

# What Events Are

By Jonathan Bennett

## 1. Introduction

The furniture of the world includes planets and pebbles, hopes and fears, fields and waves, theories and problems, births and deaths. As metaphysicians, we want to understand the basic nature of these and other kinds of item; and my topic is the basic nature of births and deaths - more generally, of events. If events are things that happen, what differentiates them from sticks and stones, which are things that exist but do not happen? Do events constitute a fundamental ontological category, or is our event concept just a way of organizing material that could be handled without its aid?

With questions like those in the background, I ask: what sort of things are events? Locke and Leibniz knew the answer to this; then Kim rediscovered it; but his rediscovery did less good than it might have because it was ambushed by an error. I shall explain.

A sparrow falls. That fall of that sparrow is a particular, located in space and time. It occurs where the sparrow is when it falls, and it occurs just then. It is, then, closely linked to the sparrow, and even more closely to the fact that the sparrow falls there and then. Witness the opening of this paragraph, where I said that a sparrow falls, and went straight on to speak of “that fall”. That the fall exists (= occurs) is a logical upshot of the fact that the sparrow falls. Every event results logically from some such underlying fact: there was a fight because some animals fought, there was a storm because wind and water moved thus and so. In section 12, I shall discuss the rival view that some animals fought because there was a fight.

What metaphysical categories have a role in the fact that a certain sparrow fell? Can any of them be identified with the sparrow’s fall? I shall consider five candidates: a fact, a thing, a temporal part of a thing, a property, and a property-instance.

(a) **The fact that the sparrow falls.** One simple reason why an event cannot be a fact is that events have positions in space-time, whereas facts do not. There is also another reason. Suppose that the sparrow, blown about by blustery winds, falls irregularly. Then its fall is irregular: one fall occurs, irregularity being one of its features. Another feature is that the fall goes right to the ground (unlike another sparrow that fell but then recovered in mid-air and flew up again). In contrast with this, the fact that the sparrow falls differs from the fact that it falls irregularly, and each differs from the fact that it moves right down to the ground. With the “that P” method for naming facts, what you see is what you get: if you vary such a fact-name so as to alter its logical force, no matter how slightly, you name a different fact. That is because facts correspond to true propositions, one for one; indeed, some hold that facts are true propositions. Either way, propositional difference carries fact difference with it.

Here are some clear symptoms of this: She was surprised that the sparrow fell irregularly, but not that it fell; he hoped that the sparrow would move to the ground, but not that it would fall to the ground; the shadows on the wall are explained by the fact that the sparrow moved irregularly, but not by the fact that it fell. Whenever a statement applies an operator to a fact or proposition, its truth value can be affected by tiny changes in the propositional component; this shows that the change leads to the naming of a different proposition or fact. To suppose that all these differences created differences of events leads to implausible consequences: the sparrow suffered many falls at that time; some but not all were irregular, some but not all went right to the

ground, and so on. Now, one good philosopher (Jaegwon Kim) has maintained precisely this, and in section 3 I shall explain why. I now merely point out how implausible it is.

(b) **The sparrow.** We cannot identify this with the fall, if only because the sparrow lasts for months while the fall takes only a few seconds. Well, then:

(c) **The sparrow-stage** - by this I mean the temporal part of the sparrow that stretches from the beginning to the end of the fall. Many philosophers hold that whereas falls and performances and earthquakes have temporal parts, sparrows and sopranos and mountains do not. Even if there are object-stages, however, it seems wrong to identify an event with the corresponding stage of the thing that is its subject.<sup>1</sup> Consider a cannon-ball which arcs its way over the wall of a city while rotating on an axis; it is plausible to suppose that the ball's journey is one event and its rotation another; but the present proposal identifies each event with the very same ball-stage, which makes them not two events but one. This is hard to swallow. Perhaps there is a richer event made up of the journey and the rotation; indeed, I think there is, though I have no ready name for it. But we want elbow-room in which to distinguish the journey from the rotation, which we cannot do if each is a ball-stage. I shall return to this matter in section 9.

(d) **Falling.** I mean this as a property, a universal, something that can be predicated of anything that falls. This cannot be what the fall of the sparrow is, because when another sparrow falls - or when this sparrow falls again - another fall occurs, another event; but it is the very same property of falling. Properties are universals; events are particulars. Well, then, finally:

## 2. Events are property-instances

(e) **The instance of falling.** I shall introduce this concept of "instance" through a different example. According to many philosophers down the ages, the fact that this pebble is round has involved not only the pebble (a concrete particular) and roundness (an abstract universal) but also the roundness of this pebble, which is an abstract particular. The roundness of this pebble, unlike the property roundness, is particular, pertaining only to this pebble; and unlike the pebble it is abstract, involving no property except roundness. (I use "abstract" in the good, Lockean sense of something not saturated with detail; not in any of the *mélange* of contemporary senses - existing necessarily, being out of space-time, lacking causal power, and so on.) Here are four uses that philosophers have made of property-instances.

(i) Some late mediaeval philosophers thought that in sense perception a property-instance - sometimes called a "sensible species" - gets from the object to the percipient, which explains how roundness comes to be represented in my mind when I see something round. This entails that a property-instance can exist without anything having it, as Berkeley implied when he said that a mind is not extended although extension exists in it, because it is "in the mind . . . not by way of mode or attribute but only by way of idea".

(ii) Some philosophers have thought that causation involves the transfer of a property-instance from one thing to another. This lies behind Locke's remark that even in the familiar impact of body on body something "inconceivable" occurs, namely one thing's giving motion to another. It does not imply that a property instance can exist when nothing possesses it, but it does imply that a single property-instance can be owned by first one thing and then another.

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<sup>1</sup> The identification of events with object-stages can be found in Quine (1996: 171). It is discussed at length in Bennett (1988, ch. 7).

(iii) Many philosophers right through to today have worried about the concept of thing; we can enumerate all the properties of a thing, they have thought, but how should we understand the thing that has the properties? One popular answer to this says that no separate thing has the properties, because things are bundles of properties, nothing more. In one version of this theory, a thing is a bundle of universals; in a different version - less fraught with difficulties - it is a bundle of property-instances. This view can, but does not have to, be advanced as part of the stronger thesis that basically there are only property-instances, a thing being one kind of aggregate of them and a universal property being another.

(iv) Events are property-instances. That seems to have been Locke's view of them. Although he sometimes takes "modes" to be universal properties, he often thinks of them rather as instances, and then he tends to identify them with events, or with one species of events, namely actions: "The greatest part of mixed modes, being actions which perish in their birth, are not capable of lasting duration, as [are] substances, which are the actors" (1690, III.vi.42; see also II.xxii.4, xxxii.17, III.v.3). Leibniz understood him in that way, and agreed:

Locke's spokesman: Of all our various ideas, only the ideas of substances have proper, i.e. individual, names. For it seldom happens that men need to make frequent references to any individual quality or to some other accidental individual. Furthermore, individual actions perish straight away, [unlike] substances.

Leibniz's spokesman: In certain cases, though, there has been a need to remember an individual accident, and it has been given a name. So your rule usually holds good but admits of exceptions. Religion provides us with some: for instance, the birth of Jesus Christ, the memory of which we celebrate every year; the Greeks called this event "Theogony", and gave the name "Epiphany" to the event of the adoration of the Magi. (1705, III.vi.42)

The phrases "individual quality" and "accidental individual" come from the mouth of Locke's spokesman, but Leibniz put them there. He evidently had no doubt that Locke meant to be deploying the concept of a property-instance, and does not hesitate to identify such instances with events.

Of the above four theories the first is clearly false; I am sceptical about the second and agnostic about the third. The fourth, however, seems to be exactly right. If the sparrow's fall is a particular instance of the property *falling*, that explains all the facts about why, when, and where it occurs. It explains why the sparrow's fall is so intimately linked with

- a fact (its existence is implied by the fact that the sparrow falls),
- a thing (it is possessed by the sparrow for a while),
- a thing-stage (it is possessed by the relevant sparrow-stage throughout its existence), and
- a property (it is an instance of the property *falling*),

without being identical with any of them. It also explains how there can be a rich event made up of two more abstract ones, each occupying exactly the same spatio-temporal zone, e.g. the event composed of the cannon-ball's journey and its rotation. Just as a property can be composed of two more abstract properties, so a property-instance can be composed of instances of two more abstract properties.

### 3. Kim's metaphysics and semantics of events

The theorist of events who has given most play to this view of events is Jaegwon Kim, who calls events "property-exemplifications" (Kim, 1966, 1969, 1973, 1980). By this he seems to mean that they are property-instances. I have publicly interpreted him in that way, and have criticized an inference he makes from his account of what events are; Kim in reply has defended his inference, without suggesting that I had its premise wrong (Bennett, 1988: chapter 5; Kim, 1991). Before proceeding, let us amend our language: in place of Kim's "property-exemplification" and my "property-instance" I now adopt the term "trope", which D. C. Williams (1953) invented to replace "property-instance".

Kim's insight that events are tropes did not do as much good as it should have, because of the wrong inference from it which I have mentioned. As applied to the sparrow example, the inference goes like this:

*Falling* is a different property from *falling irregularly*; so an instance of *falling* differs from an instance of *falling irregularly*; so when the sparrow falls, at least two falls occur, one an instance of *falling* and the other of *falling irregularly*.

The conclusion of that sounds wrong, but its premise is true - events are indeed tropes. So there must be something wrong with Kim's inference, and I now explain what it is. Although each event is a trope, I contend, an event name ("the sparrow's fall", "his assault on her") need not wear on its face every detail of the trope that it names. In this respect, names of events resemble names of physical objects: "the book on the table over there" says nothing about many features of the book to which it refers; to know the rest of the facts about it you must turn from the name to the book. Exactly analogously, "his assault on her" says nothing about many features of the assault to which it refers; you cannot learn whether it was a kick (for instance) just by thinking about the name you have used for it; to know whether it was a kick or a punch you must investigate it out there in the world. In conclusion: events are tropes, and standard event-names - I mean ones like "the kick that he gave her", "the tornado that swept through this county last month", and "the sparrow's fall" - tell you something but not everything about what trope the event is. They tell you one of the properties of which it is an instance, but not all of them.

Someone who agrees with Kim about that might explain away its counter-intuitive nature as follows: "One fall includes the other; indeed, one maximal fall includes all the others that occur at that time and place. When we count 'falls' in informal contexts we are really counting maximal falls. That is why Kim's conclusion strikes us as false when really it is true." In plenty of cases, though, our intuitions cannot be explained in that way. For example, he assaulted her by kicking her: with him as subject and her as object, there was a kick and an assault. Kim's inference makes these out to be different acts (and thus different events) because they are instances of different properties; and neither includes the other, so that the concept of maximalness gets no grip, and cannot be used to explain why we think it right to identify the kick with the assault.

Those remarks have appealed to our intuitive reactions to some things that Kim says; but my claim that the kick is the assault has a solid basis than that. Appeals to shallow and unexamined linguistic intuitions run all through the literature on events, and I want no part of them. Suppose that these are the facts:

He assaulted her once, which he did by kicking her, and at no other time did he either assault her or kick her.

Given that scenario, I contend, the following answers to these three questions are inevitable:

How many kicks did he give her? One.

How many assaults did he make on her? One.

Was that kick that he launched at her a feint? No, it was an assault.

These answers are not based on mere intuitions about what sounds right. Knowing that the answers are correct is part of elementary competence in the use of this part of our language. If a theory says that any of the answers is not strictly true, that is a defect in it. If on the other hand all three answers are true, then the kick he gave her was the assault he made on her; so Kim's conclusion is false.

What else should we expect, given that events are contingently existing particulars? Why on earth would such things be referred to by expressions that tell the whole truth about them?

#### 4. Kim's "inescapable truism"

Kim (1991) has resisted this critique of his inference. By accepting his premise and rejecting his conclusion, he has argued, I have come into conflict with an "uninformative but inescapable truism", namely:

"The exemplification of property P by substance S at time T" (if it names anything) names the exemplification of P by S at T.

I would rather not deny this! But I do not accord it the power that Kim thinks it has, and I now explain why.

The phrase "the exemplification of P" can be taken in either of two ways. (1) Understood as a **partial** describer, an item can truthfully be called "the exemplification of P by S at T" even if it is also - still in the partial describer sense - the exemplification by S at T of some other property Q. We would be using the phrase in this partial-describer sense if we characterized the divorce of Elizabeth and John at T as "the exemplification by Elizabeth and John at T of *executes a legal procedure*"; we would not be meaning to rule out its also being an exemplification by them at that time of other properties, such as *ends a marriage*. (2) Alternatively, we could understand "the exemplification of P by S at T" as a **complete** describer, meaning that the item referred to cannot also be an exemplification of some other property Q. On this complete-describer reading of it, the phrase in question refers to some item the whole truth about which is that it is an exemplification of P by at T. In ordinary English we would never use "exemplification of. . ." etc. in this complete-describer fashion; that is why I cannot make it sound natural or find idiomatic examples of it. Still, the concept is clear enough.

To get a sense of how it works, consider a complete-describer terminology that we do actually have, namely the "that P" way of referring to facts. The fact that

he ran for about three minutes at about six miles per hour

is not the fact that

he ran for two minutes and fifty-nine seconds at about six miles per hour

or the fact that

he ran for about three minutes at exactly six miles per hour;

nor is it to be identified with any fact that we name by slightly altering the logical content of that first fact-naming sentence - increasing or decreasing precision, adding or subtracting descriptive color, whatever. Any change in content yields a different fact; the initial fact-name presents the entire intrinsic truth about the fact which it names. Well, that is how it would have to be with "exemplification of. . ." names of events if they were understood as complete describers. In each terminology, what you see is what you get.

The basic issue between Kim and myself is that when we both say that the sparrow's fall is a trope, he wants to call it "the exemplification of falling by that sparrow at T" with this meant as a complete describer; whereas I hold that that phrase fits the fall only when taken as a partial describer.

Now, I accept Kim's truism in each of its two clean readings. I accept the following:

When "the exemplification of P by S at T" is used as a partial describer, if it names anything it names the exemplification of P by S at T, when its final phrase is also used as a partial describer. I also accept this:

When "the exemplification of P by S at T" is used as a complete describer, if it names anything it names the exemplification of P by S at T, when its final phrase is also used as a complete describer. Each of those is indeed a truism. Kim must mean the final phrase to work as a complete describer: only thus can he distinguish the exemplification of *kicking* from the exemplification of *assaulting*, and so on. Very well, then: I accept Kim's inescapable truism on its complete-describer reading. Does this push me towards his semantics?

It does not. I say that the kick he gave her was the assault he made on her; I also say that the kick is a trope or property-exemplification and (of course) so is the assault. When I call the kick "an instance of *kicking*", I mean that as a partial describer; I do not offer that phrase as telling the whole truth about the kick. To come to terms with Kim's argument, however, I must use the language of instances or exemplifications in the complete-describer manner. I can do that, but I must be careful. Suppose that I want to use a complete describer to refer to the kick that he gave her: I mean the real kick out there in the world, the one that was also an assault, a mistake, a betrayal, and so on. I must characterize it not as "an exemplification of *kicking*" but rather as "an exemplification of . . ." some much richer property of which *kicking* is one component. To discover its other components, I must investigate what happened between him and her at that time. The result may be something that starts like this:

The kick that he gave her was an exemplification of *kicking hard with the right foot as an assault*. . . etc.

Similarly, the assault that he made on her was an exemplification not of *assaulting* but of a richer property with that as a component. After due inquiry it may turn out that

The assault that he made on her was an exemplification of *assaulting by kicking hard with the right foot*. . . etc.

When fully spelled out, the two will be equivalent; they will refer to the very same property; so the kick that he gave her was the assault that he made on her, and this can be said and established purely in terms of the complete-describer use of "exemplification of . . .". So I stand by the thesis that events are tropes or property exemplifications, yet am not drawn into Kim's semantics of event names.

In showing how to tell the truth about events using complete-describer language, I do not endorse the latter. It is in fact a bad way of referring to any contingently existing particular. Imagine confining ourselves to complete describers in referring to people or islands or shoes!

## 5. How to distinguish events from facts

As well as maintaining that his metaphysic of events entails his semantics for their names, Kim has defended the semantics on independent grounds. I shall explain how. When she asked him "Do you want to get out of this relationship?", he shouted "Yes!" He produced an answer, and also a

shout; most of us would that the shout was the answer, i.e. that only one event occurred, he performed only one act. Kim thinks differently, but he does not say so in quite these terms. Rather, he says things like “His shouting at her is not the same as his answering her.” Now, that is persuasive: it seems clearly right to distinguish his shouting at her from his answering her. Then does Kim have a point after all?

No. We can (i) distinguish his shouting at her from his answering her without (ii) distinguishing his shout from his answer; for (ii) concerns events while (i) has nothing to do them. The phrases “his shouting at her” and “his answering her” refer not to events but to facts. Consider these two statements:

(a) The fact that he answers her is not the same as the fact that he shouts at her.

(b) His answering her is not the same as his shouting at her.

Nobody would dispute (a), which is obviously true. Most people find (b) plausible too, which explains why Kim uses it in argument; but not everyone has seen that it is plausible because it is strictly equivalent to (a). I now proceed to defend this, arguing that “his answering her” refers to the fact that he answers her.

With minor grammatical adjustments, “his answering her” and “that he answers [answered, will answer] her” can be interchanged in all factual contexts (I shall explain that at the end of this section), as can “his shouting at her” and “that he shouts at her”:

It surprised me that he shouted at her, but not that he answered her;

His shouting at her surprised me, but not his answering her.

That he shouted at her constituted harassment, but not (the fact) that he answered her;

His shouting at her was harassment, but not his answering her.

That he shouted at her is one fact about his behaviour, that he answered her is another;

His shouting at her is one thing, his answering her is another.

I knew that he shouted at her, but not that he answered her.

His shouting at her was known to me, but not his answering her.

I was aware that he shouted at her, but not that he answered her.

I was aware of his shouting at her, but not of his answering her.

On and on it goes. “His answering her” is a so-called imperfect nominal. It is a nominal, a noun phrase, which can serve as the subject of a sentence, as it does in the above examples. It is imperfect because in it the gerund “answering” retains many features of the verb from which it comes. Compare:

direct object: he answers her - his answering her

adverb: he loudly answers her - his loudly answering her

tense: he has answered her - his having answered her

modals: he has to answer her - his having to answer her.

In all these ways the gerund “answering” (“having answered, “having to answer” etc.) behaves like a verb; it has, as Zeno Vendler neatly put it, a verb alive and kicking inside it. There is nothing surprising about the grammatical similarities between “his answering her” and “he answers her”, given that they both name a single item.

None of this holds for his answer (meaning his action, not his words or their meaning). The noun “answer” takes adjectives not adverbs; it cannot be modified by tenses or modalities; it cannot have an indirect object - we cannot say “his answer her” but only “his answer to her”. It is perfectly a noun, with no grammatical traces of its parent verb; and, consistently with that, we use it to refer not to his answering her but to the answer that he made, not to a fact but to an event.

So his answer can be a shout: it is just false to say that his answer was one event and his shout another; nobody would entertain such a thought for a moment if philosophers had not conflated his answer with his answering her, confusing an event with a fact.

Sometimes things get even worse, and philosophers use pathological phrases such “the event of his answering her”, as though you could turn a fact name into an event name by putting “the event of” in front of it. If the phrase had been “the event, his answering her” this would be bad enough: it would be like writing “the physical object seven” or “the comedy *Hamlet*” - false labeling. The phrase “the event of his answering her” is even worse: it is not English at all, but philosophers’ pidgin.

I said that an imperfect nominal and the corresponding that-P clause are routinely interchangeable “in all factual contexts”. The sentences I gave as examples - including

It surprised me that he shouted at her,

That he shouted at her constituted harassment,

I knew that he shouted at her

- are all factual, in the sense that they all imply that he shouted at her. That is not implied by the likes of

They believe that he shouted at her, and

I hope that he shouted at her,

which therefore count as non-factual uses of the that-P form.<sup>2</sup> Significantly, they cannot be expressed with imperfect nominals.

## 6. Perfect and imperfect gerundial nominals

Another source of error is more widespread in the literature; though more excusable than the “event of [imperfect nominal]” nonsense, it is equally harmful to talking sense about events. As well as imperfect gerundial nominals, which stand for facts, there are also perfect gerundial nominals, which stand for events. The difference between the two kinds of nominal has been noted by many grammarians and linguists; it was Zeno Vendler who discovered its alignment with the fact/event difference, and I am relying on his work here (Vendler, 1967; also Zucchi, 1993).

I shall start up a new example to illustrate how the two sorts of nominal differ. **Datum:** *he pushed the rock, thereby dislodging it from the hole in which it lay half buried*. The fact that he pushed the rock is entirely distinct from the fact that he dislodged it: neither entails the other; and their relations to surprise, belief, expectation, gladness, regret and so on can be quite different, as can their roles in explanations. We can also say this using imperfect nominals: his pushing the rock is one fact, his dislodging it is another; his pushing it was legal, his dislodging it criminal; and so on.

Now consider the phrase “his pushing of the rock”. This is a perfect nominal, in which the gerund bears no grammatical marks of its origin in a verb. The word “of” indicates this: the object is now genitive, not direct. Whereas “his pushing the rock” is a natural partner of “He pushes the rock”, “his pushing of the rock” is grammatically like “the surface of the rock”. Can the insertion of a mere “of” make that much difference? It certainly can! If he pushed the rock strenuously, that

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<sup>2</sup> Richard Gale helped me to an awareness that I need to bring in the factual/non-factual difference here. For a profound exploration of it, especially as concerns knowing and believing, see Vendler (1972, pp. 89-119).

can be reported by putting an adjective into the perfect nominal: “his strenuous pushing of the rock”. We cannot use the adverb “strenuously” here. Tenses and modals have no place with the perfect nominal, either, as you can easily verify for yourself. On the other hand, perfect nominals do have plural forms and (connected with that) they can take definite and indefinite articles: “pushings of the rock”, “a pushing of the rock”, “the pushing of the rock”. Try those with the imperfect “pushing the rock” and you will find that it cannot be done.

I chose to start with the genitive-object feature of perfect nominals, but it has no privilege. Take instead the phrase “the pushing”: the definite article enforces its perfect nominal status, keeping out adverbs, tenses, direct objects, and so on. Or start with “strenuous pushing”: the mere fact of the adjective lets in articles and plurals, keeps out direct objects, and so on. The members of this tight cluster of grammatical features stand or fall together.

In all of these respects, the perfect gerundial “pushing of the rock” behaves exactly like the noun “push” as in “push that he gave the rock”. It also turns out that “his pushing of the rock” and “the push that he gave the rock” can be interchanged in all contexts. The case for regarding perfect nominals as names of events is strong. With that in mind, consider this interchange between Kim and Donald Davidson. Kim first:

It is not at all absurd to say that Brutus’s killing Caesar is not the same as Brutus’s stabbing Caesar. Further, to explain Brutus’s killing Caesar (why Brutus killed Caesar) is not the same as to explain Brutus’s stabbing Caesar (why Brutus stabbed Caesar). (1966, p. 232n)

Davidson responded thus:

I turn . . . to Kim’s remark that it is not absurd to say that Brutus’s killing Caesar is not the same as Brutus’s stabbing Caesar. The plausibility of this is due, I think, to the undisputed fact that not all stabbings are killings. . . But [this does not show] that this particular stabbing was not a killing. Brutus’s stabbing of Caesar did result in Caesar’s death; so it was in fact, though not of course necessarily, identical with Brutus’s killing of Caesar. (1969, p. 272)

Kim reported this later by saying: “Davidson and I disagree about. . . whether Brutus’s stabbing Caesar is the same as Brutus’s killing Caesar (1980, p. 125). Notice the switch from Kim’s imperfect nominals to Davidson’s perfect ones, followed by Kim’s switch back again. That change of terminology enables Kim to say true things about facts and Davidson to respond by saying true things about events. The audible click! as the change occurs evidently passed unheard by both writers.

Summing up: We have four kinds of expression to consider: (1) Ones containing complete sentences: “(The fact that) she kissed him tenderly”. (2) Imperfect nominals: “her kissing him tenderly”, (3) Perfect nominals: “her tender kissing of him”, (4) So-called derived nominals, as in “the tender kiss that she gave him”. Everyone agrees that category (1) name facts while (4) name events. I have argued, following Vendler, that (2) goes with (1), and (3) with (4).

Though superficially similar, (2) and (3) are unlike in their syntactical properties; and grasping *that* frees one to admit the plain evidence that they are also semantically unlike: (2) name facts, (3) name events. Many philosophers still have trouble with the difference between (2) and (3), naively offering expressions like (2) “my daughter’s eating all the brownies” as names of events. If you want to write about events and to protect yourself from clumsy misunderstandings, I suggest that you avoid (3) perfect gerundial nominals altogether, and stay with (4) such event

sortals as “accident”, “answer”, “birth”, “blow”, “circumcision”, “coronation”, “death”, “eclipse”, “explosion. “

Having cited an example about stabbing and killing, I should report a debate about that. Some writers who do not side with Kim across the board, and who think that an answer can be a shout, nevertheless distinguish Brutus’s stabbing of Caesar from his killing of him on the grounds that the stabbing is complete before the killing is (Cleland, 1991, pp. 392-4). That assumes that the time of the killing runs on until the victim dies, which means that it could run on until after the killer has died! A better solution is this: a killing is an action which has a certain relational (causal) property; it occurs at the time and place where the person makes the relevant movements; but it may acquire that relational property after it is all over, i.e. after the event in question has ceased to exist. There is no philosophical difficulty about this: it is logically on a par with someone’s posthumously becoming a great-great-grandfather. (For a full discussion, see Bennett, 1973.)

### 7. Tropes that are not events

It has been maintained that all events must be changes (Lombard, 1986, ch. 6). That entails that each event must involve the instantiation of one property and then later of a different one, which means that each event must stretch through time. That debar starts and finishes - construed as instantaneous - from counting as events. It also implies that, although when a monument decays over centuries there occurs a protracted event which we might call its decay, no corresponding event occurs when a monument remains unchanged for centuries. You may find one or both of these plausible; I have no strong views about either, and do not want any. Each case involves a trope; and questions about whether this or that trope counts as an event are of no metaphysical interest.

Contrast this with the metaphysical theory that a physical object is an aggregate of spatio-temporal zones. Someone who finds that plausible, as Newton and Spinoza did and as I do (Newton, 1664; Bennett, 2001, sections 53-5), will not say that every aggregate of zones is a physical object; he will want to understand what it takes for an aggregate to satisfy the rather stern constraints that our concept of a physical object lays down. Our evidence about these comes not from shapeless intuitions of verbal propriety but from plain hard structural facts about what inferences are valid, what statements are self-contradictory, and so on. There are such facts because the physical object concept does a great deal of central, disciplined work for us. Not so our event concept. We use it to give small, vague gobbets of information about what goes on - the storm lasted for three days, the battle raged fiercely, he has been through two divorces - but when we want precision and detail we pay off the event concept and employ other parts of our conceptual repertoire instead. That is why the issue about which tropes are events is so thin.

Similarly, it has been maintained that relational tropes are not events: there was no such event as Xantippe’s entry into widowhood, because if there were it would be an instance of the relational property: *being married to a man who dies* (Lombard, 1986, 123f). This implies that such phrases as “Foreman’s loss of his title” are not strictly proper, for that claims to name an event that would have to be a relational trope. We might live with this if it were implied by our best theory to cover the central facts about how our event concept behaves, but no-one has demonstrated any such backing for it.

Again, some have thought that a single event must be a trope possessed by a single object. This implies that there is no such event as a conversation, because two or more people don’t constitute an object (Lombard, 1986, p. 239). That is also fiercely counter-intuitive, and the

supposed theoretical basis for it is weak. Granted that an event is a trope, and even granted that a trope can exist only at a zone where something has the property, it does not follow that what has the property must be some one object rather than a scattered aggregate of objects, for example, or a spatio-temporal zone. As before, these considerations should give way in face of solid theoretical advantages for the thesis that a single event must be tied to a single object; but nobody has shown, or even tried to show, that there are any such.

### 8. Zonal fusion of events

The cannon-ball's journey and its rotation occupy exactly the same spatio-temporal zone: the ball journeys when and where it rotates, and only then and there. If there is a single qualitatively richer event E that consists of these two, we can call E the "non-zonal fusion" of the two. It is non-zonal because E results not from combining items from different zones, but from putting together qualitatively different items from one zone. If two events do not occupy the same zone, then an event which consists of those two must be spatially and/or temporally larger than either of them; such an event is called the "zonal fusion" of the two smaller events. From now on I shall use the unadorned "fusion" as short for "zonal fusion".

It is clearly all right to allow some fusions: a speech is the fusion of many briefer episodes, a riot is the fusion of many spatially smaller episodes (unless there is no such event as a riot because it does not have a single "object" as its subject). Some theorists of events - notably Judith Jarvis Thomson - hold that for any set of events there is a unique event that is the fusion of all of them (Thomson, 1977, pp. 78-9). This implies the existence of some pretty exotic events, such as the fusion of all the impolite utterances ever made by people with an "h" in their names.

Thomson remarks: "I have no argument for the Principle of Event Fusion. But it seems to me that there is no argument against it either" (1977, p. 82). Actually, her book on events is a kind of argument for it: the book presents an elaborate metaphysical theory of events, the building-blocks of which are the concepts of event, cause, and part; and it relies on the assumption that there are almost no restrictions on the fusion of events. This theory, however, has not won much acceptance; so the door is open to some rival metaphysic that does justice to our actual handlings of our event concept, is cleaner and more economical than any of its unrefuted rivals, and owes some of its success to restrictions that it places on fusion. That would be evidence that not all fusions of events are events.

So far nothing has come through that door. All we have been offered are "intuitions" - that is, quick appeals to episodes of naive astonishment - sometimes expressed with the all-purpose word "surely".<sup>3</sup> In this area of philosophy, as in every other, intuitions are of value only if they point the way to results that are theoretically solid. *Mere* intuitions are worthless.

One might argue for some more restricted principle of fusion, something saying that if  $R(e_1, e_2)$  then there is an event that is the fusion of  $e_1$  and  $e_2$  - for some suitable R. Here are some plausible candidates: - (1)  $e_1$  spatially or temporally overlaps  $e_2$ . If that sufficed for there to be an event fusing the two, events would be on a par with continuous, or unbroken, portions of matter. (2)  $e_1$  is an immediate, or direct, cause of  $e_2$ . That would yield fewer events, but it would imply

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<sup>3</sup> "Events sometimes sum to yield a further and distinct one; yet intuition balks at the notion that such summing is universally permissible (there is surely no one event comprising both Lennon's death and Charles's wedding)." Taylor (1985, p. 25).

that every unbroken causal chain is an event (unless there is action at a spatial or temporal distance). (3) Given certain standing conditions, the occurrence of  $e_1$  logically necessitates the occurrence of  $e_2$ . For example, given that Socrates was married to Xantippe, his dying absolutely necessitated her becoming a widow; and so the occurrence of his death necessitated the occurrence of her entry into widowhood. If relational tropes can be events, then clearly we have two events here - two tropes with different subjects in different places. On the present proposal we shall allow that there is also a single event that fuses those two.

I am sympathetic to all three of those proposals, but I know of no thick reasons - as distinct from paper-thin intuitions - for preferring anyone of them, or indeed for rejecting Thomson's virtually unconstrained approach to zonal fusion.

### 9. Event-identity: non-duplication principles

The term "identity" is imposing and sounds deep and central, but when philosophers have discussed "identity conditions for events" they have generated more heat than light. This is partly because some of them have not been clear about what the problem is, wandering so far astray as to ask (absurdly) what the conditions are under which "two events are the same", or to ask (trivially) which events are identical with which.

However, we can do better. One objective is to discover sufficient conditions for event-identity, i.e. for values of  $R$  for which it is true and not trivial that

For any event  $x$  and for any  $y$ , if  $R(x,y)$  then  $x$  is  $y$ .

The problem here is to discover values of  $R$  that make this true but not trivial. Any success in this search must involve a relation which no event can have to anything else. Some proposals about this have involved relations of likeness: no event can be similar in such-and-such a way to anything but itself. Davidson, for example, has suggested that no two events can be related by  $R_{cc}$  = having the very same causes and effects, which means that if  $x$  is an event and  $R_{cc}(x,y)$  then  $x$  is  $y$ . Such theses are non-duplication principles; they say that an event cannot be duplicated in a certain manner by another event.

It has often been remarked that Davidson's thesis could not help anyone who was trying to get a first hand-hold on event-identity, because a grasp of *that* is needed in establishing what the causes and effects of a given event are. Anyway, nobody has done anything interesting with this thesis, apart from some significant attempts to refute it (Brand, 1977, p. 366; Thomson, 1977, p. 70). Nor have discussions of it ever hooked into any metaphysical issues about what events are.

The same does not hold for the only other non-duplication principle that has been proposed, namely Quine's thesis that no two events can be related by  $R_{st}$  = having the very same position in space-time. This says that if  $x$  is an event and  $R_{st}(x,y)$  then  $x$  is  $y$ . It does have a metaphysical thrust; for it amounts to identifying events with stages of their subjects, thus denying that the cannon-ball's rotation can be one event and its arcing across the sky another. I reject that. Each of the two salient facts about the cannon-ball attributes to it a property (one relational, one monadic), so to each there corresponds a trope; so there is every reason to say that there are two events here. That is not to deny that the (non-zonal) fusion of those two events is also an event, a trope consisting of an instance of the property *arcs across the sky while rotating*.

Non-duplication principles all concern sufficient conditions for event-identity: sameness of causes and effects (Davidson) or of spatio-temporal location (Quine) is said to suffice for identity. What about necessary conditions for identity? Do they present us with interesting theses that are mirror-images or logical duals of non-duplication principles? No. If it is interesting to be told that

if x is like y in such-and-such respects then x is y, the interest lies in what the relevant respects are. But if x is y, then x is like y in every respect; there is no space here to do philosophy in.

### 10. Event-identity: parts and wholes

Of the remaining questions about “event-identity” that rattle around in the literature, most are about parts and wholes. A months-long battle around and (eventually) in Stalingrad had temporal parts, of which one occurred in September 1942 and another in February 1943. We can refer to the big long battle through descriptions pointing to either of these parts, and that enables us to come up with an identity-statement: “The battle being fought around Stalingrad in September 1942 was the battle being fought there in February 1943.” This is logically like the statement: “The ocean that washes the beaches of California is the one that pounds against the east coast of New Zealand.”

Similarly with spatial parts of events: the storm that is wrecking Galveston is the one that is making life miserable in Houston.

Although these are identity-statements, it is not helpful to think of them primarily in terms of “conditions for the identity of events”. What makes any of them true is a pair of considerations. (1) The principles governing the (zonal) fusion of events under sortals - e.g., governing when two battles are parts of a larger battle, two fires parts of a larger fire, and so on. (2) The principles governing when one can refer to an event through a description that fixes on some part of it. Once those are grasped, and the relevant contingent facts are established, the statements about event-identity roll out automatically. There is nothing here about “event-identity” understood as something that we have to get straight about if we are to understand what an event is.

There is nothing deep in (1) the principles governing fusion under sortals. Wanting to know when

two episodes of combat count as parts of a single battle,  
two conflagrations count as parts of a single fire, or  
two festive episodes count as parts of a single picnic,

we have to consult the ordinary meanings of “battle”, “fire”, and “picnic”. The answers to our questions owe everything to semantics and nothing to metaphysics. Was there a single fire that burned down your house on Monday and mine on Tuesday (or yours and at the same time mine on the next street)? We do not answer Yes unless some continuous spatio-temporal zone linking the two incinerations is fiery throughout. But we handle “same battle” differently: we allow that armies can sleep and then resume their battle; so a single battle can stretch across two days even if the two episodes are not linked by a spatio-temporal zone that is actively combative throughout. This difference between fires and battles is conventional; we can imagine handling “same battle” differently. Nothing of philosophical interest is going on here.

As for (2) the question of when it is all right to refer to a large event through a reference to one of its parts: I suspect that it is always all right to do this, but I have nothing useful to say on the topic.

Parts and wholes come into a different range of identity-statements about events, such as these: “When he answered at the top of his voice, his shout was his answer”; “When he dislodged the rock by pushing it, the push that he gave it was his dislodgement of it.” These involve non-zonal parts of events. A certain qualitatively thick event, which is a push and a dislodgement, occupies a spatio-temporal zone which is also occupied by a thinner event that is just a push, and

another thinner event that is just a dislodgement. These are qualitative or non-zonal parts of the thicker event, just as the property of *pushing* is part of the richer property *dislodging by pushing*.

Here again we can ask (1) when two zonally coincident events count as parts of a single qualitatively “larger” event, and (2) when it is all right to refer to an event through a description that fixes on some qualitative (non-zonal) part of it. I imagine that everyone would answer question (1) by saying that any such pair of events are qualitative parts of a single qualitatively thicker event. Whatever tropes occur at a given zone, there is always the totality of what goes on at that zone, and there is no conceivable reason for denying that that is an event. There is, however, controversy about how to answer question (2). Kim holds that it is never correct to refer to an event through a description that picks out some qualitative part of it, so that we cannot use “The push he gave the rock” and “His dislodgement of the rock” each to refer to a single thick event which was both a push and a dislodgement. I have explained in section 3 why I disagree with this. It is not, however, in any significant sense an issue about event-identity, but only one about what can be meant by certain phrases. Kim’s metaphysic of events is just fine; only his semantics of event names is wrong.

Once we stop confounding events with facts, that frees us to hold that it is sometimes all right to refer to an event through a phrase which gives only some of the truth about it, i.e. immediately refers to some non-zonal part of it; and when we have two such references to a single event we can formulate such identity-truths as that the shout was the answer, the kiss was the greeting, the picnic was the celebration, and so on.

We might hope to establish some general principles governing event-identities of this kind, but there is no prospect of that. Given that two things go on at a zone, the question of whether an expression naming one of them can also be used to name the fusion of them is a purely semantic one, and there seem to be no strong general principles governing the answer to it.

## 11. Events and the “by”-locution

One class of identity-statements about events needs separate mention. It concerns one species of events, namely acts. G. E. M. Anscombe once suggested, and Davidson later asserted, that if someone  $\phi$ s by  $\psi$ ing, then the act which makes it the case that he  $\psi$ s is the act which makes it the case that he  $\phi$ s (Anscombe, 1957, pp. 37-47; Davidson, 1971). If she signaled by lifting her arm, then the signal was the gesture; if he saved the village by diverting the river, then his rescue of the village was his diversion of the river; and so on. There has been much discussion of the “Anscombe thesis”, as it has been called - I am guilty of adding to it myself. In fact, the thesis should have been strangled at birth, because the “by”-locution has nothing to do with acts or, therefore, with events. (For more details than I can give here, see Bennett, 1994.)

(1) One reason for that concerns scope. In many instances of the “by”-locution, the second half - the part that follows “by” - does not involve any act that the person performed. “He fulfilled her fears by never once thinking of her during the whole voyage.” “He did his duty by continually remaining sensitive to any slights to her good name.” In these perfectly normal “by”-statements, the phrases “[his] never once thinking of her during the whole voyage” and “[his] continually remaining sensitive to any slights to her good name” do not report acts. Countless other examples could be given. (Those sentences report facts about the person’s conduct - possible subjects of deliberation beforehand and recrimination or congratulation afterwards - so they pertain to the province of *action* (mass term). But they do not report *actions* (count term) or acts.)

(2) The other reason for being skeptical about the Anscombe thesis concerns logical form. “She signaled by raising her hand” passes the scope test: it does entail that she performed two acts, a signal and a gesture. But it contains no trace of the act concept; to bring the latter into the story we must reel it in on a line of logic. The sentence has the surface form of all “by”-statements:

- (i) a fully sentential clause (“She signaled. . .”)
- (ii) the word “by”, and
- (iii) a subjectless gerundial nominal (“. . . raising her hand”).

Such triples give us “He broke the record by pushing a railroad car at 10 m.p.h. on level ground”, “He let the apples spoil by leaving them in the barrel”, and “She signaled by raising her hand”. The first item, obviously, states a whole proposition about how the person behaved. That proposition might involve the act concept - “She gave him a kick” - but usually it does not.

What about the third item, the noun phrase containing a gerund? In “She signaled by raising her hand” the gerundial phrase is short for “her raising her hand”, with “her” being deleted because it co-refers with the subject of the whole sentence. (To stop the co-reference, put the first clause into the passive - “A signal was given. . .” - and then we have to put “her” back in: “A signal was given by her raising her hand.” Analogously, we delete “himself” from “He wants himself to go to the concert” but we do not delete “her” from “He wants her to go to the concert”.) So we should see “She signaled by raising her hand” as ending with the complete gerundial nominal “her raising her hand” - an imperfect nominal which refers to the fact that she raised her hand.

The “by”-locution as such, we now see, does not involve the act concept anywhere. It has the form: a proposition about behaviour - “by” - a proposition about behaviour.

I now offer an analysis of the locution which dances to the tune of its logical form. The first clause always means something of the form: “Some fact about x’s behaviour had RP”, where RP is a relational property. The remainder of the “by”-statement produces an instance, a value of the “Some fact. . .” which makes the initial clause true. Thus, “he broke a promise. . .” means that some fact about his behaviour conflicted with a promise he had made, and “. . . by coming home late” says what it was. Thus,

He broke a promise - - - by - - - coming home late  
analyzes into

Some fact about his behaviour conflicted with a promise he had made - - namely the fact that - - - he came home late.

Similarly, “He overcooked the stew. . .” says that some fact about his behaviour causally led (in a certain way) to the stew’s being overcooked, and “by leaving it on the fire for too long” says what.

This “namely” story is the only analysis, so far, that covers all the territory. An ingenious account by Judith Jarvis Thomson applies only to cases where RP involves causation; as does a more recent one by Francken and Lombard.<sup>4</sup> Neither of those analyses applies to the likes of “He divorced her by signing a document” or “He tried to escape by disguising himself or “He

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<sup>4</sup> Thomson (1977, p. 204, formula T-S<sub>7</sub>, and p. 218, formula T-S<sub>12</sub>; Francken and Lombard (1992, p. 39). For other attempts, see Austin (1962, Lecture 10); Goldman (1970, ch. 2); Ginet (1990, pp. 16- I 7).

fished by throwing hand grenades into the water”. The signing does not cause the divorcing, nor does his disguising himself cause his trying to escape, or his throwing of grenades cause his fishing.

The “namely” analysis lay hidden for so long because we did not think to dig into the initial clause of the “by”-locution so as to uncover the existential quantifier; until that comes into the open, “namely” has nothing to grab onto. The idea of digging came easily, once I had realized that “by”-statements do not interrelate human acts but rather facts about how people behave.

The vigor of the Anscombe thesis in the literature probably comes from its being true of a certain subset of cases. When someone  $\phi$ s by  $\psi$ ing, and

- (1) his  $\phi$ ing implies that he performed a  $K_1$  action, and
- (2) his  $\psi$ ing implies that he performed a  $K_2$  action, and
- (3) what makes it the case that he performed a  $K_2$  action is that his  $\psi$ ing has a certain causal consequence,

then his  $K_1$  action is his  $K_2$  action. I briefly defended this at the end of section 6, in connection with stabbing and killing. This is not to endorse the Anscombe thesis, but only a limited corner of it. It is not really about the “by”-locution, but rather about the relational properties of events.

## 12. Events and adverbs

Anything useful we can say with the event concept we can say without it; it is everywhere dispensable. Truths about events supervene logically, and in a simple way, on truths about things and their properties: there was a quarrel because some people quarreled; there was a shower because rain fell; and so on.

Or so I maintain, but Davidson has argued on the contrary that “Adam and Eve quarreled” unpacks into “There was a quarrel, and Adam and Eve took part in it”, not vice versa; that “Rain fell” derives from “There was a shower” rather than conversely, and so on (Davidson, 1967).

He has an ingenious reason for this. That *they quarreled furiously* entails that *they quarreled*, and Davidson has wanted to represent obvious entailments as holding in first order quantificational logic. That logic cannot handle adverbs. It cannot do better than to represent “Adam quarreled with Eve” in the form  $F(a,e)$ , and “Adam quarreled furiously with Eve” as  $G(a,e)$ ; and those, with their formally unrelated dyadic predicates, do not exhibit the entailment between the two propositions. Davidson proposes to remedy this by understanding “Adam quarreled furiously with Eve” as having the form

For some  $x$ : Quarrel( $x$ ) & Antagonists( $x,a,e$ ) & Furious( $x$ ).

Informally: there was a quarrel in which Adam and Eve were the antagonists, and it was furious. We get from this to “Adam quarreled with Eve” by representing the latter as

For some  $x$ : Quarrel( $x$ ) & Antagonists( $x,a,e$ ).

Informally: there was a quarrel in which Adam and Eve were the antagonists. First order predicate logic captures the inference to this from the other, for it involves simply dropping a conjunctive clause in an existential statement.

Davidson offers this not as a mere technical device - a way of regimenting adverb-dropping inferences - but as a contribution to psychology. He claims to be laying bare the logical principles that guide us in our handling of adverbs. Someone tells me “. . . Danton gestured derisively to Robespierre . . .”, and on the strength of that I tell someone else “. . . Danton gestured to Robespierre”. Davidson holds that I have inferred that Danton gestured from the premise that he gestured derisively by understanding the premise to mean “There was a gesture and it was

derisive. . .” and the conclusion to mean “There was a gesture. . .”. It would be absurd to maintain this only when there is an adverb in the vicinity; the claim has to be that whenever we say “He gestured. . .” we mean “There was a gesture. . .”. That is hard to believe. It implies that if someone were brought up in ignorance of the fraction of English that involves the event concept - having no acquaintance with count nouns such as “fall”, “kiss”, “fight”, “gesture”, and their kin - he would have an impaired command of statements such as “That sparrow just fell” and “She kissed him” and “They fought with one another”. I do not believe it.

Anyway, the theory is not strongly enough motivated, because a rival way of handling adverb-dropping inferences does better (Parsons, 1980; Bennett, 1988, pp. 168-78). The rival has to go outside the bounds of first-order logic, which may be a disadvantage; but as well as being believable considered as psychology, it has the further merit that it handles many adverbs which Davidson’s theory does not touch.

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### Bibliography

- Anscombe, G. E. M. (1957). *Intention*. Oxford: Blackwell.
- Austin, J. L. (1962). *How to Do Things with Words*. Cambridge, MA: Harvard University Press.
- Bennett, Jonathan (1973). “Shooting, killing, and dying”, reprinted in Casati and Varzi 1996: 319-27.
- (1988). *Events and their Names*. Oxford University Press.
- (1994). “The ‘Namely’ analysis of the ‘by’-locution”. *Linguistics and Philosophy*, 17:29-51.
- (2001). *Learning from Six Philosophers*. Oxford University Press.
- Brand, Myles (1977). “Identity conditions for events”, reprinted in Casati and Varzi 1996: 363-71.
- Casati, Roberto and Achille C. Varzi (eds.) (1996). *Events*. Aldershot: Dartmouth.
- Cleland, Carol (1991). “On the individuation of events”, reprinted in Casati and Varzi 1996: 373-98.
- Davidson, Donald (1967). “The logical form of action sentences”, reprinted in Casati and Varzi 1996: 3-17.
- (1969). “The Individuation of events”, reprinted in *ibid.*: 265-83.
- (1971). “Agency”, reprinted in his *Essays on Actions and Events*. Oxford University Press, 1980: 43-61.
- Francken, Patrick and Lawrence Brian Lombard (1992). “How not to flip the switch with the floodlight”. *Pacific Philosophical Quarterly*, 73: 31-43.
- Ginet, Carl (1990). *On Action*. Cambridge University Press.
- Goldman, Alvin A. (1970). *A Theory of Human Action*. Princeton University Press.
- Kim, Jaegwon (1966). “On the psycho-physical identity theory”. *American Philosophical Quarterly*, 3: 227-35.
- (1969). “Events and their descriptions: some considerations”, in N. Rescher et al. (ed.), *Essays in honor of Carl G. Hempel*. Dordrecht: Reidel: 198-215.

- (1973). "Causation, nomic subsumption, and the concept of an event". *Journal of Philosophy*, 70: 217-36.
- (1980). "Events as property exemplifications", reprinted in Casati and Varzi 1996: 117-35.
- (1991). "Events: their metaphysics and semantics". *Philosophy and Phenomenological Research*, 51: 641-6.
- Leibniz, G. W. (1705). *New Essays on Human Understanding*, ed. P. Remnant and J. Bennett. Cambridge University Press, 1996.
- Locke, John (1690). *An Essay Concerning Human Understanding*, ed. P. H. Nidditch. Oxford University Press, 1975.
- Lombard, Lawrence Brian (1986). *Events: a Metaphysical Study*. London: Routledge & Kegan Paul.
- Newton, Isaac (1664). "Descartes, Space and Body", in the version presented at [www.earlymoderntexts.com](http://www.earlymoderntexts.com).
- Parsons, Terence (1980). "Modifiers and quantifiers in natural language". *Canadian Journal of Philosophy*, suppl. vol. 6: 29-60.
- Quine, W. V. (1960). *Word and Object*. New York: MIT Press.
- Taylor, Barry (1985). *Modes of Occurrence*. Oxford: Blackwell.
- Thomson, Judith Jarvis (1977). *Acts and Other Events*. Ithaca, NY: Cornell University Press.
- Vendler, Zeno (1967). "Facts and events", in his *Linguistics in Philosophy*. Ithaca, NY: Cornell University Press: 122-46.
- (1972). *Res cogitans: an Essay in Rational Psychology*. Ithaca, NY: Cornell University Press.
- Williams, Donald C. (1953). "The Elements of being", reprinted in his *Principles of Empirical Realism*. Springfield, IL.: Thomas: 109-74.
- Zucchi, Alessandro (1993). *The Language of Propositions and Events*. Dordrecht: Kluwer.