Thing Causation[1]

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> Two objects may be consider'd as plac'd in this relation [of causation], as well when one is the cause of any of the actions or motions of the other, as when the former is the cause of the existence of the latter. For...that action or motion is nothing but the object itself, consider'd in a certain light.
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> - David Hume, *A Treatise of Human Nature* (1.1.4.4)

Introduction

When a bomb explodes, collapsing a building, there appear to be two causal culprits. We can pin the building's collapse on the explosion (an event), or on the bomb (a thing). This "double causation" by events and things is systematic: rarely do bombs outstrip bomb-explosions in their most notable effects, and no bomb-explosion ever causes what no bomb does. Of course, this is no extraordinary coincidence, nor is it evidence of a global conspiracy to place bombs at the sites of bomb-explosions. For there is surely some general explanation of the systematic double causation by events and things. But what exactly is the explanation?

The orthodox explanation appeals to the *event-causal view*. On the event-causal view, thing causation is definable from event causation, and event causation is the most primitive, irreducible kind of causation: it is not definable from thing causation, nor from any other kind of causation.[2] To indicate the most primitive kind of causation, I will underline "causation" (and "cause" and "effect"). The orthodoxy is that causes are events, and things cause only in a derivative sense: for a thing to cause some effect just is for the thing to figure, in the right way, in an event that causes the effect. The bomb counts as a cause of the collapse only because it figured in an event—the explosion—that was the collapse's cause. What explains the systematic double causation is that a thing causes all and only the effects of the events in which it figures.

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[2] Steward 1997, chapter 5 argues that neither event nor thing causation is definable from the other. Another possibility is that event causation and thing causation are interdefinable (Lowe 2008, chapter 6).

This event-causal view has dominated analytic philosophy, playing important roles in several areas of philosophy. These include the philosophy of mind, where the event-causal view is a crucial premise in the most influential arguments for token physicalism (the view that every event is a physical event), and action theory, where the event-causal view is used to rule out agent-causal views of free agency.[3]

I reject the event-causal view. Instead, I claim that causes are things. This view was dominant throughout most of the history of western philosophy, whereas the event causal view is virtually nowhere to be found until the 18th century—certainly not in Aristotelians, but also not in Hobbes or Locke or Malebranche or Leibniz.[4] I suggest that we return to thing causation.

I take causation to involve a thing causing a thing to do something, usually by doing something itself.[5] The bomb, for instance, causes the building to collapse, by exploding. Event causation reduces to thing causation. I sketch a theory of events (§II), which I use to provide a definition of event causation from thing causation (§§III, IV). I then give my core argument that thing causation is not definable from event causation (§§VI, VII). I present my spin on a classic problem about "fine-grained" cases of causation, which cannot be accommodated if we take causation to relate events (unless events are extremely fine-grained). I show how we can solve the problem by taking causation to be thing causation (§VII). These fine-grained cases show that thing causation is not definable from event causation. In §VIII, I reply to C. D. Broad's influential "timing objection", which has often been thought to decisively refute the view that causes are things. I then take up the question of whether thing causation is "basic", or whether instead things only ever cause by doing something further (§IX). I defend the latter option from looming threats of regress, and finally I explore connections with agent-causal theories of free agency (§X).

I. Preliminary Remarks

Before all this, some points of clarification are needed. First, when I say that causes are things, I am using "thing" in a narrow way that contrasts with "event", as well as "state", "property", "fact", and "proposition". Things are particulars that exist in time and do not occur or obtain. I am counting ordinary objects, people, nonhuman organisms, and artifacts as things, as well as stuff like air and water, and some entities of physics, like photons and electrons.

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[3] See respectively Davidson 1970; and Hornsby 1980 and Ginet 1990, chapter 1.

[4] See Pasnau MS for a thorough history of thing causation.

[5] This is based on an idea floated by Lowe 2008, chapters 6–8; also see Skow 2018, chapter 5. Other defenses of causation by things include Swinburne 1997, Alvarez and Hyman 1998, Alvarez MS, Mayr 2011, Steward 2012, Jacobs and O'Connor 2013, Vihvelin 2013, Hyman 2015, chapter 2, Whittle 2016, Paolini Paoletti 2018, and Kuykendall 2019.

Second, I focus on the relationship between event causation and thing causation. There appears to be causation between other entities: between absences, omissions, states, disjunctive and existential facts, and so on. A common view is that all causation reduces to event causation. Philosophers who endorse this view face the task of spelling out this reduction.[6] If I were defending the view that all causation reduces to thing causation, I would face a similar task.[7] Although I believe that this view is true, I will not try to defend it in this paper. Here, I only aim to reduce event causation to thing causation.

Lastly, I should remark on how thing causation relates to the more familiar "substance causation" and "agent causation". There are two important differences between substance causation, as it is typically understood, and thing causation. The first difference concerns the difference between things and substances. Not all things are Aristotelian substances, and I want to allow that these non-substances can cause. My left earlobe, my belt buckle, and perhaps even my shadow can cause, even if they are not substances.

The second difference is that substance causation is normally taken to involve the manifestation of irreducible Aristotelian powers. By contrast, nothing I say rules out the possibility that causation might ultimately reduce to the Humean mosaic (or to something else, like fundamental laws). In fact, philosophers as anti-Aristotelian as Hobbes embraced causation by things. Hobbes writes:

> A body is said to work upon or act, that is to say, do something to another body, when it either generates or destroys some accident in it; and the body in which an accident is generated or destroyed is said to suffer, that is, to have something done to it by another body. As when one body by putting forwards another body generates motion in it, it is called an *agent*; and the body in which motion is so generated, is called the *patient*; so fire that warms the hand is the agent, and the hand, which is warmed, is the patient. That accident, which is generated in the patient, is called the *effect*.[8]

My main arguments are intended to appeal to Humeans and Aristotelians alike. That said, my reduction of event causation to thing causation should be particularly welcome to causal powers theorists, since it is things, rather than events, that have powers. Causal powers theorists have extra reason to hope that I am right.

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[6] Thomson 2003 argues that causation between states and between omissions is definable from event causation.
[7] The task for me will be *at most* as difficult. For if I am right that event causation is reducible to thing causation, then anything reducible to event causation is reducible to thing causation.
[8] Hobbes 1839, pg. 120.

With agent causation, things are a bit different. Some agent causal theorists will be happy with my conclusions, since I reject the most common complaint against agent-causal theories: that causation by an agent is impossible. But many will be unhappy. For Thomas Reid and Roderick Chisholm, the specialness of agency is brought out by the contrast with the natural world, where we find only event causation (what Reid calls mere "physical causation"). And some agent-causal theories are very straightforwardly inconsistent with thing causation, as they take causation by an agent to suffice for free agency (see §X).

II. What Things Do

I will now sketch a view of what events are. The view clarifies the relationship between events and things, which will be important when I show how to define event causation from thing causation. It also distinguishes events from states, as well as absences and omissions.[9] The view of events is in some respects novel, but it is designed to avoid taking a stand on controversies about event individuation and essence, as it would be unwise to presuppose particular views of individuation and essence in my reduction of event causation.

The rough idea is that events are cases of things "doing something": for short, events are "doings".[10] Consider musicians: sometimes they perform music for an audience; performing music for an audience is something they do. When they do it, a case of people performing music for an audience occurs. Such cases are known as concerts, and concerts are events. Rockslides are cases of rocks sliding; sunsets are cases of suns setting. Sliding down mountains and setting in the west are things that things do. For ease of expression, I will call these things that things can do "act types". Playing music, sliding, and setting in the west are act types.[11]

Let me make some more precise and general claims about how events are related to act types. (1) Every event is a doing of an act type by a thing at a moment or period in time. (2) If an

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[9] This matters because my main goal is to reduce causation between events to thing causation. Reducing causation between nonevents is a further project that I don't take up in this paper, though it is worth making some quick remarks. Reducing causation by and of absences is more complicated, whereas reducing causation between states (if indeed causation can relate states) is easy: we allow that a thing can cause a thing to be F, by being G, where being F and being G are static properties. S1 causes S2 if and only if for some A, B, F, and G, S1 = A's being F, and S2 = B's being G and A causes B to be G by being F.

[10] For similar views, see Thomson 1977, pg. 123, Steward 1997, chapter 3, and Glennan 2022.

[11] This term is idiosyncratic, in that the instantiation of act types need not involve the exercise of agency, even in the broadest sense of "agency" (see Alvarez and Hyman 1998 and Alvarez MS). Other terms for act types are "activities" (Thomson 1977), "things done" (Hornsby 1980), "agenda" (Grice 1986), "acts" (Skow 2018), and the adjective "dynamic" (Setiya 2013).

event is a doing of act type α by thing A at time t, then A does α at t. (3) In the converse direction: if A does α at t, then there is a doing of α by A at t. (4) Doings are events. Furthermore, (1)–(4) are necessary truths. (I am pretending for simplicity that A and α are single things and act types. Of course, a concert is often a performance by some musicians together. I will not bother to formulate the account in full generality.)

Let me forestall some possible confusions. First, the view that events are doings does not entail anything about the essences of events. It need not be essential to a doing of α by A at t that it be by A, or be a doing of α, or occur at t. Second, I am not offering a criterion of individuation here. In particular, the view does not entail that events are finely individuated, and in fact I would reject a fine-grained individuation that pairs off each event with a unique triple <A, α, t>.[12] A doing of α by A can also be a doing of β, where β is a different act type than α. Murders are killings, but murdering someone is not the same act type as killing him. Also, there can be multiple, simultaneous doings of a single act type by the same thing. The same person can be the agent of two simultaneous killings.

I have stated some connections between events and act types. But what are act types? They are repeatables: walking, playing music, sliding, attracting large bodies, and causing a war all can be done more than once, and by different things. In this respect, they are similar to properties. Are they properties? This is a matter of terminology: whether we count them as properties depends on how broadly we use the word "property". Some philosophers use "property" so as to include act types; others reserve "property" for "static" repeatables like being square and being human.[13] The important thing is that we recognize the distinction between act types and static properties.

What exactly is the difference between act types and static properties? I doubt the difference can be captured in independent terms; rather, the concept of "doing something" is primitive. The best way to get a grip on the distinction between act types and properties is not to look for definitions, but instead to consider a linguistic distinction among verb phrases. For some verb phrases VP, "NP VPed" entails "one thing NP did was VP" (where NP is a noun phrase). For example, "the rocks cascaded" entails "one thing the rocks did was cascade". For other verb phrases, this entailment does not go through, always or almost always because "one thing NP did was VP" is ungrammatical. It is not grammatical to say of a tall person "one thing she did was be tall". Say that VP is "dynamic" exactly when "NP VPed" entails "one thing NP did was VP". Some dynamic verb phrases: "run", "disintegrate", "look at the giraffe", "help the giraffe", and "become a senator".

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[12] See Kim 1976 for a fine-grained individuation, and §VI for my objections to Kim. Kim, like me, does not take the triple to be essential to the event; an event could have been associated with a different triple.

[13] Thomson 1977, pg. 114 and Thompson 2008, pg. 122 say that act types are not properties.

These can be contrasted with stative verb phrases, which do not pass the entailment test, such as "be happy", "believe in God", "possess $1", and "owe Agatha $1".[14]

The dynamic/stative distinction is important in linguistics. (Linguists are primarily interested in the distinction between dynamic and stative verbs, rather than whole verb phrases, where a verb is dynamic just if it passes the entailment test, and stative otherwise. Here are three linguistic differences between dynamic and stative verbs. Most dynamic verbs can occur in the progressive: "Joe was running" is grammatical. Stative verbs usually cannot: "Joe was believing in God" is ungrammatical. Dynamic verbs, when used in the simple present tense, naturally take habitual readings: "Joe runs" tells us about his daily or weekly schedule. Stative verbs do not normally take habitual readings: "Joe believes in God" does not report a habit of Joe's. Certain verbs like "force" and "cause", which can take infinitival complements, normally take an infinitival clause as a complement only if it is headed by a dynamic verb. "I forced Joe to improve his chess skills" is grammatical, but "I forced Joe to be skilled at chess" arguably is ungrammatical.[15]) The dynamic/stative distinction is also important in metaphysics, because stative VPs stand for static properties, and dynamic VPs stand for act types.[16]

III. Thing Causation

With these distinctions, I can state the view of causation that I favor. The crucial idea is that causing relates things and act types. Causation consists in a thing causing a thing to do something. We can capture this with sentences of the form "A causes B to do β". The bomb, for instance, causes the building to collapse. One domino causes another to fall over. There will also, usually or always, be some means by which A causes B to do β. In that case, we say that A causes B to do β by doing α. The bomb, for instance, causes the building to collapse by exploding. The one domino causes the other to fall over by falling on it. "A causes B to do β by doing α" is the most straightforward form that thing causation can take.

An important question, which will arise in §V, is whether there are cases where we cannot complete our statements with "by doing α". If we set this aside, then we can treat causation as a four-place relation between two things and two act types. In the bomb case, the relata are the

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[14] Failing the entailment test is necessary but not sufficient for being a stative VP. I have not defined what it is for a VP to be stative. To be a stative VP is not just to be a nondynamic VP. VPs like "allegedly tell a lie" are neither dynamic nor stative.

[15] Dowty 1979, pgs. 51–65

[16] The importance of the dynamic/stative distinction for metaphysics and action theory is emphasized by Vendler 1957, Kenny 1963, chapter 8, Steward 1997, chapter 3, Thompson 2008, chapter 2, Setiya 2013, and Skow 2018. The distinction arguably goes back to Aristotle: see Graham 1980.

bomb, exploding, the building, and collapsing. In general, if A causes B to do β by doing α, then causation relates A, α, B, and β.

Furthermore, causing itself is not a static relation, but rather an act type. Or more accurately, it is an "unsaturated" act type: given any particular B and β, there is an act type of causing B to do β. This is important because we can ask the same questions about causing that we ask about other act types—in particular, the question just raised: is causing ever basic, or is it instead something we always do by doing something further?

My view of effects is unusual. Most philosophers who believe that causes can be things believe that effects are events. In particular, agent-causal theorists of free will typically say that agents cause certain mental events in their own minds, such as decisions. Nearly all these theorists agree that causes vary in their ontological category: causation surely does not exclusively relate *things* to events. For causation is "chainable": either it is a transitive relation, or at least there are many transitive chains of causation. But no relation that exclusively relates things to events is chainable. So causation cannot exclusively relate things to events.[17]

My view makes room for chainability in a different way. If causation is a four-place relation that always relates two things and two act types, then it is easily chainable. Imagine that the building, by collapsing, causes some birds to scatter: then (presumably) the bomb, by exploding, causes the birds to scatter. We have a transitive chain: the bomb, exploding → the building, collapsing → the birds, scattering.

Let me dispel one temptation. It is tempting to think that this four-place relation is just event causation, thinly disguised. If we say that by waving my hand, I cause an effect, isn't this just the same as saying that a particular event, the hand wave, causes it? No. "By waving, I cause…" does

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[17] Agent-causal theorists usually say that causes include both things (specifically, agents) and events. Opponents of this view often challenge agent-causal theorists to explain how it could be that the very same causal relation that normally relates events to events also sometimes relates things to events. Here is Hilary Bok:

> We understand what it means to be someone's sister. But it does not follow that we understand what it means to be the sister of an event. It would not help to be told that our relation to such an event would be the exact same relation we now stand to our siblings…Likewise, we cannot assume that it makes sense to say that agents can stand in the same causal relation to events that other events do, absent some explanation of how an agent can produce an event in a way that is not reducible to event causation (Bok 1998, pgs. 44–45).

My view faces no such worry, for I think that only things can cause.

not say *of a particular event* that it causes. Suppose that, having two hands, I give two waves at once. Which wave have I attributed the causing to? Neither!

Thing causation is not the same as causation by particular events. But it still might be definable from event causation. I have said nothing yet to rule this out. "By waving, I cause…" might mean that *there is* a wave of mine that causes. In fact, we will see that thing causation is *not* definable from event causation. The next four sections focus on issues of definability.

IV. Definability: Event Causation from Thing Causation

It is very natural to think that event causation and thing causation are interdefinable. E. J. Lowe has argued for this: here are (roughly) the definitions he provides.[18] Let "A" and "B" be variables for things, "C" and "E" be event variables, and "α" and "β" be act type variables.

> Event from Thing: C causes E if and only if there are some A, B, α, and β, such that C is a doing of α by A, E is a doing of β by B, and A causes B to do β by doing α.
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> Thing from Event: A causes B to do β by doing α if and only if there are two events C and E such that C is a doing of α by A, E is a doing of β by B, and C causes E.

If my view that events are doings is correct, then these look very promising.

In fact, both definitions are false. Event from Thing can be fixed; I am about to try to fix it. Then I will turn to Thing from Event, which is not fixable; thing causation is not definable from event causation.

The backward direction of Event from Thing is false. Suppose that I wave at my neighbor Abby, and she waves back. Then we have event causation—my wave causes Abby's return wave—and thing causation: by waving at Abby, I cause her to wave back. So far so good: the thing-causal and event-causal statements agree in truth-value. But I have not finished telling the story. Abby is behind a fence that partly occludes her vision. To make sure that she sees me wave, I wave with both my hands, at the same time. So (at least) two events feature me as their agent: a left-handed wave and a right-handed wave. As it happens, only the right-handed wave causes her to wave back. Now we have a counterexample. I cause Abby to wave back by waving at her. My left-handed wave is also a wave, so by the backward direction of Event from Thing, my left-handed wave at her causes the wave back.

In general, there will be counterexamples to Event from Thing whenever some thing does α twice at the same time, and, by doing it, causes some effect, but only one of the doings of α is a

[18] Lowe 2008, chapter 6. Lowe is somewhat tentative about Thing from Event.

cause. There are also analogous counterexamples to Event from Thing on the side of the effect, whenever A does α, thereby causing some B to do β, and B does β twice, but only one of the doings of β by B is caused by the doing of α by A.

Here is the fix:

> Event from Thing 2: C causes E if and only if there are some A, B, α, and β, such that C is the unique doing of α by A, E is the unique doing of β by B, and A causes B to do β by doing α.

α and β will have to be determinate enough to pick out C and E uniquely. In cases where C and E occur alongside events very similar to them, α and β will be very determinate. In the waving case, α will have to be something like waving right-handedly or waving with my unoccluded hand, so that we can pick out C as the unique doing of α by A (my right-handed wave). So I cause Abby to wave back by waving at her with my unoccluded hand. In general, we will endorse thing-causal reports with highly determinate α and β. I think that this is good: it is true that I cause Abby to wave back by waving with my unoccluded hand. (Thing-causal reports that lack such specificity can also be correct: it is also true that I cause Abby to wave back by waving at her.)

Many philosophers have thought that causes should be proportionate to their effects: they should not be overly specific, at least not in irrelevant ways. Consider Socrates, who guzzles down some hemlock and dies shortly thereafter. The poison is potent enough that sipping it slowly would still have been lethal, so it is irrelevant to Socrates' death that he *guzzled* it. Arguably, it was Socrates' drinking the poison, and not his guzzling it, that caused him to die.[19] Now, one might worry that in choosing an α determinate enough that it uniquely picks out the efficacious event, we may end up with something overly specific, in ways irrelevant to the effect. It is important that this is always avoidable: there is always some α that is both relevant to the effect and strong enough to pick out only the cause. We can find such an α in the waving example: in mentioning that I wave *with my unoccluded hand*, I am not being overly specific; the specificity is needed. By waving my other hand, I would not—and in fact, do not—cause her to wave back. Here is a sketch of a general argument. Suppose that A does α twice at once, but only one of A's doings of α has a certain effect. Then there must be some difference-maker—some reason why only the efficacious doing of α had the effect. Whatever makes the difference can be "added" to α to get a more determinate act type, α+, so that only the efficacious doing of α is a doing of α+. In the waving case, α+ is waving with my unoccluded hand.

[19] Yablo 1992, pg. 414 suggests this. For classic proportionality constraints, see Hume 1968, pgs. 148–149 (1.3.13.11), and Mill 1950, Book III, Chs. VI-X. See also Rubenstein 2024a, 2024b, 2024c.

If Event from Thing 2 is a good definition, then event causation is definable from thing causation. The next question is whether thing causation is definable from event causation. I will argue that it is not.

V. Basic Causation?

Consider Lowe's proposed definition of thing causation from event causation:

> Thing from Event: A causes B to do β by doing α if and only if there are two events C and E such that C is a doing of α by A, E is a doing of β by B, and C causes E.

This is a good definition of thing causation only if (1) the biconditional is true and (2) "A causes B to do β by doing α" covers all cases of thing causation.

Lowe suggests that this biconditional is true; the question is whether all cases of thing causation are of the form: A causes B to do β by doing α. According to Lowe, the potential exceptions to this are cases in which A causes B to do β, but not by doing anything. In such a case, the connection between thing causation and event causation would break down. It would be a case of irreducible thing causation, since there would be no doing of something by A that causes the doing of β by B.

But are such cases possible? Lowe floats a potential counterexample. I will now consider Lowe's example, and argue that it does not threaten Thing from Event at all.[20] Later on, however, I will argue that the biconditional in Thing from Event is false.

Lowe's case involves basic intentional action. Many philosophers of action have thought that a person's movements of her own body can be basic intentional actions. If I raise my arm, and I do not do so by doing anything else (by lifting it with my other arm, for instance), then this is a basic intentional action. But for me to raise my arm is for me to cause it to rise,[21] so this is a case in which I cause my arm to rise, but not by doing anything further. So if arm raising can be basic, then we have an example of thing causation with no event causation. Or so Lowe argues.[22]

Lowe ultimately denies that our movements of our bodies are ever basic intentional actions. Instead, for independent reasons, he takes basic intentional actions to be "willings" internal to the mind; he thinks that we move our bodies by willing. So he does not actually think

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[20] Skow 2018, chapter 5 also floats a counterexample to Thing from Event involving a very different sort of basic causation, which Skow thinks occurs in cases of causation by omission. As I am avoiding the complexities raised by omissions, I will not address Skow's example.
[21] Or rather, it is in part to cause it to rise. See §IX.
[22] Lowe 2008, pg. 125

that any arm raisings are cases of irreducible thing causation. He merely accepts the conditional that if our movements of our bodies are basic intentional actions, then such actions are cases of irreducible thing causation. Some philosophers accept both this conditional and its antecedent, and thus its consequent: John Hyman has argued that basic arm raisings show that some causation is not reducible to event causation.[23]

But Hyman and Lowe are wrong to accept the conditional. When I raise my arm, I always do so by doing something further: contracting my muscles. If raising an arm can be basic in any sense, it can be basic only in the sense that I do not do it by doing anything that I do *intentionally*.

Lowe anticipates this point: he explicitly denies what I have just claimed. He says that we do not raise our arms by contracting our muscles. Lowe says that if anything, we do just the reverse: we contract our muscles by raising our arms. (To make this seem more plausible, imagine that a doctor has told you to contract certain muscles, and the only way you know how to do so is to raise your arm.)

There may be some sense of "by" on which Lowe is right to say that we do not raise our arms by contracting our muscles. Some philosophers have thought that there is an intention-implying sense of "by" on which it is impossible to do β by doing α without doing α intentionally. If so, then Lowe's claim is true, with "by" interpreted in this sense.[24] But there is also a non-intention-implying sense of "by", on which we can perform basic intentional actions by doing something further. When we raise our arms, we may not do so by doing anything we do intentionally, but we still raise our arms by contracting our muscles. To deny this is to deny a fact of physiology.

It is this latter, non-intention-implying sense that is at work in Thing from Event. It had better be, since many things that cause are inanimate objects that do not act intentionally. When the bomb causes the building to collapse by exploding, it does not intentionally explode. So in the relevant sense of "by": whenever we cause our arms to rise, we do so by doing something further.

It will be helpful to talk of a thing doing something "basically". Using the non-intention-implying sense of "by": something does β basically if and only if it does β, but not

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[23] Hyman 2015, pg. 40. Alvarez and Hyman 1998 defend a more nuanced position on which contractions of one's own muscles are sometimes cases of causing basically, but arm raisings never are.
[24] Wreen 1987. An alternative view is that there is a sole sense of "by", that we raise our arms by contracting our muscles, and that when a doctor gets you to contract your muscles, you do not contract them by raising your arm; rather, you contract your muscles by doing what you do in beginning to raise your arm (perhaps by forming the intention to raise your arm).

by doing anything further.[25] For any act type β, we can ask whether anything ever does β basically. Our question is about when doing β = causing: are there any examples of a thing causing basically? I do not think that Lowe's example is an example of a thing causing basically, but there may still be other examples. If there are, then they are examples of irreducible thing causation. Even if things never cause basically, however, there might still be other examples of irreducible thing causation. In §VII, I give examples of irreducible thing causation that is nonbasic.

VI. Fine-Grained Causation

In this section, I give a novel presentation of a classic problem about how to account for the phenomenon of fine-grained causation. In the next section, I show how we can solve it by taking causation to be thing causation. I also show that these fine-grained cases are counterexamples to Thing from Event; they are cases of irreducible thing causation.

Suppose that I am with my friend Quinn in a temple in which roughhousing is forbidden: to break this rule is to act sacrilegiously. Quinn shoves me forcefully, causing me to fall over. The shove is sacrilegious, so in event-causal terms: the forceful, sacrilegious shove caused my fall. But there is a causal difference between the shove's forcefulness and its sacrilegiousness: the latter was irrelevant to my fall, whereas the former played a crucial role. My fall was caused by Quinn's shoving me forcefully, but not by his shoving me sacrilegiously. How do we capture this difference in event-causal terms? There was just one shove that was both forceful and sacrilegious, and it caused my fall. Of course, we can capture the difference in other ways—with counterfactuals, for instance: my fall would not have occurred had the shove not been forceful, but still would have occurred had the shove not been sacrilegious. But we cannot capture the difference by talking about which events cause which.

Analogous problems arise on the side of the effect. Suppose that just as Quinn shoves me, I manage to pull myself together and fall gracefully. Then there is just one fall of mine, and it is graceful. Although Quinn's shove caused the graceful fall, the fall does not owe its gracefulness to the shove. Its gracefulness is a result of my exercise regimen, or perhaps some gymnastics lessons I once took, not of Quinn's rough ways. Quinn's shove does not cause me to fall gracefully; it merely causes me to fall. How do we make sense of this, when there is only one fall of mine, and it is both graceful and an effect of Quinn's shove?

[25] It is arguably a flaw of this definition that it does not allow that a thing simultaneously does α both basically and nonbasically. This may be possible in cases where A does α twice at once. I will set aside this complication.

One response to this is to claim that distinctions that cannot be drawn in a coarse-grained event-causal framework are not genuine causal distinctions, despite our use of the word "cause". They are merely explanatory distinctions. Quinn's sacrilegious shove caused my fall, but we would be better off not appealing to the sacrilegiousness in an explanation of why I fell. I will not dwell on this strategy.[26] Instead, let me turn to the most common approach.

Many philosophers embrace a finer-grained conception of events, on which there are multiple materially coincident shoves Quinn gives me, followed by multiple materially coincident falls of mine. The shoves are all sacrilegious, but some of them are only *incidentally* sacrilegious, while others are *constitutively* sacrilegious.[27] Only an incidentally sacrilegious shove is a cause of my fall. The constitutively sacrilegious shoves do not cause me to fall. (We can devise alternative scenarios in which they do: imagine a sturdier and more pious version of me—I am so taken aback at Quinn's sacrilege that I fail to maintain my balance as he shoves me.) All of the shoves are forceful, only some constitutively so. Some of the constitutively forceful shoves cause my fall. Same for the effect: only incidentally graceful falls of mine are caused by any of Quinn's shoves.

The fine-grained approach has been developed in various ways. Jaegwon Kim suggests that we associate each event with a unique ordered triple of a thing, a property the thing instantiates ("property" construed to include act types), and a time at which the instantiation obtains. We then individuate events by their association with such triples. One event is associated with <Quinn, shoving me sacrilegiously, time t>, another with <Quinn, shoving me forcefully, t>. The latter causes my fall; the former does not. Stephen Yablo suggests that we take an event's constitutive properties to be its essential properties. We distinguish coincident events by their essences: Quinn's shoves are all sacrilegious, but only some are essentially sacrilegious, and they do not cause my fall.[28]

The most common complaint about fine-grained views is that they are ontologically extravagant: Yablo and Kim posit vastly many overlapping concrete particulars.[29] But I want to

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[26] Davidson 1967, pg. 702–703, Strawson 1985. One common objection to this strategy is that it renders causation problematically intransitive (Ehring 1987, 1997, pgs. 73–78, Hausman 1992, and Paul 2000, pgs. 240–242). Another problematic consequence is that the majority of causal talk turns out not to be about causation. Causal-infinitival phrases like "cause me to fall", which are a paradigm of causal locutions, allow for fine-grained causation. Related phrases like "make me fall", "prompt him to reply", and "force him to reply", also allow for fine-grained causation. So too does the "by"–locution. So do causal statements with imperfect nominals. Too much apparent causation turns out not to be genuine causation.

[27] Note that my use of "constitutive" differs from Jaegwon Kim's: on my usage, constitutive properties are instantiated by events, whereas on Kim's they are instantiated by things.

[28] Kim 1976, Yablo 1992

[29] Paul 2000, footnote 8 objects to Yablo's view on this basis.

press a different objection. Although we natural language speakers make fine-grained causal distinctions, we do not normally do so by making fine-grained event-causal distinctions. If we want to provide the cause of my fall, we do not search for an event whose constitution includes the shove's forcefulness, yet leaves out the shove's sacrilegiousness as merely incidental. We are content simply to say that the shove causes my fall.

This problem for the fine-grained event-causal view becomes clearer when we consider other effects of the shove. Imagine that a nearby priest, seeing Quinn shove me, gasps in horror at the sacrilege, despite being unbothered by the shove's forcefulness. If we appealed to fine-grained events, we would say that it is a constitutively sacrilegious, incidentally forceful shove that causes the priest's gasp; this shove is numerically distinct from the shove that causes my fall. Yet this does not seem to be true: we are perfectly happy to say that Quinn's shove causes both my fall and the priest's gasp.

Notice that all of this is true regardless of whether the ontology of fine-grained events is correct. Even if the world contains both the incidentally sacrilegious, constitutively forceful shove and the constitutively sacrilegious, incidentally forceful shove, ordinary speakers do not take care to refer to the former rather than the latter in picking out the cause of my fall. When we want to draw fine-grained causal distinctions, we instead say things like "Quinn caused me to fall over by shoving me forcefully", while denying that he knocked me over by shoving me sacrilegiously.

There might seem to be a major exception to this—a way that natural language allows us to make fine-grained event-causal distinctions. Kim and Yablo often use phrases like "Quinn's shoving me forcefully", or "Quisling's betraying Norway", or "his pushing a car". One might think that such phrases refer to events, and that we can use them to make finer-grained distinctions. Whereas "Quinn's forceful shove" and "Quinn's sacrilegious shove" corefer, and are substitutable in causal contexts, "Quinn's shoving me forcefully" and "Quinn's shoving me sacrilegiously" do not seem to corefer, and are not substitutable in causal contexts. "Quinn's shoving me forcefully caused my fall" is true, whereas "Quinn's shoving me sacrilegiously caused my fall" is false. So it may seem that we can use these phrases to make fine-grained event-causal distinctions.

But this is actually false, for these phrases do not refer to events. Events are countable particulars. Consider concerts and shoves: a certain number of concerts took place in London last night, and a certain number of shoves by Quinn have had me as their victim. But the phrase "Quinn's shoving me" is not a countable phrase: it is ungrammatical to say "the two Quinn's shovings me" or "Quinn's two shovings me". Of course, we can use a phrase like "Quinn's shoving me twice"; we could, for instance, say that his shoving me twice really annoyed me. But "Quinn's shoving me twice" clearly doesn't refer to two particular events. (Imagine he has shoved me ten

times: then which two particular shoves would it refer to?) These phrases don't refer to events at all. So we can't appeal to these phrases to motivate fine-grained event causation.

What do these phrases refer to? A number of philosophers and linguists, most notably Jonathan Bennett, have argued that these phrases refer to propositions. Bennett contrasts two sorts of nominals: *perfect* nominals like "Quinn's sacrilegious shove" and *imperfect* nominals like "Quinn's shoving me sacrilegiously". Perfect nominals refer to events, whereas imperfect nominals refer to propositions. Here is what Bennett says about the nominal "his pushing the car":

> It is an imperfect nominal, so-called because it retains at least seven grammatical marks of the verb ["push"] from which it comes. (i) It has a direct object, just as a verb would: it says "pushing a car", which is like "he pushes a car". (ii) It doesn't admit of articles: We cannot say "a pushing a car" or "the pushing a car". (iii) It doesn't admit of plurals: We cannot say "pushings a car". (iv) It takes adverbs before the gerund: "easily pushing a car", "elegantly pushing a car". (v) It can be modified with respect to tense: "having pushed a car"...(vi) It can be transformed modally: "having to push a car", "being unable to push a car". (vii) It can be negated: "not pushing a car". These seven features form a grammatically natural cluster: any gerundial nominal that has one has the lot. Furthermore, all seven are shared by the "that P" expressions which are our paradigm for referring to propositions. Consider "...that he pushes a car": direct object, no articles before the verb, adverbs and not adjectives, tenses, modals, negation—the whole apparatus. I conclude that imperfect nominals behave so thoroughly like "that P" phrases that they should be understood as names of propositions.[30]

When we make fine-grained distinctions between Quinn's shoving me sacrilegiously and his shoving me forcefully, and we distinguish the effects of each, we are distinguishing propositions, not events.

At this point, one might object to my arguments on methodological grounds. Why think that these linguistic considerations have any force here? Many philosophical theories posit vastly many entities that we never refer to. For example, some philosophers think that any statue is coincident not just with a lump of matter distinct from it, but with infinitely many statue-shaped objects that differ only in their modal properties. Outside of philosophy conversations, perhaps only statues and lumps, and not anything else coincident with them, have ever been referred to. One should *not* object to such a plenitudinous view by appealing to the fact that we natural language speakers do not take advantage of the opportunity to refer to most of these coincident

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[30] Bennett 1994. Also see Vendler 1967, chapter 5, and Bennett 1988, pgs. 4–6. For criticism of the analogy between "that"–clauses and imperfect nominals, see McCann 1979.

entities. This would obviously be a bad objection, since it is no surprise that we do not refer to these statue-like objects: we normally have no interest in such objects. Is it similarly ineffective to object to Kim and Yablo by pointing out that we do not refer to most of the many events that they posit? Or is the fact that we do not bother to refer to Kim's and Yablo's entities more problematic than the fact that we do not refer to the many statue-like objects?

I think it is more problematic: there really is a problem for Kim and Yablo. If Kim and Yablo are right, then we are very fortunate to be surrounded by this plenitude of events. We natural language speakers have available exactly the entities we need to draw the fine-grained causal distinctions that we often want to draw. Yet, for some reason, we squander this opportunity. Instead of inventing some simple linguistic device for picking out one among several coincident events (as Kim himself does), we use other locutions, saying that Quinn's shoving me caused me to fall, and that Quinn did so by shoving me.

The situation here contrasts sharply with that of other plenitudinous ontologies of entities we never refer to. We rarely have any reason to refer to things with strange essences or scattered spatiotemporal profiles, so it is no mark against theories that posit them that reference to them is rare. But we do have a need to refer to constitutively or essentially forceful shoves, and it is precisely *because* of this need that Kim and Yablo posit them. It would be bewildering if it turned out that these events exist, yet we systematically fail to make use of them to satisfy this need.

VII. Propositions, Abstractness, and Thing Causation

Bennett's point that imperfect nominals refer to propositions naturally leads to a view on which causation relates true propositions. Propositions, not events, are fine-grained enough to be causes and effects. This is Bennett's own view: he thinks that causation relates true propositions.[31] Quinn's shoving me forcefully, but not his shoving me sacrilegiously, causes my falling over. But there is a well-known objection to this view. Propositions are just not the sorts of things that could be causes and effects. They are abstract, not located in space or time. Bennett himself provides a nice statement of this worry (though he rejects it):

[31] Also see Mellor 1995. Bennett and Mellor more often speak of "facts" as causes and effects, but they take facts to be true propositions. If we distinguished facts from true propositions, then Bennett's comparisons with "that"-clauses would seem to suggest that it is propositions, rather than facts, that cause, since propositions are the referents of "that"-clauses.

> [Propositions] are not the sort of item that can cause anything. [A proposition]... is not something *in* the world but is rather something *about* the world, which makes it categorically wrong for the role of a puller and shover and twister and bender.[32]

If this thought is right, then causation cannot relate propositions. (This is not to deny that there is some sense in which propositions can cause or be caused: Quinn's shoving me forcefully causes me to fall over in a derivative sense. But all it is for Quinn's shoving me forcefully to cause me to fall over is for Quinn to cause me to fall over by shoving me forcefully.)

To sum up the problem, we run into trouble if we take causation to relate coarse-grained events, fine-grained events, or propositions. Coarse-grained event causation misses out on some causal distinctions. Fine-grained event causation does not, but fine-grained event causation is somewhat dubious; the causes and effects that are sometimes thought to be fine-grained events are actually propositions. And propositions are not the sort of thing that could cause, as they are not the sort of entity that could pull or shove or twist or bend another entity.[33]

Bennett originally rejected the argument against propositional causation, on the basis that neither propositions nor events can pull, shove, twist, or bend. He writes:

> Consider these:
>
> > 'The vase broke because a heavy stone was dropped by it.'
> >
> > 'The vase's destruction was caused by the fall of a heavy stone.'
> >
> > 'The vase broke when a heavy stone sent shock waves through it.'
>
> The first two of these report causes, a [proposition] in one case, an event in the other. The third reports a pusher, an exerter of force, and this is neither a [proposition] nor an event, but a stone.

[32] Bennett 1988, pg. 22

[33] There are a number of other views that I have not discussed: the causal relata have been taken to be tropes (Ehring 1987), and instantiations of properties by events (Dretske 1977), by things (Honderich 1988), or by both events and things (Paul 2000). And contrastive approaches also can be used to accommodate fine-grained causation (Schaffer 2005).

Bennett denies that events could exert forces or push things around.[34] Since Bennett takes his opponent to hold that causation relates events, he thinks that he is in no more trouble than his opponent.[35]

But Bennett still faces the same abstractness problem, even if it is a problem that event-causal theorists face as well. And Bennett later took the worry more seriously. With his permission, I quote a 1998 letter of his to David Lewis:

> I now see that I mustn't take a position which entails that a proposition can cause a death - not when I ordinarily think of propositions, Lewis-fashion, as sets of worlds! What caused the death is some part or aspect of the actual world; and what I have to do is work out how to make that clear while also holding to my continuing conviction that the best way to report particular causal connections is in the language of states of affairs, with imperfect nominals and whole sentences. That can be done, I believe, but I'm not ready to claim success in it.

Thing causation gives Bennett exactly what he wants. It clearly avoids the abstractness problem. The stone causes the vase to break, by sending shockwaves through it. Things can push and pull; they are suited to cause. Thing causation also avoids the problems that afflict coarse-grained event causation. In thing-causal language, we can make the fine-grained distinctions that resist an event-causal treatment. Quinn causes me to fall by shoving me forcefully, but he does not cause me to fall by shoving me sacrilegiously. And he causes me to fall, but he does not cause me to fall gracefully.

Thing causation allows for the fine distinctions not permitted by event causation. Yet things, unlike propositions, are just the right sorts of entities to cause.

Let us finally return to the definition:

> Thing from Event: A causes B to do β by doing α if and only if there are two events C and E such that C is a doing of α by A, E is a doing of β by B, and C causes E.

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[34] I am not convinced that he is right about this. He claims that explosions, for instance, do not push objects around—that only the molecules involved in the explosions do. It is odd to deny that the explosion also pushes them around. But if he is right, then so much the better for thing causation.

[35] Bennett's response to the problem (1988, pg. 22) was simply to deny that causes must be entities that could shove or push: "I grant that [propositions] cannot behave like elbows in the ribs, but we know what items do play that role—namely elbows. In our world the pushing and shoving and forcing are done by things...and not by any relata of the causal relation." Bennett justifies this denial by arguing that event causation is in no less trouble.

We can now see that Thing from Event is false; specifically, its backward direction is false. Quinn's sacrilegious shove (C) causes my fall (E), even though Quinn does not cause me to fall by shoving me sacrilegiously. And Quinn's shove (C) causes my graceful fall (E), even though Quinn does not cause me to fall gracefully. The shoving example is a case of irreducible thing causation.

VIII. Timing and Determination: The Error in Broad's Argument

In this section, I defend the view that causes are things from perhaps the best-known objection to it: that causes must determine or suffice for their effects, but things do not determine their supposed effects, so things cannot be causes. The most famous version of this objection, from C. D. Broad, has often been taken to decisively refute the view that causes are things.[36] Broad focuses on the timing of the effect:

> [Insofar] as an event is determined, an essential factor in its total cause must be other events. How could an event possibly be determined to happen at a certain date if its total cause contained no factor to which the notion of date has any application? And how can the notion of date have any application to anything that is not an event?[37]

Broad's idea is that an effect's total cause must determine when it occurs. Things cannot determine when an effect happens. Consider my fall in the temple. List all the things you like—Quinn, his arms, the temple—these things do not determine when my fall occurs. Quinn could have waited a few seconds longer to push me, or he could have just sat there doing nothing, never pushing me; either way my fall would not have occurred when it did. Because things can simply sit around, inactive, they cannot determine whether or when an effect occurs.

The conclusion of this argument must be qualified in two ways. First, Broad's argument at most rules out deterministic causation by things; it does not threaten the possibility that things could be indeterministic causes. Second, Broad does not claim that things cannot (deterministically) cause at all; rather, he says that any total cause must contain events. For all Broad has said, things and events might somehow work together to cause an effect.[38] Broad's argument shows at most that deterministic causes cannot consist only of things.

Here's an argument for this conclusion that captures much of what Broad has in mind.[39]

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[36] Ginet 1990, pg. 14, Fales 1990, pgs. 53–55, Clarke 2003, pgs. 197–199. It is especially common to use such arguments to object to agent-causal theories.
[37] Broad 1934, pg. 215
[38] Vihvelin 2013, pgs. 80–81 argues that this is metaphysically possible.
[39] Broad's point that only events are datable does not appear in this rendering of his argument, but this point might be taken to explain why the second premise is true.

(1) X is a total deterministic cause of Y only if X determines whether and when Y occurs.
(2) Things do not determine whether and when their supposed effects occur.
(C) Things are not total deterministic causes of their supposed effects.

Although (C) does not unqualifiedly rule out causation by things, it comes close. It is a very strong conclusion, and certainly not one that I want to accept.

The argument for (C) is valid. But its first premise, though it may look trivial, is actually highly dubious, because it is inconsistent with standard views about event causation. Consider Donald Davidson's view. Davidson takes causation to relate coarse-grained events, and he holds that underlying any causation is a law of nature that quantifies over events. According to Davidson, if C causes E, then there are some predicates "F" and "G" such that C is describable as "the unique F event" and E is describable as "the unique G event", and there is a law that logically entails that if an F event occurs at time t, then a unique G event will occur at time t+c (where "c" is a constant). (The law must entail more than this on Davidson's view, but this is the relevant part.) For Davidson, this is what a cause's sufficiency consists in: it and its effect can be described as "the F event" and "the G event", such that "the F event occurred at t", together with a law, entails "the G event occurred at t+c". Notice that C need not determine anything itself; it is the truth "The F event, which is C, occurs at t" that determines that the G event occurs at t+c. Causes, on Davidson's view, do not suffice for or determine their effects; it is truths about them that suffice.[40]

If a deterministic cause itself must determine whether and when its effect occurs, then Davidson's view is false. While many people do not accept Davidson's view of causation, I have never heard anyone suggest that it was refuted by Broad's argument (more than thirty years before Davidson's paper). Broad assumes that deterministic causes must determine whether and when their effects occur, but this rules out views it should not.

We could weaken the first premise to accommodate Davidson's view: perhaps causes themselves need not suffice for their effects; it could instead be appropriate truths about causes that must suffice. But this lets in things as causes. Quinn does not suffice for my falling when I do; his mere existence does not determine whether or when I fall. But a truth about him—"Quinn shoves me forcefully me at t"—does suffice for "I fall just after t" (together with some other background truths: that no one pushes from the opposite direction, etc.). To generalize this, suppose that A causes B to do β at t+c. Then A's mere existence at t will normally not suffice for B's doing β at t+c.

[40] Davidson 1967, §III. I focus on Davidson's view because it is especially straightforward, but the same point applies to most views of events. Only if events have implausibly strong "factlike" essences do they nomically determine their effects.

But there will be some α such that A's doing α at t suffices for B's doing β at t+c, and A causes B to do β at t+c by doing α at t.

Broad demands something to which the "notion of date" applies. We have something: it is at time t that A does α. But it is A that causes, whereas it is the truth that A does α at t that determines whether and when A's effect occurs. Just as Davidson takes truths about causes, not causes themselves, to be sufficient, I take the truth that A does α at t, not A itself, to suffice for B's doing β at t+c.

In §V, I raised the question of whether there can be cases of basic thing causation, i.e. whether a thing can cause, but not by doing anything. I just suggested that if A causes B to do β, then A's doing α at t suffices for B's doing β, for some α such that A causes B to do β by doing α. This entails that causation is nonbasic: if A causes, then it does so by doing something further. If causation is nonbasic, then we have available a particularly nice and simple response to Broad's worry. If things sometimes cause basically, then there are presumably still other truths about A that determine that B does β at t+c: truths about A's dispositions, surroundings, and intrinsic nature. We could respond to Broad's argument by appealing to these truths. But I doubt the response would be as neat and straightforward as the response that nonbasic causation offers. This is a modest point in favor of taking thing causation to be nonbasic.

IX. Nonbasic Causation

In this section, I take up the question of whether thing causation is nonbasic. This is important because cases of basic causation would provide an additional reason why thing causation is not reducible to event causation—indeed, a more familiar reason than the one I have given. I am not convinced that there is any basic causation. I defend the view that causation is nonbasic from looming threats of regress, but I neither endorse the view nor give a positive argument for it.

Earlier I criticized E. J. Lowe's example of basic causation. Lowe says that sometimes we cause our arms to rise, but not by doing anything. I disagree: we cause our arms to rise by contracting our muscles. But notice that to contract your muscles is (in part) to cause your muscles to contract. So we just have more causation. You might worry that if this "by" chain does not end with causation, then it will not end at all. In other words, unless causing can be basic, regress ensues. Consider the following more general reasoning:

> Assume that thing causation is nonbasic. Then if A causes B to do β, A does so by doing α_1, for some α_1. So A does α_1. To do α_1 is to cause some effect, so A must do α_1 by doing some

α_2, for some α_2. To do α_2 is to cause some effect, so A must do α_2 by doing some α_3, for some α_3... So we have a regress.[41]

This reasoning contains a mistake. It is not true of every act type α that to do α is to cause an effect. The regress can stop at any α_n, so long as α_n is a "noncausal" act type. Let me explain.

Many act types essentially involve causation. To melt something is, at least in part, to cause it to melt. I say "at least in part" because many philosophers and linguists think that melting something requires more: a melter must "nondeviantly" cause the melting. I might convince my friend to take up metalworking as a hobby, resulting in the melting of some metal; this does not entail that I myself have ever melted any metal. Say that an act type α is causal if and only if for A to do α is, at least in part, for A to cause something or other. Otherwise, α is noncausal.[42] If thing causation is nonbasic, then what end regresses are noncausal act types. If A does α by doing α_2... and she does α_{n-1} by doing α_n, and she does α_n basically, then α_n is a noncausal act type. Basic action is noncausal.

It is easy to see that melting something is causal. This is because "melt" is an ergative verb, i.e., it can appear both as a transitive verb and as an intransitive verb, such that the transitive "A melted B" entails "A caused B to melt". If an ergative verb stands for an act type, then the act type is causal. To heal a wound is in part to cause it to heal, and to collapse a building is in part to cause it to collapse. Most causal act types, however, are not denoted by any ergative verb. Consider the act type kicking a particular stop sign over. This is causal: to kick the stop sign over is in part to cause it to fall over by kicking it. Furthermore, kicking the stop sign is itself causal: to kick the stop sign is in part to cause one's own foot (or ankle or shin) to come into contact with the stop sign. But there is no ergative verb that stands for kicking a stop sign.

There is no simple procedure for telling whether an act type is causal. One might worry that all act types are causal—that this is what we will find if we investigate deeply enough. In fact,

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[41] Such regresses are not obviously impossible. Thompson 2008, pgs. 107–108 and Skow 2018, pgs. 169–170 suggest that a regress ensues whenever we traverse a continuous path: we do so by traversing its first half, which we do by traversing its first quarter...

[42] One possible way out of the regress is to deny that melting something (for instance) is really a causal act type in my sense. Although it is uncontroversial that melting something entails causing it to melt, perhaps one could deny that to melt something is in part to cause it to melt. For one might think that there is no way to "complete" this definition by adding more to "cause it to melt" to get a necessary and sufficient condition, and so melting something cannot be identified with anything that has as a part causing that thing to melt. Then there is nothing ruling out the possibility of melting something basically.

philosophers and linguists have made assertions roughly along these lines.[43] And it does seem that many act types turn out to be causal if we look at them hard enough. One more example: for a person to blink is for her to blink her eyes, which arguably is in part for her to cause her eyes to blink.

If all act types were causal, then we would face not only a regress going "backward", but also one going "forward". Suppose that A causes B to do β, and that all act types are causal. Then for B to do β is for B to cause some C to do β_2 (+ more). (The "+ more" indicates that there may be more to what it is for B to do β; causing C to do β_2 may only be part of what it is to do β.) So for A to cause B to do β is for A to cause B to cause C to do β_2 (+ more). Since β_2 is causal, for A to cause B to do β is for A to cause B to cause C to cause D to do β_3 (+ more). And so forth. We only ever cause things to cause things to cause...[44]

But not all act types are causal. Although the sort of blinking that people do is causal, the blinking that eyes do is not. To kick a sign over is in part to cause it to fall over, but to fall over is not to cause anything. Falling over and blinking are specific types of movement. More generally, moving from one position or location to another is noncausal. (I mean simply moving, as opposed to moving oneself.) Of course, if something moves across the sky, it thereby causes some effects (such as tiny changes in the wind), and surely something causes it to move (perhaps it does so itself, by causing its wings to flap). But to move is not in part to cause changes in the wind or in anything else, nor is it to cause one's own movement. Even more generally: to change in some respect, for instance in one's properties or location, is not to cause anything. Changing is noncausal.

A different example can be found in Skow 2018. Skow suggests that exerting a gravitational force on something—pulling on it gravitationally—is noncausal. Pulling something *somewhere* is causal: to pull something somewhere is in part to cause it to move there by pulling it. But just pulling on something is not causal, for it is consistent with pulling on something that you don't succeed in moving or changing it.[45] Other forces could cancel out those you exert. And Skow also suggests that things can pull on something basically: "Consider any electron in the universe...that

[43] For example, Dowty 1979, pg. 91 comes close to this when he suggests that all accomplishment verb phrases are causatives. Kenny 1963, pg. 236 makes roughly the same claim.
[44] Analogous forward and backward regresses arise for event causation if all events are causings: E must be a causing of E_2 by E_3; each of E_2 and E_3 must be a causing of another event by yet another...
[45] Pulling is perhaps constitutively tied to causing: roughly, for x to pull on y is in part for it to be the case that if other forces on y were absent, then x would cause y to move. But this does not make pulling a causal act type, since pulling does not entail causing.

electron is pulling, gravitationally, on the Earth right now...it is not pulling on the Earth by doing anything else.[46]

In addition to exerting a force basically, things can also change basically. An object could grow taller, and not by doing something else. Since changing is noncausal, we have two examples of noncausal act types that can be done basically: exerting a force and changing. More controversial is the view that some act types we do intentionally and basically are noncausal. According to volitionalist views of action, willing is such an act type.[47] We do not will by doing anything further, and to will that some outcome obtain is not to cause anything. Carl Ginet also gives a more specific example: he claims that "mentally saying" a word to oneself is noncausal, and can be done intentionally and basically.[48]

Since some act types are noncausal and can be done basically, nonbasic causation does not inevitably lead to a regress. This helps to make room for the possibility that causation is nonbasic. But it does not show that causation is nonbasic. There might still be cases of basic causation. Certain examples initially seem to involve basic causation. Consider Medusa's head, which inevitably turns to stone all those who gaze upon it. Perseus shows the head to Atlas, and sure enough, Medusa's head causes Atlas to petrify. One might think that the head does not do so by doing anything; it is only Perseus who does something. But this is not right: the head petrifies Atlas by reflecting light into his eyes. Reflecting light is causal too: to reflect the light into Atlas's eyes is to cause it to change direction and move into Atlas' eyes. But Medusa's head does *this* by entering Atlas' line of sight, and entering someone's line of sight is noncausal.

In many cases, a similar story can be told: in principle, we can find some plausible way of tracing out a "by" chain until we reach a noncausal act type. Does this apply in all cases? The trickiest cases feature the causation involved in the functioning and behavior of living things. Consider, one final time, contracting one's muscles. How do I cause my muscles to contract? By causing my brain to do something—send a signal to my muscles? If so, then how do I do that? I am unsure how to continue this "by" chain, and unsure whether it terminates in a causal act type or a noncausal act type (or goes on forever). Maria Alvarez and John Hyman have suggested that this chain terminates in a causal act type, and thus that causing can be basic. I am genuinely uncertain about cases like this. Perhaps Alvarez and Hyman are right, but I doubt that intuitive reflection on particular alleged cases of basic causation will prove conclusive.[49]

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[46] Skow 2018, pg. 170
[47] Or rather, willing is an unsaturated act type: willing that p is an act type, for each p.
[48] Ginet 1990, pg. 12
[49] Alvarez and Hyman 1998

X. Agent Causation

Even if examples do not prove that causation can be basic, there may still be more theoretical reasons to believe in basic causation. Some agent-causal theorists, such as Roderick Chisholm, hold that agents act freely only when they cause certain effects that are not caused by any events.[50] (These effects of the agent might be her own decisions or volitions; for Chisholm they are neurological events.) This entails that agents cause basically. For if an agent causes an effect by doing α, then it follows that some doing of α by her is an event-cause. If Chisholm is right that the absence of event-causes is a necessary condition for free action, and that some action is free, then some causation by agents is basic.

If the arguments for a view like Chisholm's are effective, then they might persuade us that things sometimes cause basically. Agent-causal theories can have implications for thing causation. In the reverse direction, my conclusions about thing causation have implications for agent-causal theories. Here is one. Some agent-causal theorists think that causation by an agent is one of several necessary conditions for free agency; the absence of deterministic laws is often thought to be necessary as well. But some agent-causal theorists disagree: Ned Markosian, for instance, argues for a compatibilist agent-causal theory according to which agent causation is both necessary and sufficient for free agency: "[an action] A is...free iff A is caused by A's agent".[51] Markosian's view is incompatible with my view of thing causation. For I think that agents (and inanimate objects) are causes even when they act unfreely, and even when they do something that does not exercise their intentional agency, for instance when I trip and fall on you, causing you to fall as well. Thing causation is primitive even in these cases.

In a sense, agent-causal theorists in the Reidian tradition, can be the greatest enemies of thing causation.[52] For Reidians like Chisholm and Markosian, event causation does the especially crucial work of distinguishing free agency from the natural world. Agents are elevated above all other things because they are unique in being causes. Thus Reidians have a particularly significant commitment to rejecting causation by things that are not agents. I suggest that we abandon this way of distinguishing free agency from the natural world. Nature is full of causation by things. Agent-causal theorists should embrace this, and should take causation by an agent to be a necessary but *insufficient* condition for free agency. In cases of both freedom and unfreedom, agents can be causes.

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[50] Chisholm 1964, 1976, chapter 2

[51] Markosian 2012, pg. 384; also Markosian 1999. Nelkin 2011, chapter 4 defends a similar view.

[52] See Pasnau MS on how Reid may be to blame for "killing" thing causation.

If we are persuaded by Chisholm, then we should believe in basic thing causation. But those who are not persuaded by Chisholm can take things to cause without thinking that they ever cause basically. The view that causation is nonbasic thing causation can be seen as a middle ground, lying between the "extreme" views that causation is event causation and that causation is basic thing causation. If causation is nonbasic thing causation, then whenever A causes B to do β, A does so by doing some α. So causation is always accompanied by event causation: a doing of α by A causes a doing of β by B. There is no thing causation without event causation. But thing causation does not reduce to event causation: the reduction goes in the opposite direction. Let me make one suggestion. Much of the resistance philosophers have had toward the view that things can cause might be better directed at the more extreme view that things can cause basically. In particular, philosophers who want to argue against agent-causal theories might be better off criticizing the commitment of these theories to basic causation by agents, instead of objecting to the general idea that things can cause.

If things can cause basically, then it follows that thing causation is not definable from event causation. In §VII, I argued that there is a separate reason, independent of whether thing causation is basic, why thing causation is not definable from event causation: thing causation can accommodate fine-grained causal distinctions, whereas event causation cannot. Since event causation is definable from thing causation (as shown in §IV), thing causation is more primitive than event causation.

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