

An Analysis of the ‘by’-locution

Jonathan Bennett

[This is most of chapter 2 of *The Act Itself* (Oxford UP 1995); it’s a somewhat improved reworking of the content of “The Namely analysis of the ‘By’-locution”.]

8. How the ‘by’-locution works

Our rich repertoire of things to say about how people behave is not a mere assemblage of atoms. Atomic reports can be combined into molecules, held together by relations that we are interested in. One of these is temporal succession: He spent the money *and then* he worked to earn it; She married him *before* having her baby. Another is the relation involved in the ‘by’-locution: He signalled *by* waving his arm; She rescued the village *by* diverting the flood; He betrayed Essex *by* prosecuting him on a capital charge. These ‘by’-statements are answers to ‘how?’-questions; the questions are often of great importance to us, as are the answers. The ‘by’-locution is a powerful, flexible, tremendously useful conceptual device that we have for stitching together things we say about how people behave. My main project will go better if we have a clear understanding of how the locution works. That will be my task in the present section.

Each instance of the ‘by’-locution comprises three elements: (i) a complete sentential clause (‘She signalled’), (ii) ‘by’, (iii) a subjectless gerundial phrase (‘waving’). I associate (iii) with a second complete sentential clause (‘She waved’); I shall say why later.

The first clause always means something of the form ‘Something that x did had RP’, where RP is a relational property. For example, ‘He broke a promise’ means that some fact about his behaviour conflicted with a promise he had made. What the remainder of the ‘by’-statement does is to produce an instance, a value of the ‘Something. . .’ (or ‘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
analyses 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. In each case, the whole content could be expressed without using ‘some’ and ‘namely’: ‘His coming home late conflicted with a promise he had made’, ‘His leaving the stew on the fire too long led to its being

overcooked'. My more prolix 'some'/'namely' version has two merits: it brings out in a perspicuous way what is common to all instances of the 'by'-locution, and it explicitly states the two trivially entailed propositions—that he broke a promise and that he came home late, that he overcooked the stew and that he left it on the fire for too long.

When we say that someone ϕ ed by π ing, the proposition that he π ed may also mean something of the form 'Something that he did had RP', so that it can be fed into a new 'by'-statement. This lets us make chains: 'He spoiled the party by insulting the host, which he did by insinuating that the host gave the party only to further his career, which he did by saying "I see that nobody higher than vice-president is here; don't you wish you had saved your money?"' The last term in that chain would be hard to specify further with help from 'by', though one might say that he uttered that sentence by moving his vocal organs in certain ways. I shall return to this in Section 11 below.

Such chains can be enormously long: we can report behaviour in ways that involve relation upon relation. Reports of causal chains are striking in this respect. When someone's conduct has a certain causal upshot, this will have others in its turn, and so on indefinitely; and these more remote consequences can often be reported in statements that do not use 'cause' or 'consequence' or the like. So in answer to 'What did he do?' we can often choose how far to go along the causal chain. Joel Feinberg has called this phenomenon 'the accordion effect'.¹ What did he do?

- He saved the village.
- He prevented a flood.
- He diverted the stream.
- He blocked an outlet.
- He felled a tree.
- He moved thus and so with a saw.

These can all be true because of a single set of movements that he made: He saved the village by preventing a flood, which he did by diverting the stream, which he did by . . . and so on. Also, links can be omitted: He saved the village by felling a tree, he prevented a flood by moving thus and so with a saw.

My 'namely'-analysis seems to be a pretty good account of how the 'by'-locution works. It is clearer than any of its predecessors, and unlike them it covers all the territory.² If this simple proposal is right, why has it been so long in coming? The surface answer is that previous workers on the problem (including myself) did not 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 relate human *acts* to one another.

This was part of the still larger discovery—as I think it to be—that the act concept should not predominate in any inquiry into our thought and talk about how people behave. Much analytic philosophy about behaviour has, I believe, been cramped and thus distorted by reliance on the act concept, and many aspects of this book reflect my

¹ Joel Feinberg, 'Action and Responsibility', pp. 134f.

² See for example J. L. Austin, *How to Do Things With Words*, Lecture 10; Alvin A. Goldman, *A Theory of Human Action*, chapter 2; Judith Jarvis Thomson, *Acts and Other Events*, p. 204 (formula T-S₇) and p. 218 (formula T-S₁₂); and Carl Ginet, *On Action*, pp. 16f. Thomson's ingenious account is confined to cases where RP involves causation, and cannot be extended to cover the likes of 'He divorced her by signing a document' or 'He tried to escape by disguising himself'. The analysis offered by Patrick Francken and Lawrence Brian Lombard, 'How not to Flip the Switch with the Floodlight', p. 39, is similarly limited.

having broken free from it. The act concept proved to be an obstacle to understanding in the areas I shall explore; in no philosophical inquiry have I found it helpful. Before showing how it impedes understanding of the 'by'-locution, I should first explain what concept it is.

9. 'Act'

Acts can also be called actions, and we could speak of 'the action concept', but then we must be wary. My topic is (i) the concept of *actions* or of *an action*, not (ii) that of *action*, with which I have no quarrel. The two differ grammatically as count noun and mass noun, as do 'puddle' and 'water': the former can be pluralized and takes articles while the latter does not; the latter can be preceded by 'a quantity of. . .' and 'a sample of. . .', while the former cannot. Puddles are things we count, while water is a kind of stuff that comes in stretches or quantities or amounts. Similarly with machines and machinery, shoes and footwear, snowflakes and snow, loaves and bread. Many nouns can be used in either way: there are three *roads* leading out of town; we walked along miles of bad *road*. 'Action' is such a noun.

When used as a mass noun, 'action' has the same grammar as 'water' and 'snow', occurring in the singular without any article. It does not of course refer to material stuff, but it does refer to *some of what goes on*, or, we might say, to *stuff that is done*. For example:

- (a) She sprang into action.
- (b) There was a lot of action here this morning.
- (c) That was a gratifying course of action.

To get a sense of action as stuff that is done, partly comparable with material stuff, compare those three with these:

- (a') She bathed in milk,
- (b') There was a lot of fog here this morning,
- (c') This is a profitable line of footwear.

We also use 'action', in a grammatically mass fashion, to stand for a universal—namely, whatever it is that an item must have in order to count as action. Used like that, 'action' means the same as 'agency': we speak of an episode as 'an instance of action', or say that some philosopher is exploring the field of 'action'—not meaning 'stuff that is done', but rather the conditions something must satisfy if it is to count as *done*. Agency matters greatly in philosophy. The morality of conduct concerns what we do, as distinct from what happens to us—the movements we make, not the spasmodic twitches that we cannot avoid—and there are philosophical problems about just what this involves. I take this concept on trust, however, making it the frame of my whole inquiry; and in my rare mentions of it I shall call it 'agency', not 'action'. That frees 'action' for use purely to designate stuff that is done, in contrast to 'act', which is my vehicle for the count concept, the notion of individual, countable things that are done.

An act is an event of a certain kind. The shout that he gave was an event; if his giving it was an exercise of human agency, then it was also an act. Thus:

An act is an event that is an instance of agency. We do not yet deeply, analytically understand the concept of *agency*, and that limits our grasp of *act*, which contains it.¹ What unfits the latter for theoretical use, however, is its well understood ingredient, namely the event concept. This concept behaves well when kept in its place, but that is not in disciplined theories.

¹ I disagree with this: 'If. . . actions are events, a proper understanding of action—including intentional action—requires a proper understanding of events.' Alfred R. Mele, 'Recent Work on Intentional Action', p. 199. We need to understand *event* to understand *actions* (which I call *acts*), but not to understand *action*—whether this is stuff that is done or the universal agency.

Students of it often refer to acts through gerunds, that is, verb derivatives ending in 'ing'. They are apt to refer to *the catch he made* as *his catching of the ball*. That, although correct, is risky because it gets confused with *his catching the ball*, which does not name an event at all. This mix-up has led some into philosophical error. To get an intuitive sense of how the two differ, consider how 'his catching of the ball' behaves like 'the cover of the ball' or some other phrase standing for a thing-like entity:

- It includes an indirect object ('of the ball').
- 'His' can be replaced by articles ('the catching of the ball', 'a catching of the ball').
- An adjective can precede the gerund ('his lucky catching of the ball').

For reasons like these, 'his catching of the ball' is called a *perfect* nominal, meaning that it has become perfectly noun-like, its parent verb having lost all its nature as a verb. In contrast, 'his catching the ball' has a conflicting set of grammatical properties, which it shares with the propositional 'He catches the ball'.

- It includes a direct object.
- An adverb can precede the gerund ('his brilliantly catching the ball').
- It can be negated ('his not catching the ball').
- It can be modified with tenses ('his having caught the ball').
- It can be modified modally ('his having to catch the ball').

No articles, no 'of the ball', no preceding adjectives. 'His catching the ball' is called an *imperfect* nominal, because although it behaves in some ways like a noun phrase—e.g. it

can be the subject of a sentence—its parent verb is, in Zeno Vendler's phrase, still 'alive and kicking' inside it.¹

If this quick survey leaves you unconvinced, it need not matter much. I shall keep out of trouble by referring to events not with gerunds but rather through so-called 'derived nominals'—event sortals such as 'appointment', 'birth', 'collapse', 'departure', 'earthquake' and so on. Here are some that are specifically kinds of acts:

apology, argument, baptism, burial, climb, dance, dismissal, fight, frown, gesture, greeting, hug, intervention, kick, lockout, punch, quip, refusal, resignation, shout, smile, speech, stroll, tackle, takeover, theft, tracheotomy, transplant, visit.

Those words are perfectly nouns: they take adjectives, can be pluralized, and take articles; 'ingratiating smile', 'refusals', 'a transplant', 'the speech'. The kick that he gave her is grammatically on a par with the ring that he gave her; so is the apology that she extracted from him. Events are things that happen.² Physical objects are things that do not happen. That is not a mere fact about how we use 'happen': there is a metaphysical basis for it, though I shall not go into it here.

The event concept is good for giving small, vague bits of news, but not for use in hard-edged theories. Two things go wrong, for example, when a philosophical inquiry into behaviour is expressed in terms of the act concept. **(i)** The analysis loses scope, because much of the truth about how people behave is not about their acts. For example, we might be concerned with the fact that *She did not warn him*, or that *She closed at least one of the gates but not more than three*. In neither case can we cleanly say what act of hers interests us. Behavioural facts that are naturally expressed

¹ Almost everything in the present section is derived from Zeno Vendler, 'Facts and Events'. These ideas of Vendler's have been widely accepted and further developed, most recently by Alessandro Zucchi, *The Language of Propositions and Events*.

² This phrase is the perfect title of J. E. Tiles' book *Things that Happen*.

with help from negation or disjunction usually lie beyond the reach of the act concept, which thus tethers us, preventing us from ranging across our whole proper territory. **(ii)** The event/act concept creates needless problems. Intending to slap him mildly, she in fact slapped him hard: was *the slap* that she gave him intentional? You can make a case for Yes and one for No; or you can say that 'The slap was intentional' is true in one sense and false in another, or that the slap was intentional under one description but not under another. The question must be faced if the act concept is your topic; but if your concern is with intentions, you need not slog through all this. There is no mystery about the case. What happened was that she intended to slap him mildly, and did slap him hard. If we say, more stiltedly, that she intended it to be the case that *she slapped him mildly*, and in fact she slapped him hard, we make explicit that she intended one fact to obtain but made a different one obtain instead. That is the whole story. We had a 'problem' only because we forced our account of her intention into the constricting mould of the act concept, which pushed it out of shape and then dropped it into quicksand.

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 quarrelled; there was a shower because rain fell; and so on.¹ The only event-using statements that are not simply expressible in other terms are the ones that stir up dissension among theorists: 'When he wins the event with his final jump, the jump is the victory'; 'Two events cannot have exactly the same causes and effects'; 'The fall of this sparrow could have occurred later', '. . . could have

had a different trajectory', '. . . could have been the fall of a different bird'. These have to be wrestled with when the event concept is one's *topic*; but they do not lie across the path to my present goal of finding the best way to think about behaviour.

If my present work has an obvious predecessor, it is Lars Bergström's *The Alternatives and Consequences of Actions*. That work's chances of being helpful are lessened by the heavy use it makes of an act concept. Also, the concept is peculiar: if I reply loudly, Bergström would have it that my reply is one act and my loud reply is another; and he speaks of one act as a 'version' of another, as though acts were stories.

10. The grammar of the 'by'-locution

Previous writers on the 'by'-locution have nearly all approached it through the act concept, asking what the sentence 'She signalled by waving her arm' says about how her *signal* related to her *arm-wave*. I, for one, wasted much time peering at 'by' through the lens of the famous thesis that if she signals by waving then her signal is her wave. We were all wrong to force the act concept into a story so inhospitable to it. I say that for two reasons.

(i) One is that plenty of 'by'-statements clearly have nothing to do with acts as ordinarily understood. 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. These are normal 'by'-statements, but the phrases '[his] never once thinking of her during the whole voyage' and '[his] continually remaining sensitive to any slights to her good name' don't strike one as reports on *acts* that he performed. There are countless such examples:

¹ Donald Davidson argues, on the contrary, that we should unpack 'Adam and Eve quarrelled' into 'There was a quarrel, and Adam and Eve took part in it', not vice versa. For references and counter-arguments see my *Events and their Names*, Chapter 11.

He broke the record by not speaking to anyone for five weeks; He upset her by how loudly he cracked his knuckles; She kept him off-balance by treating him nicely every second time they met. There is no clean way to handle these as relatings of act to act.

(ii) 'She signalled by raising her hand' does involve acts, because it entails that a signal and a gesture were performed. Even it, however, has no trace of the act concept on its surface; if that concept is to enter the story, it must be dragged in. The sentence has the surface form which I have noted as common to all 'by'-statements: a fully sentential clause ('She signalled. . .'), the word 'by', and 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', 'She brought down the government by not intervening in the debate', and 'She signalled by raising her hand'. The first item, obviously, states a whole proposition about how the person behaved. It might report an act, but often it does not: the 'by'-locution as such does not force the act concept into that initial sentential clause.

The third item, the noun phrase containing a gerund, is trickier. It seems clear that in 'She signalled 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'. The best way to see 'She signalled by raising her hand', therefore, is as ending with the complete gerundial nominal 'her raising her hand'. That is an imperfect nominal, which refers to the fact

that she raised her hand; or so I have argued, pointing out a series of grammatical features which it shares with whole sentences and not with such act-names as 'the movement she made with her hand'.

So the 'by'-locution as such does not involve the act concept. The form of it is: *a proposition about behaviour—'by'—a proposition about behaviour*. That is precisely the form of the analysans in my 'namely' analysis.

I have expressed the latter using the phrase 'something that he did', which could quantify over acts; so it might be thought that I have acts lurking in the background after all. If that were right, my analysis would not cover all the ground: as we have already seen, 'He fulfilled her fears' had better not mean anything of the form 'Some act of his had RP'. To avoid being hemmed in, I construe 'something that he did' to mean 'some fact about his behaviour'. I have said so explicitly a few times, and I now declare that to be the position I am taking. Each 'by'-statement, I assert, means something of the form: *Some fact about x's behaviour has RP, namely the fact that. . .* This requires that the relational properties in question be ones that facts can have. So indeed they are, as I shall show in Section 14.

When I speak of 'facts about behaviour', I seem to imply that I have in my ontology some stuff called 'behaviour'—or 'action', a term we have already encountered standing for stuff that is done. Perhaps I could accept that implication, on this basis:

There is no trouble in the concept of *what is done*. The clumsy awkwardness of the act concept comes from its way of cutting up what is done into things that are done, that is, comes from its nature as a count concept. Behaviour or action is of the same ontological kind as acts, differing from it only as mass from count—as grass differs from blades, footwear from

shoes, cash from coins. So although I refuse to work with the act concept, I have no qualms in quantifying over items or portions or stretches of behaviour.

Even if that is right, though, I do not want to owe you a metaphysics of behaviour. Of course there is behaviour, some of which can be sliced into acts; but I need not give either of these a ground-floor place in my enterprise. What I call 'facts about behaviour' are really about people, specifically about how they behave, just as facts about heights are about how high things are. If I ask you to 'tell me about her behaviour', you are less likely to begin 'Her behaviour was. . .' than to begin 'She. . .'.

11. Intrinsic behavioural facts

'She thatched the cottage.' 'How?' There must be an answer to this: Nobody could thatch a cottage without there being some other fact about her behaviour which resulted in the cottage's having newly placed thatch on its roof. 'He raised his hand.' 'How?' There must be an answer to this too. It might be 'He raised his hand by holding it in his other hand and hoisting it like a flag', or 'He raised his hand by tying it to a crane-hook and starting the crane'. It is of course more likely that no such intermediate behaviour was involved, and that he raised his hand by just raising it, and not through any other mode of behaviour that he could have embarked on as a means to getting his hand up. In such a case I shall say that he *immediately* raises his hand.¹ Even when he raises his right hand by hoisting it with his left, he immediately moves the latter. Most human behaviour involves immediately moving one's limbs or vocal cords.

Or so I believe, but some philosophers disagree. Accord-

ing to them, all action starts with a voluntary *act of the will* or *trying* or *setting oneself to ϕ* , or the like, which does not consist in one's moving.² This implies that we never immediately move our limbs or vocal cords. I shall assume without discussion that this minority view is wrong; if it is right, I could revise this book to fit it.

It is sometimes uncontroversially the case that behaviour starts with the person's voluntarily doing something other than moving, e.g. redirecting his thoughts. (The verbal question of whether turning one's thoughts is properly called 'behaviour' is negligible.) Suppose for example that I want you to stop talking, and I think that my best chance is to get you to think that you have embarrassed me. I deliberately turn my thoughts onto some shaming episode in my past, making myself blush. If my plan works, then *I have quietened you*, which entails that some fact about my behaviour has resulted in your being silent; and it is not a fact about how I moved. From now on I shall simplify things by setting aside all cases like this, and pretending that all behaviour involves moving. The only harm that this pretence might do to the work will be noted in Section 33.

When Agent immediately raises his hand, the question 'How?' has an answer: 'He raised his hand by immediately raising it.' This is unlike most instances of the form 'He ϕ ed by π ing' in that here 'He π ed' entails that he ϕ ed. There is no mystery about that, however. Whenever someone ϕ s mediately, there is some value of π such that **(i)** 'He π ed' does not entail 'He ϕ ed' and **(ii)** he ϕ ed by π ing. That is what it is to do something mediately. When Agent raises his hand immediately, there is *ex hypothesi* no value of π satisfying those two conditions—merely one that satisfies **(ii)**.

¹ When Agent ϕ s by π ing, I shall say that he π *more immediately* than he ϕ s. We can thus easily define the uncomparative use of 'immediately' out of its comparative use. This use of '(im)mediate' has of course nothing to do with the direct/mediated distinction that I discuss in other chapters.

² H. A. Prichard, 'Acting, Willing, Desiring'; Jennifer Hornsby, *Actions*, chapter 3.

Does any plain English sentence mean, for some value of ϕ , that the subject ϕ ed immediately? Here are some candidates:

- He nodded.
- She clapped her hands.
- She snapped her fingers.

Someone might get his head to move back and forth by attaching it to an eccentric gear etc., but that would not be *nodding*, it seems; the meaning of 'nod' rules it out; and similarly with the other two. It does not follow that 'She nodded' means that she moved her head immediately. (I thought it did, until Thomas McKay came to my aid.) Suppose that someone has an infirmity which has destroyed her proprioceptive body image: she has lost her sense of how it feels, from the inside, to move thus or so. On a certain occasion she gets her head to move up and down, meaning this as 'Yes' to a question. Unable to do this immediately, she achieves it by watching herself in the mirror, rapidly trying out various micro-movements, and eventually hitting on the right ones to get her head to move as she wants it to.¹ Looking at her, we would say 'She nodded', and when she explained how she did it we would not retract. The verb 'to nod', in short, does not permit such a wide range of values of π as does 'to raise one's hand'; nor do 'to clap', 'to kick' and some others. Yet the ordinary meanings of these verbs, though narrow, still leave *some* room for 'How?' to receive

answers other than 'By doing it immediately'.

If I am wrong about that, so be it. The point does not matter greatly, because it only concerns what meanings are provided for in plain English. There are what we might call *intrinsic facts* about behaviour, namely the ones I report in the form 'She immediately ϕ ed'. We need to be clear about how these relate to non-intrinsic facts, such as that she boiled the eggs or kept faith with her friend; but whether English can express them without help from 'immediately' is of no great moment.

Philosophers have sometimes spoken of 'basic acts', in a sense which connects with intrinsic facts about behaviour. When Agent immediately raises his hand, they would say that he thereby performs a basic act. Here as so often the act concept makes needless trouble. If someone signals by waving her hand, and if the wave is a basic act, then is the signal the wave? If it is, then the signal is basic, which makes every act basic, rendering 'basic' idle. If it is not, then the person in waving performs two acts—a signal and a wave—and the floodgates are open to her performing hundreds. Wrestling with this conundrum is a high price to pay for *disadvantage* of working with the act concept. Facts about behaviour create no such difficulty. That she signalled is different from the fact that she waved, but who would doubt that there are thousands of facts about how a person behaves at a given time?

¹ For details, see Oliver Sacks, 'The Disembodied Lady'.