the seemingly insurmountable hold that fossil fuel interests have on the future become more undecidable. Such an effort would seek to produce a *cataclysm now* to fossil fuel powers so that a far worse climate catastrophe will not transpire later. Perhaps with this prospect of diabolical diagramming's potencies in mind, we might become motivated to take such needed actions.

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Notes

- ¹ Given this topic, we may want to determine the kinds of political actions we should take, strategically speaking, and we might also wish to examine the nuances of Deleuze's political philosophy. To maintain the prescribed scope of this essay, the focus will have to remain more specifically on the relation between metaphysical conceptions and motivation, with these other relevant issues left for another occasion.
- ² Based on the first figure of [3] (p. 589).
- ³ Based on figure *a* of the "Summary for Policymakers" section of [1] (p. 16).
- ⁴ Here and below, Dupuy says that he quotes a passage from [18], which quotes from [19].
- ⁵ Based on the second figure of [3] (p. 589).
- ⁶ Dupuy provides a more precise description: "One can imagine, for example, the following state of affairs: an object *O* possesses the property *P* until time *t*; after *t*, it is not only the case that the object *O* no longer has the property *P*, but also that *O* never had *P*. In that case the truth value of the proposition 'The object *O* has the property *P* at instant *t*' would depend on the moment when the proposition is stated" [17] (p. 202).
- ⁷ Pelopidas notes another demotivating factor with Dupuy's enlightened doomsaying. For us to be sufficiently wary of a future catastrophe, it would seem necessary that we have already experienced a very severe one, which is what we want to avoid in the first place. Since we have never gained that experiential knowledge, we might not feel the motivation to prevent it [24].
- ⁸ Here are some questions we might ask when trying to form a clear conception of enlightened doomsaying. In what manner does the present moment progress, and how does that affect the present–future loop? When we get to t_3 and no catastrophe has happened, do we then create a new loop to keep catastrophe on the horizon? However, if we keep arriving at forthcoming presents that go against the previous predictions, would there not be a record of an overarching, branching structure between the predicted paths and the actual course of time? Or, is the future point never "fixed" to a precise date in the first place but is rather *indeterminately* placed somewhere in the future? Dupuy might be suggesting something similar to this when he speaks of the non-zero but arbitrarily small probability of the catastrophe happening, causing it to be uncertain and thus to have some type of "indeterminacy" in the future [5], (Ch. 12), [3] (p. 592), [15] (pp. 52–53), [16] (p. 144). Nevertheless, if this means that the fixed point to which it is anchored will also need to be indeterminately located in the future, then why not use a structure similar to our

simpler toy version, which is based on that assumption, rather than appealing to the future perfect tense structure? Moreover, how can the future be causally but not counterfactually dependent on the present? (If the present were different, would it not cause a different future?) Lastly, if we fully buy into the projected time structure, would it not be enough to set a non-catastrophic future as the fixed point, since we would only be able to conduct the actions which would causally bring it about?

⁹ What we examine here does not include another very important way that Deleuze elaborates his philosophy of the present–future relation, namely his “third synthesis of time”. See: [26] (pp. 85–94).

¹⁰ See Ronald Bogue [30] (p. 201), footnote 26, for a useful comparison of the German, French, and English versions of the Kafka passage. It should be noted that in Deleuze and Guattari’s *Kafka* book, these diabolical forces often refer to such power-consolidating systems or entities as Nazism, Fascism, Stalinism, Bureaucracy, Capitalism, and oppressive authority figures [31] (pp. 12, 41, 57, 59, 83). However, in this same text, the diabolical powers of the future are also associated with deterritorialization and pacts with the devil [31] (pp. 30–33, 46–48), and these demonic pacts, in another text, are related to mutational becoming [32] (pp. 268–277). Generally speaking, for Deleuze, a “demonic” principle is one of heterogenous and multiple composition and becoming [33] (pp. 332–340). This ambiguous status of the diabolical powers is also seen in the context of painting. Deleuze says that Bacon’s diagram captures the diabolical powers, which can be associated with fascism and torture, and transforms them; thus, “the screaming mouth becomes both the friend and the enemy of these powers” [29]. In other words, it seems that these forces could be channeled in such a way as to either generate and reinforce the “stratifications” or to overturn them, depending on how the diagram functions in that case. This would correspond to the ambiguous use of “diagram” in the Foucault context, which applies to State or Church diagrams, but also to their mutation (see the discussion to follow). The interpretation I am offering is one that emphasizes these forces’ capacity to create change in a system of relations; however, the additional step I aim to take, as we will see, is to locate their source in the tensions between the affirmed, divergent futures.

¹¹ In this context, Deleuze is not talking about mutually affecting forces, but rather about bodies. While this terminology may seem incompatible with our discussion of force relations, we might note that for Deleuze, bodies in a Nietzschean context can be understood as “nothing but forces” [37] (p. 135).

¹² This conception is drawn from a number of sources where Deleuze conceives of the structure of time in a bifurcational way within the context of Leibniz’s philosophy of compossible worlds. A possible world for Leibniz can be understood as being composed of many individual substances, whose predicates imply a sequence of events that they are involved in; in one possible world, all these series harmonize such that all events unfold without one substance disallowing for any other [39] (pp. 78–79, 120–131, 233), [40] (pp. 59–64). There are infinitely numerous harmonious, possible combinations of substances with different arrangements of predicates where their event-series are convergent, and God chooses the “best” of all such possible worlds [41] (p. 193), [42] (p. 275), [43] (pp. 267–268). Even though substances in each world are absolutely unique, we can group many of them under a common name by ignoring certain particularizing features; for instance, we might think of a “vague Adam” that refers to all the Adams in all worlds prior to his temptation, putting aside for the moment the fact that some of these Adams will sin and others will not, following an event of temptation where these worlds will diverge [39] (pp. 78, 110–112, 128–129), [44] (pp. 60–61). Deleuze has us consider how events would be structured if we remove the God who chooses just one possible world, thus making the outcomes of events uncertain and all substances “vague” and “vagabond”, wandering across many worlds that coalesce in one event despite their incompatibilities [33] (pp. 131, 197). Since each possible world contains its own divergent line of time, and supposing that the undecided event in question is actively present, this could mean that many lines of temporal development coalesce in the present without converging, and that they bifurcate in many divergent directions into the future [38,45]. For a more detailed account of Deleuze’s Leibnizian, bifurcational conception of time, see: [46] (pp. 117–135; 199–202).

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