

–INGS AND –ERS

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Abstract

This paper is about the semantic structure of verbal and deverbal noun phrases. The focus is on noun phrases which describe actions, perceptions, sensations and beliefs. It is commonly thought that actions are movements of parts of the agent's body which we typically describe in terms of their effects, and that perceptions are slices of sensible experience which we typically describe in terms of their causes. And many philosophers hold that sensations and beliefs are states of the central nervous system which we generally describe in terms of their typical causes and effects. For example 'Brutus's killing of Caesar' is thought to describe a movement of a part of Brutus's body – e.g. the thrust of an arm – in terms of one of its effects, namely, Caesar's death. And 'Hyman's visual perception of a table in front of him' is thought to describe the visual experience I'm having right now in terms of its cause. The object of the paper is to show that these doctrines misrepresent the semantic structure of verbal and deverbal noun phrases.

1

I shall begin with a quotation from a paper by Wilfrid Sellars. In the passage that I want to quote, Sellars makes a comment about the sentences 'Jones has an impression' (he means some kind of visual impression) and 'Jones wore a smile'. This is what he says:

Another way of putting this is to draw a distinction between *real* relations, such as 'to the left of', and *nominal* relations, such as 'has' or 'wore'. The 'nominal' character of the latter would be bound up with their eliminability in accordance with the schema 'x is R_n to a N_v ↔ x V' where 'R_n' stands for the nominal relation, and 'N_v' for the verbal noun corresponding to the verb 'V'.¹

Sellars is saying that the main verb in a sentence like 'Jones wore a smile' doesn't really express a relation. 'Jones wore a smile'

¹ Sellars 1967, p. 287.

may look like the sentence 'Jones wore a hat', but the appearance is deceptive. And this is connected with the fact that the 'nominal' relation expressed by the verb 'wore' in 'Jones wore a smile' can be eliminated, by paraphrasing the sentence as 'Jones smiled'.

As I shall explain shortly, I believe that Sellars is right about this. And I believe this has some important implications in the theory of action and perception, and in the philosophy of mind, which I shall spell out in due course. But first, I want to make some general comments about definite descriptions and about verbal and deverbal noun-phrases.

2

A definite description is sometimes defined as a term which consists of the definite article followed by a noun-phrase: e.g., 'the author of Waverley', 'the death of Socrates', 'the cube root of eight'. But this definition is unsatisfactory, for two reasons.

The first reason is that it excludes terms like 'Lewis's cat', 'Waverley's author' and 'Socrates' death', which don't begin with the definite article, but which mean the same as terms that do. And of course there are languages that have no articles – Latin and Polish, for example. But 'The author of Waverley was Scotch' has an exact translation in Latin or Polish, and the controversy about definite descriptions is just as much about the interpretation of these sentences as it is about their English counterparts.

The second reason is that part of the point of introducing the idea of a definite description is to contrast it with the idea of a proper name. But there are many proper names that consist of the definite article followed by a noun-phrase. For example, 'The King's Arms' is the name of a pub in Oxford, and 'The Origin of Species' is the name of a book. Neither of these names could be described as a 'meaningless mark', which is how Mill sometimes describes a proper name. All the same, they are proper names and not descriptions.²

I do not intend to define the term 'definite description'. But I

² Far from being meaningless, names quite often convey information about their bearers. For example, 'Kristin Lavransdatter' is the name of a woman whose father was called Lavran, 'Discours de la méthode de bien conduire sa raison, et chercher la vérité dans les sciences' is the name of a book, and 'I can't believe it's not butter!' is the name of a margarine.

shall use it broadly enough to include any term which means the same as one which consists of the definite article followed by a noun-phrase, and whose meaning we need to be aware of, in order to understand a sentence in which it occurs. This includes the cases where we use the genitive case instead of the definite article and it excludes proper names. It also includes 'the glasses' in the sentence 'The glasses are in the cupboard' and 'the butter' in the sentence 'The butter is rancid', despite the fact that these sentences cannot be paraphrased in the way that Russell paraphrases 'The author of Waverley was Scotch'. For some purposes, it would be useful to demarcate a smaller class of expressions. But for my purposes this will do fine.

3

There are three further points I want to make about definite descriptions and proper names. First, definite descriptions describe things belonging to various categories – including people ('the author of Waverley'), places ('the capital of Finland'), events ('the death of Socrates'), and periods of time ('the day after Christmas').

Second, there are expressions that fall in between proper names and definite descriptions, such as 'the Prophet Isaiah' and 'the City of Rome'. It is probably best to construe this sort of expression as a combination of a name and a *determinative*, i.e. an expression that indicates the kind of thing to which the bearer of the name belongs. When the word 'of' links the two, it is simply an appositive device, like the genitive of apposition in 'Dublin's fair city'. In fact the Latin for 'the City of Rome' is 'Urbs Roma', which is in the nominative case, and not 'Urbs Romae'.

The third point – which is the most important for my purposes – is that some definite descriptions are *relational* descriptions. By a relation, I mean a way in which one thing can stand to another thing, or several things can stand to one another.³ For example, there are relations of comparison, such as being hotter than or

³ Prior 1976, p. 29, remarks that the general notion of a many-termed relation seems to be a relatively recent one, and suggests that it was formed by about 1870.

It is debatable whether acts are relations. (See Kenny 1963, ch. 7.) Certainly, an act is not a way in which one thing can stand to another thing. For acts are dynamic, and not static. But the argument in this paper does not turn on the distinction between acts and relations, and for the most part I shall ignore it in what follows.

wiser than; spatial and temporal relations, such as being inside, west of or earlier than; cognitive relations, such as being a witness of or being acquainted with; and relations that result from actions, such as being the father of, the author of or the owner of. By a relational description, I do not mean a description of a relation. I mean a description that describes a thing in terms of a relation. For example, 'the author of *Waverley*' describes a man by mentioning a book he wrote. As P.F. Strawson puts it, it catches its man in a relation, and the relation is *being the author of*, or simply *authorship*. Again, 'Lewis's cat' describes a cat by mentioning its owner. So in this case the relation is *being the owner of*, or simply *ownership*. (Cats like to think of it as *co-habitation*; but we know better.)⁴

4

So much for definite descriptions in general. Now 'the death of Socrates' and 'the fall of Constantinople' are evidently definite descriptions. But they are definite descriptions of a particular sort, which I shall call *nominalizations of sentences*.

We can form a nominalization of a sentence by a simple procedure. We simply replace the main verb of the sentence with the corresponding verbal or deverbal noun and then either we put the subject of the sentence into the genitive case or we combine the noun with the definite article and insert prepositions where they are required, to link the resulting noun-phrase with the subject and object of the verb. In this way, 'Socrates died' yields 'Socrates' death' or 'The death of Socrates', 'Constantinople fell' yields 'Constantinople's fall' or 'The fall of Constantinople', 'Brutus killed Caesar' yields 'Brutus's killing of Caesar' or 'The killing of Caesar by Brutus', and so on.

The rules that govern the construction of these expressions are not very complicated. But it would be a digression to explain them here. The question I want to address is the following one: are these terms, or are some of them, relational descriptions? Do

⁴ Notice that if Smith himself is the man who shaves Smith, 'the man who shaves Smith' is a relational description of Smith. But although Brown may be the same man as Smith, 'the same man as Smith' cannot be a relational description of Brown, because one man cannot be the same man as another, and hence *being the same man as* is not, in the sense in which I am using the term, a relation. I regard 'the same man as Smith' as an elaboration (as opposed to an abbreviation) of 'the man Smith', which is comparable to 'the Prophet Isaiah' and 'the City of Rome', and hence not strictly speaking a definite description at all.

they sometimes catch the things we use them to describe in a relation? I shall begin with ‘the death of Socrates’.

5

Suppose ‘the death of Socrates’ *is* a relational description. Suppose it picks out an event – a death – in terms of a relation between this event and Socrates. What *is* the relation?

The answer that occurs to many people first is: *undergoing* or *being the subject of*. But arguably we don’t undergo our own deaths, unless we survive them. So it is probably wise to stick with *being the subject of*. Interestingly, though, Donald Davidson answers the question differently. He says that the relation is *dying*. In fact his example in the sentence I shall quote is flying, not dying. What he says is this:

Flying is basically a relation between an event of flying and a thing that flies.⁵

Davidson makes it clear that he is using the verb ‘fly’ intransitively. Hence, if what he says is true, dying is basically a relation between an event of dying and a thing that dies.

It sounds a little odd to say that dying is a relation, because the verb ‘died’, in the sentence ‘Socrates died’, doesn’t look as if it expresses a relation. Intransitive verbs don’t. But appearances can be deceptive. For example, the sentence ‘Socrates

⁵ Davidson 1985, p. 232. It should be noted that some remarks by Davidson (which were, however, made some fifteen years earlier) suggest that he may have intended a rather special interpretation of this claim. He writes as follows: ‘all I *mean* by saying that [‘Spirit of St. Louis flew’] has the logical form of an existentially quantified sentence, and that [‘flew’] is a [two-]place predicate is that a theory of truth meeting Tarski’s criteria would entail that this sentence is true if and only if there exists . . . etc.’ (Davidson 1980a, p. 143. I have replaced Davidson’s own example.) If we bear this remark in mind, and if we also make the assumption that all Davidson means by claiming that flying is basically a relation is that ‘flew’ is a two-place predicate, the claim amounts to this: a theory of truth for English meeting Tarski’s criteria would entail the theorem: ‘Spirit of St. Louis flew’ is true if and only if $((x) (\text{Flew} (\text{Spirit of St. Louis}, x)))$. It is no part of my purpose in this paper to dispute this claim.

Nor do I wish to deny that the only logical paraphrases of the sentences ‘Spirit of St. Louis flew gracefully’ and ‘Spirit of St. Louis flew’ which will ensure that the inference we make by dropping the adverb corresponds to a correct sequent of the predicate calculus will use a predicate with an extra place to represent the verb. As it happens, Davidson’s logical paraphrases can be improved on. For if we follow Davidson, the inference from ‘Brutus killed Caesar’ to ‘Caesar died’ does not correspond to a correct sequent; and there is a different method of paraphrase with which it does. (See Alvarez 1999, p. 225.) But the argument in this paper does not, in my view, provide any additional ammunition for someone unhappy with Davidson’s formalizations.

ate' is grammatically impeccable. But it has often been said – rightly or wrongly – that the verb 'ate' does express a relation here, and that we can paraphrase 'Socrates ate' as 'Socrates ate something', if we want to make this explicit.

If Davidson is right, the sentence 'Socrates died' is similar. The verb 'died' expresses a relation between Socrates and an event; and we can make this explicit by paraphrasing 'Socrates died' as 'Socrates died something'. In this case, the something is an event. But the pronoun 'something' commonly ranges over events. 'Something happened', we say. In fact it's the title of a novel.

So, if 'the death of Socrates' is a relational description, which relation is it to be, *being the subject of* or *dying*? The answer is that we don't need to choose. Because either way, if we claim that 'the death of Socrates' is a relational description, we imply that the verb 'died' in the sentence 'Socrates died' expresses a relation. If we choose *being the subject of*, the paraphrase of 'Socrates died' which makes this explicit packs more information into the noun: 'Socrates was the subject of a death'. If we choose *dying*, the paraphrase packs more information into the verb: 'Socrates died something'. But either way, we can decide whether 'the death of Socrates' is a relational description by deciding whether the verb 'died' in the sentence 'Socrates died' expresses a relation.

6

As I have said, it does not look as if it does. But it is easy enough to produce a paraphrase of 'Socrates died' in which the main verb does look as if it expresses a relation, even if we are reluctant to tolerate the artificiality, or grammatical oddity, of the paraphrases I mentioned a moment ago, because 'Socrates died' can be paraphrased as 'Socrates met his death'. Hence, we can decide whether 'the death of Socrates' is a relational description by deciding whether the verb 'died' expresses a relation in the sentence 'Socrates died', despite not appearing to; or whether, on the contrary, the verb 'met' doesn't express a relation in the sentence 'Socrates met his death', although it looks as if it does.

In fact 'Socrates met his death' is an example of a fairly common construction in English. One can take a bath and have a chat. One can make a choice or a promise. And so on. Often the main verb in this kind of sentence will be one of a limited number of common verbs, such as 'have', 'do', 'give', 'make' or 'take'. But it is sometimes cognate with the noun-phrase. For example, if

Socrates lived well and died peacefully, then he lived a good life and died a peaceful death. Sentences like 'Socrates took a bath' are said to have eventive objects; and sentences like 'Socrates died a peaceful death' are said to have cognate objects.

Now as we saw at the beginning, Sellars claims that the verb 'wore' in the sentence 'Jones wore a smile' doesn't really express a relation; and he says that this is bound up with its eliminability. In other words, it is bound up with the fact that 'Jones wore a smile' can be paraphrased as 'Jones smiled'. And of course if Sellars is right, the same applies to 'Socrates died a peaceful death', which can be paraphrased as 'Socrates died peacefully', and to 'Socrates had a chat, took a bath and met his death', which can be paraphrased as 'Socrates chatted, bathed and died'.

I think Sellars *is* right about this, but eliminability by paraphrase isn't by itself a convincing reason, because if one sentence is a paraphrase of another sentence, the second sentence is a paraphrase of the first. In other words, the relation *being a paraphrase of* is a symmetric relation. And Sellars does not provide a reason for holding that the verbs in 'Jones wore a smile' and 'Socrates met his death' don't really express relations, in spite of the superficial grammar of these sentences; instead of holding that the verbs in 'Jones smiled' and 'Socrates died' do really express relations, in spite of the superficial grammar of *these* sentences.

But there is a reason. In fact there are several, and I shall mention two. In the first place, if the main verb of a sentence with a cognate object expressed a relation, then as C.J.F. Williams shows, some evidently fallacious arguments would be valid. For example, 'Bonzo fights only what he hates; Bonzo fights many cats; *ergo* Bonzo hates many cats' is a valid argument; but 'Bonzo fights only what he hates; Bonzo fights many fights; *ergo* Bonzo hates many fights' is not.⁶

Secondly, a nominalization of a sentence in which the main verb expresses a relation is not a description of one of the relata. For example, take the sentence 'Rachel is the sister of Leah'. 'The x such that x is the sister of Leah' and 'the x such that Rachel is the sister of x ' are definite descriptions of the two sisters; but 'Rachel's being a sister of Leah' is not a description of either of them. Again, take the sentence 'Judas kissed Jesus'. 'The x such that Judas kissed x ' and 'the x such that x kissed

⁶ Williams 1989, p. 144.

Jesus' are descriptions of the parties to a kiss. But 'Judas's kissing of Jesus' is a description of a *kissing*, i.e. a kiss. And the *kissing* is neither the *kisser* nor the *kissed*.

But the nominalization of 'Socrates met his death' *is* a description of what Socrates met, when he met his death. Because of course when Socrates met his death, their meeting *was* his death. Hence Sellars was right. The main verb in the sentence 'Socrates met his death' does not express a relation. And so the paraphrase 'Socrates met his death' disguises the semantic structure of the sentence 'Socrates died', and not vice versa. It does not follow that there is no relation in which Socrates stood to his death. And in fact there is evidently at least one such relation, because Socrates committed suicide, and a man who commits suicide causes his own death. But it does follow that the verb 'died' in the sentence 'Socrates died' does not express a relation; and hence that 'the death of Socrates' is not a relational description.

7

What about a description that is derived from a sentence in which the main verb is transitive? For example 'Brutus's killing of Caesar' is a nominalization of the sentence 'Brutus killed Caesar'. Is 'Brutus's killing of Caesar' a relational description?

It is certainly possible to derive relational descriptions from the sentence 'Brutus killed Caesar', namely, 'the x such that x killed Caesar' and 'the x such that Brutus killed x '. But – assuming that Brutus alone killed Caesar, and that Caesar was his only victim – these describe Brutus and Caesar respectively. Whereas of course 'Brutus's killing of Caesar' mentions both of them, but describes an act. So what should we say about 'Brutus's killing of Caesar'?

The argument is exactly parallel to the argument about 'the death of Socrates'. 'The death of Socrates' cannot be a relational description unless the verb 'died' in the sentence 'Socrates died' expresses a two-place relation; and by parity of reasoning 'Brutus's killing of Caesar' cannot be a relational description unless the verb 'killed' in the sentence 'Brutus killed Caesar' expresses a *three*-place relation. In other words, if dying is basically a relation between an event of dying and something that dies, then killing is basically a relation between an act of killing, something that kills and a victim.

As with 'Socrates died', we can devise a (clumsy) paraphrase in which the main verb is nominalized and another verb which appears to express a relation is introduced, viz. 'Brutus performed the killing of Caesar'. (Paraphrasing 'A murdered B' as 'A committed the murder of B' is also clumsy, but less so.) But the result of this operation is another sentence with an eventive object; the performance of the killing and the killing performed are one and the same act; and hence the verb 'performed' does not express a relation.

8

I think it should be obvious by now that a nominalization of a sentence is never a relational description. Whether the main verb of the original sentence is transitive or intransitive, the verbal noun-phrase cannot catch the act or event or state of affairs reported by the sentence in a relation. In a sense, a relational description takes an indirect route to its destination, and reaches it via something else. For example, 'the author of Waverley' reaches Scott via Waverley, and the route from Waverley to Scott is authorship. But the route from 'Waverley' to Waverley is a direct one. If the argument so far is correct, a nominalization of a sentence has the semantic complexity of a definite description, but the directness of a name.

But why does this matter? It matters because it has become common among philosophers to make claims that imply that various nominalizations of sentences *are* relational descriptions. Here are some examples: first, nominalizations of sentences reporting acts, such as 'Brutus's killing of Caesar'; secondly, nominalizations of sentences reporting perceptions, such as 'my perception of a table in front of me'; thirdly, nominalizations of sentences reporting sensations and beliefs, such as 'Jack's headache' and 'Joe's believing that lemurs are carnivorous'. Nominalizations of sentences reporting acts are held to describe either movements of the agent's body or events inside the agent's body in terms of their effects – for example by Davidson and Hornsby. Nominalizations of sentences reporting perceptions are held to describe impressions or experiences in terms of their causes – for example by Grice and Strawson. And nominalizations of sentences reporting sensations and beliefs are held to describe events in or states of the nervous system in terms of their typical causes *and* effects – for example by Armstrong and Lewis.

9

I shall comment on all of these cases, beginning with action and perception. In Davidson's article, 'Agency', he invites us to imagine that a queen killed a king by pouring poison into his ear, and that she poured the poison by holding the vial by his ear and moving her hand, or rotating her wrist. In this case, Davidson argues, 'the killing . . . did not differ from the movement of the hand'.⁷ He says that these acts are not 'numerically distinct'.⁸

If Davidson is right, the queen's killing of the king *was* a movement of her hand; this movement was a killing because it was an act that caused a death; and if we describe it as a killing, we are describing it in terms of a relation – the causal relation between the act itself and its effect. This is how Davidson puts it: 'the description of an event is made to include reference to a consequence'.⁹ And when he returns to this theme in a later essay, he says the noun-phrases 'my poisoning of the victim', 'my killing of the victim' and 'my murdering of the victim' are expressions which 'describe actions . . . in terms of their causal relations'.¹⁰

Now for perception. Strawson states the doctrine I want to comment on as follows:

It is a necessary condition of an M-experience being the M-perception it seems to be that the experience should be causally dependent on corresponding M-facts.¹¹

This statement of the doctrine involves some technical terminology, but the terminology can be explained quite simply. First, an *M-experience* is the experience one is having if it sensibly seems to one as if one is perceiving an object or an array of objects. For example, right now it sensibly seems to me as if I am seeing a table in front of me. Secondly, an *M-perception* is an instance of someone's actually perceiving something. For example, right now I actually am seeing a table in front of me. And thirdly, an *M-fact* is the fact that an object or an array of objects exists. For example, right now there *is* a table in front of me.

If Strawson is right, the M-experience I am having right now qualifies as a perception of a table in front of me, and I can

⁷ Davidson 1980a, p. 58.

⁸ *Ibid.*, p. 56.

⁹ *Ibid.*, p. 58.

¹⁰ Davidson 1980b, p. 178.

¹¹ Strawson 1974, p. 73.

describe it as a perception of a table in front of me, only because it is causally dependent on the fact that there *is* a table in front of me. Hence, once again, the noun-phrase 'my perception of a table in front of me' is a relational description of the visual experience I am having now. It describes this experience by mentioning an object that was involved in causing it.

So we have two ideas. First, we have the idea that acts are changes in the agent's body – movements of his limbs, perhaps – which we typically describe in terms of their effects. For example, 'Brutus's killing of Caesar' describes a movement of a part of Brutus's body – the thrust of an arm, perhaps – in terms of Caesar's death. And secondly, the idea that perceptions are 'slices of sensible experience' – the phrase is Strawson's¹² – which occur in our minds because of the influence of the environment on our sense organs, and which we typically describe in terms of their causes.¹³

These two ideas stem from a long and powerful tradition in philosophical thinking, which encourages us to shrink our acts and experiences so that they fit within our skin. We imagine that the act itself is a change in the body's shape, or its position. Whatever else we mention is extraneous. And we imagine that a perception is an episode inside the skull, or in the soul. But Brutus's killing of Caesar cannot be a movement of Brutus's arm, because if it were, 'Brutus's killing of Caesar' would be a relational description of it: it would describe the movement in terms of its relation to a death. And my perception of a table in front of me cannot be an episode inside my skull or a purely spiritual occurrence, because if it were, 'my perception of a table in front of me' would describe this episode in terms of its relation to a table. Hence, the semantic structure of these descriptions disproves the imaginary conception we have inherited of the things that they describe.

But if acts are not movements of the agent's body, which we typically describe in terms of their effects, and if perceptions are not 'slices of sensible experience', which occur in the minds of

¹² Strawson 1979, p. 43.

¹³ The analogy between these ideas is noted by Jennifer Hornsby, who writes as follows: 'If I am right about action, and if those who have recently advocated causal theories of perception are right about perception, then there is an obvious analogy between the concepts. To describe an event as a perception (a perceiving of something) is to describe it in terms of its causes: to describe an event as an action is to describe it in terms of its effects.' Hornsby 1980, p. 111.

sentient animals, and which we typically describe in terms of their causes, what are acts and perceptions?

One plausible answer is that acts and perceptions are not things that we typically describe in terms of relations: they are themselves relations, or better, instances of relations. Thus a perception is an instance of a cognitive relation, obtaining between a sentient animal and a perceptible object; and an act is an instance of causation, obtaining between an agent and an event. For example, Brutus's killing of Caesar was Brutus's causing of Caesar's death. And Brutus's extending of his arm was Brutus's causing of this extension. Hence both of these acts are causings; and causings are instances of the relation expressed by the verb 'cause'.¹⁴

10

Next I want to say something in turn about sensations and about beliefs. One of the examples I gave earlier of a relational description was 'Lewis's cat'. I picked this phrase in honour of David Lewis, and with a particular passage from an article by Lewis in mind. The article is 'Mad Pain and Martian Pain', and Lewis states the doctrine that he wants to defend in it as follows. 'The concept of pain,' he writes, 'or indeed of any other experience or mental state, is the concept of a state that occupies a certain causal role, a state with certain typical causes and effects.' He continues as follows:

If pain is identical to a certain neural state, the identity is contingent. Whether it holds is one of the things that varies from one possible world to another. But take care. I do not say that here we have two states, pain and some neural state, that are contingently identical, identical at this world but different at another. Since I'm serious about the identity, we have not two states but one. This one state, this neural state which is pain, is not contingently identical to itself. It does not differ from itself at any world. Nothing does. What's true is, rather, that the concept and the name of pain contingently apply to some neural state at this world, but do not apply to it at another. Similarly, it is a contingent truth that Bruce is our cat, but it's wrong to say that Bruce and our cat are contingently

¹⁴ See above note 3.

identical. Our cat Bruce is necessarily self-identical. What is contingent is that the nonrigid concept of being our cat applies to Bruce rather than to some other cat, or none.¹⁵

According to Lewis pain is a neural state. But if I call this neural state 'pain', I describe it in terms of its typical causes and effects. For example, if a headache is keeping me awake, it is a neural state that is keeping me awake, whether I realize this or not. And if I *say* that a headache is keeping me awake, I pick out this neural state by implicitly adverting to the kinds of events by which it is typically caused, and the kinds of events that it typically causes.

But take care. 'The kinds of events by which it is typically caused' does not mean the kinds of events by which a particular *instance* of the state is typically caused. An instance of the state has, no doubt, its causes and effects; but it has no *typical* causes and effects. It cannot be caused by one kind of thing in typical cases, and by another kind of thing in atypical cases, because an instance has no cases. It does not recur. 'The kinds of events by which it is typically caused' means the kinds of events by which typical instances of this state are caused, and 'the kinds of events which it typically causes' means the kinds of events which typical instances of this state cause.

Lewis holds that whatever state pain is, it could have been a different state. If neural state X is the state that occupies the causal role we associate with pain, then pain *is* neural state X. But it could have been state Y. Because state Y could have occupied this causal role instead, if (as Lewis puts it) 'the relevant causal relations had been different'. Hence, he also holds that if I use the word 'pain', it is a contingent fact that the name I use applies to the state it does apply to. It is a contingent fact that 'pain' applies to neural state X, in the same way as it is a contingent fact that 'Lewis's cat' applies to Bruce.

But if the concepts of pain and headache are the concepts of states with certain typical causes and effects, it also follows that 'the pain in Jack's knee' and 'Jack's headache' are *relational* descriptions, since they describe states in terms of their causal relations. As I explained earlier, they take an indirect route to their destination, and reach it via something else. 'Lewis's cat' reaches Bruce via Lewis, and the route from Lewis to Bruce is ownership. And if the concepts of pain and headache are the

¹⁵ Lewis 1980, p. 218.

concepts of states that occupy a certain causal role, then 'the pain in Jack's knee' and 'Jack's headache' also take an indirect route to the states they describe, via the kinds of events which pains in knees and headaches are typically caused by, and the kinds of events which they typically cause.

11

Now consider the sentence 'Jack has a headache'. I hope it is clear that the verb 'has' in this sentence is being used in the same way as the verb 'met' in the sentence 'Socrates met his death', the verb 'wore' in the sentence 'Jones wore a smile' and, closest of all, the verb 'has' in the sentence 'Jack has a nosebleed'. The verb 'has' in these two sentences – 'Jack has a headache' and 'Jack has a nosebleed' – is not being used to express a relation. It is simply a common verb – like 'take' and 'make' – combined with an eventive object.

It is sometimes said that sensations are not *objects* that we experience, but kinds *of* experience; or that sensations are not *things* we can be aware of, but *states* we can be in. But if we say one of these things, we run the risk of seeming to deny what is obviously true, namely, that we can experience or be aware of sensations. And we impose a restriction on the use of the words 'object' and 'thing' which a special tone of voice or the use of italics is sometimes expected to convey, but cannot possibly explain. However, we can steer clear of these unsatisfactory claims without missing the important point that having a headache is not a matter of standing in a relation to something, and *a fortiori* that it is not a matter of standing in a cognitive relation to something.

So, like 'Socrates met his death' and 'Jones wore a smile', the sentences 'Jack has a headache' and 'Jack has a nosebleed' combine a common verb with an eventive object. And just as 'Socrates met his death' can be paraphrased as 'Socrates died' and 'Jones wore a smile' can be paraphrased as 'Jones smiled', 'Jack has a headache' can be paraphrased as 'Jack's head aches' and 'Jack has a nosebleed' can be paraphrased as 'Jack's nose bleeds'. (I shall ignore the difference between the habitual 'bleeds' and the progressive 'is bleeding'.)

But now it should be obvious that 'Jack's headache' and 'Jack's nosebleed' cannot be relational descriptions. Because they are both nominalizations of sentences, and a nominalization of a sentence cannot be a relational description. 'Jack's headache' – which means

the same as 'the aching of Jack's head' – is a nominalization of the sentence 'Jack's head aches'; and 'Jack's nosebleed' – which means the same as 'the bleeding of Jack's nose' – is a nominalization of the sentence 'Jack's nose bleeds'. Hence, 'Jack's headache' and 'Jack's nosebleed' cannot catch the things they describe in a relation, any more than 'Socrates' death' and 'Jones's smile' can. But if 'Jack's headache' isn't a relational description, it cannot pick out a state in terms of its typical causes and effects. Hence, the concept of headache cannot be the concept of a state that occupies a certain causal role.

The idea that the terms in which we typically describe sensations only apply to them contingently has been debated extensively. Saul Kripke (among others) has argued that this idea is false. Whereas David Lewis (among others) has argued for the opposite view. But the question of whether these noun-phrases are relational descriptions has been neglected. Perhaps this is because philosophers are reluctant to acknowledge that grammar has a bearing on philosophy. Everyone agrees that we should be open-minded about the sorts of propositions that can prove or disprove philosophical doctrines. No one wants to argue against being open-minded. For example, if a philosopher attempted to prove the existence of God from the premise that some things move, or from the premise that ginger is hot, no one would object that kinematics cannot have a bearing on theology, or that God's existence cannot be deduced from a fact about root vegetables. But grammar is not a popular source of knowledge among philosophers these days.

As it turns out, the fact that 'Jack's headache' is a nominalization of a sentence does not tell us *much* about sensations. It does not even tell us enough to distinguish between headaches and nosebleeds, and as we know, these are very different things. But it tells us enough to know that the concept of headache is not the concept of a functional state, for example, one that will turn out to be a state of the nervous system. For that matter, the fact that 'Jack's nosebleed' is a nominalization of a sentence does not tell us much about nosebleeds either. But it does entail that the concept of a nosebleed is not the concept of a functional state of the venous system.

12

When we turn to beliefs, one preliminary point needs to be borne in mind. The term 'belief' – like the terms 'statement',

'announcement', 'assertion', 'claim', etc. – can be used in two distinct but connected ways. It can be used to mean *either* something that is believed *or* an instance of someone's believing something. And, as has often been noted, these are quite different things. Something believed is, in one familiar use of this term, a *proposition* – an item in a creed, so to speak. Whereas someone's believing something is an instance of a state of mind – the credence rather than the creed.

Suppose, for example, that Joe believes lemurs are carnivorous. If Joe's belief is true or false, denied by Jim, or consistent with some evidence, it is *what Joe believes* – namely, that lemurs are carnivorous – that is true or false, denied by Jim, or consistent with some evidence. An instance of a state of mind is not the sort of thing that *can* be true or false, etc. If it were, it would also be the sort of thing that can be entailed by Euclid's axioms. But if Joe's belief is silly or unreasonable, it is *Joe's believing that lemurs are carnivorous* that is silly or unreasonable. In other words, it is silly or unreasonable of Joe to believe this. It cannot be silly or unreasonable that lemurs are carnivorous. Whose silliness or unreasonableness would it be?

Now if it is claimed that the description 'Joe's belief that lemurs are carnivorous' applies to whatever state occupies a certain causal role, 'Joe's belief that lemurs are carnivorous' must be taken to mean Joe's believing that lemurs are carnivorous, and not what Joe believes. Because what Joe believes is evidently not a state. But 'Joe's believing that lemurs are carnivorous' is a nominalization of the sentence 'Joe believes that lemurs are carnivorous'. Hence it cannot be a relational description, and it cannot pick out a state in terms of its typical causes and effects. Hence the claim that 'Joe's belief that lemurs are carnivorous' applies to whatever state occupies a certain causal role is false.

13

Finally, I want to consider an objection, which is directed in particular towards my remarks about descriptions of acts. I said earlier that if Brutus alone killed Caesar, the relational description 'the x such that x killed Caesar' describes Brutus. But to kill a man is to cause his death. Hence, if Brutus alone killed Caesar, 'the x such that x caused Caesar's death' must also describe Brutus. But Davidson denies that this is strictly true. He writes as follows:

although we say that the agent caused the death of the victim, that is, that he killed him, this is an elliptical way of saying that some act of the agent . . . caused the death of the victim.¹⁶

If this is correct, 'Brutus's killing of Caesar' must also be an ellipsis, and it may appear that restoring the missing phrase will reveal a relational description, such as 'the act of Brutus's which caused Caesar's death', which evidently does describe an act in terms of one of its effects. So we need to consider two questions. First, is 'Brutus killed Caesar' an ellipsis? And secondly, if it is, does it follow that 'Brutus's killing of Caesar' is, after all, a relational description?

It is not difficult to see why philosophers invoke ellipses. A hidden piece of meaning can preserve a semantic theory in much the same way as a hidden heavenly body can save an astronomical one. But in this case there are several reasons for thinking that Davidson is mistaken. In the first place, 'Brutus killed Caesar' is not grammatically incomplete as it stands, unlike, say, 'Peter is tired but James is not [tired]', 'I'm happy if you are [happy]' and '[It is] lovely to see you'.

Secondly, the supposedly missing expression is neither an exact copy of the antecedent, as it is in the first two standard examples mentioned above, nor even precisely recoverable, as it is in all three. Is the complete sentence supposed to be '*Some act of Brutus's killed Caesar*' or '*Brutus's doing or failing to do something killed Caesar*'? Or are we supposed to delete the word 'killed', producing '*Some act of Brutus's caused ~~killed~~ Caesar's death*', or '*Brutus's doing or failing to do something caused ~~killed~~ Caesar's death*'?

Thirdly, if saying that Brutus killed Caesar were an elliptical way of saying that some act of Brutus's caused Caesar's death, it would not be possible to understand the sentence 'Brutus killed Caesar' without knowing that if Brutus killed Caesar, he did so by doing or failing to do something else, just as it is not possible to understand the sentence 'Peter is tired but James is not' without knowing that if Peter is tired but James is not, then James is not tired. But with 'Brutus killed Caesar' this *is* possible. Many people believe that merely wanting someone to die, without doing anything about it, can sometimes cause that person's death. They are certainly mistaken. But it does not follow that they cannot understand the sentence 'Brutus killed Caesar'.

¹⁶ Davidson 1980a, p. 49.

Fourthly, 'Brutus killed Caesar' and 'Some act of Brutus's caused Caesar's death' do not have the same meaning. For if they did have the same meaning, then by parity of reasoning 'Brutus raised his arm' would mean the same as 'Some act of Brutus's caused his arm to rise'. But Brutus *could* raise his arm without doing so by doing or failing to do something else, because raising one's arm, unlike killing someone, is something one can do immediately. (Philosophers who deny this are at liberty to vary the example.) But one sentence cannot be elliptical for another unless they have the same meaning.

The only reply to this argument I am aware of is to claim that the sentence 'Brutus raised his arm' is ambiguous; that what it means depends upon whether or not the speaker has an immediate act in mind; and that in one meaning it is elliptical, but in the other not. But this is unconvincing. It is true that 'Brutus raised his arm' does not tell us whether he did so by doing something else. But 'Brutus raised his glass' does not tell us whether he did so by lifting it with his hand, or with a Heath Robinsonian contraption of some sort. This uncertainty does not imply that 'Brutus raised his glass' is ambiguous, or that in one meaning it is elliptical for 'Some event which was caused by some act of Brutus's caused his glass to rise'; and the corresponding uncertainty does not imply that 'Brutus raised his arm' is ambiguous, or that in one meaning it is elliptical for 'Some act of Brutus's caused his arm to rise'.^{17, 18}

For these reasons, I do not accept that 'Brutus killed Caesar' is an ellipsis. But suppose I am mistaken about this. Does it follow that 'Brutus's killing of Caesar' is a relational description, which

¹⁷ This point is argued at greater length in Alvarez 1999, pp. 235f. Cf. Parsons 1990, p. 116.

¹⁸ If the sentence 'Some act of Brutus's caused Caesar's death' can be paraphrased as 'Brutus killed Caesar by doing or failing to do something', and if we follow Davidson in using the term 'act' extremely liberally, so that failing to do something can also be an act, then 'Brutus killed Caesar' and 'Some act of Brutus's caused Caesar's death' are logically equivalent. For 'Brutus killed Caesar by doing or failing to do something' entails that Brutus killed Caesar. And Brutus could not possibly have killed Caesar except by doing or failing to do something. God may be able to kill a man immediately – by sheer volition, as it were – but not Brutus.

But logical equivalence does not imply sameness of meaning. There are many examples of logically equivalent sentences which evidently differ in meaning. For example, 'Socrates died' and 'Socrates died if and only if $2+2 = 4$ ' are logically equivalent, but it is clear that they do not have the same meaning, because ' $2+2 = 4$ ' means something, and so the addition of the phrase 'if and only if $2+2 = 4$ ' cannot leave the meaning of a sentence unaltered. Again, all tautologies are logically equivalent, but 'Either it's raining or it isn't' does not have the same meaning as 'Either he'll arrive on time or he won't'.

describes an act in terms of one of its effects? It does not. For if 'Brutus killed Caesar' is elliptical for 'Some act of Brutus's caused Caesar's death', then the nominalization of the first sentence is elliptical for the nominalization of the second, i.e. 'Brutus's killing of Caesar' is elliptical for 'some act of Brutus's causing Caesar's death'. But whatever this phrase may be thought to describe, it does not describe an act of Brutus's, because it does not describe an act at all. A causing of a death by an agent is an act; but a causing of a death by an act, if there is such a thing, is not. And if it does not describe an act, *a fortiori* it does not describe an act in terms of one of its effects. To suppose that it does is to confuse it with one of the relational descriptions which *can* be derived from the sentence 'Some act of Brutus's caused Caesar's death', namely, 'the act of Brutus's which caused Caesar's death'.

So the objection fails; and it seems that two mistakes conspired to produce it. The first is to detect ellipsis where there is no such thing. The second is to confuse the nominalization 'the killing of Caesar' and the relational description 'the x such that x killed Caesar'. In other words, it is to confuse a killing and a thing that kills. Or, in general terms, a *causing* and a *causer* or a *cause*. Davidson says, correctly, that 'my killing of the victim must be an action that results in the death of the victim'.¹⁹ But resulting in is not the same as causing. How are they related? The answer is simple. Let 'A' be the name of an agent and let 'E' be the name of an event. 'The causing of E by A' is a nominalization of the sentence 'A caused E'; and the causing of E is the act which results in E.

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¹⁹ Davidson 1980b, p. 178.

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