

Lecture 5: Facts and Events

1. Introduction

2. Facts

...2.1. Motivations for Realism

...2.2. Nature and Properties of Facts

...2.3. Non-basic facts

3. Events

...3.1. Motivations for Realism

...3.2. Nature and Properties of Events

.....3.2.1. Repeatability

.....3.2.2. Cardinality

Lecture 5: Facts and Events

1. Introduction

▪ So far, we have discussed the existence and nature of two candidate types of 'inhabitants' of our world: properties and objects. Here we turn to another two important candidates: facts and events.

▪ The debate over the existence and nature of these putative entities is a technical and difficult one. The effort, however, is fully justified: events and facts figure heavily in a number of debates in various areas of philosophy (e.g. philosophy of causation, philosophy of language, philosophy of mind, etc.), and the particular view that one takes of these categories has a number of serious repercussions further afield.

▪ With respect to our own syllabus, events and facts are *particularly* important as they are the two principal candidates for being the kinds of things that stand in relations of cause and effect (i.e. there are accounts of causation that take causes and effects to be events and competing accounts of causation that take them to be facts).

Lecture 5: Facts and Events

2. Facts

- Word of caution: this topic is host to a *considerable* amount of terminological (and in my view philosophical) confusion. With regards to terminology, note in passing that:
 - Some philosophers (e.g. Loux) acknowledge the existence of a category of states of affairs in addition to facts and events. The category of states of affairs is taken to be a category that includes both facts and possible facts, facts being understood as actual states of affairs or again states of affairs that obtain.
 - Other philosophers (e.g. Armstrong) also use the term 'state of affairs', but do so to simply refer to facts.
 - We will stick to facts.
- As per usual, the debate proceeds in two steps: (i) discussing the motivations for postulating the said categories, (ii) attempting to provide an analysis - or at least a partial analysis - of their nature.

Lecture 5: Facts and Events

2. Facts > 2.1. Motivations for Realism

- Our first argument follows a pattern that should by now be familiar. In a similar vein to the kind of move discussed in relation to properties, tropes and objects, the realist with respect to facts points to the existence of various kinds of singular terms that appear to refer to facts:
 - (1) 'The fact that Steven resolved the problem earned him a great deal of respect.'The realist argues that, to the extent that (1) is true, 'The fact that Steven resolved the problem' must correspond to a certain wordly entity, namely a fact. But 'the fact that [S]' construction isn't the only linguistic device thought to pick out facts. We also have the 'that [S]' construction:
 - (2) 'That that Steven resolved the problem earned him a great deal of respect.'...as well as so-called 'imperfect' nominalisations such as:
 - (3) 'Steven's resolving the problem earned him a great deal of respect.'(see Bennett 1988, Chapter 1)

Lecture 5: Facts and Events

2. Facts > 2.1. Motivations for Realism

- Our second argument for Realism is an extremely widely discussed one. It can be traced back to Russell and is currently endorsed by Armstrong and many others. It basically claims that we need to posit the existence of facts in order to provide an explanation (again in the metaphysical rather than causal sense) of the truth of true truth-bearers...
- Terminological interlude: a 'truth-bearer' is an entity that can have the property of being true/false. There is a certain amount of controversy over which kinds of things can be truth-bearers. Plausible candidates include beliefs, sentences and utterances (as well as a type of entity known by philosophers as 'propositions', but we needn't concern ourselves with this here).

Lecture 5: Facts and Events

2. Facts > 2.1. Motivations for Realism

▪ **Argument for Realism from truth-making.** (see Armstrong in Loux collection, pp 74-75) [1] There are true truth-bearers. [2] If a given truth-bearer X is true, then there exists something F – a truth-maker for X – such that, necessarily, if F exists, then X is true. Therefore [3] there are truth-makers. Furthermore, [4] these truthmakers cannot be either (a) objects + properties, or (b) objects + tropes. [5] the only plausible remaining candidate truthmakers are facts (it seems sensible to claim that the utterance of 'James is kind' is true because of James' being kind). Therefore [5] there are facts.

Justification for [4] (a). Consider the sentence 'James is kind'. The existence of James and the property of kindness isn't sufficient for the sentence to be true. Both items would exist if James were unkind and his friend Henry kind. Nevertheless, in these circumstances, James wouldn't be kind.

Justification for [4] (b). The existence of James and his kindness trope k is sufficient for the sentence to be true only if tropes are non-transferable (i.e. no person other than James can have k) and there are no good reasons to claim that they are.

Lecture 5: Facts and Events

2. Facts > 2.1. Motivations for Realism

There is now a large literature on the argument from truth-making. The best overview that I know of is Rodriguez-Pereyra's 'Truthmakers', now available on the course webpage.

- Finally, there is a third line of argument for the existence of facts, which claims that we need facts in order to account for the relation of causation. This has been met with an equally famous response due to Davidson, known as the 'Slingshot Argument' (see Davidson (1967) 'Causal Relations', in his *Essays on Actions and Events*). This in turn has generated a huge amount of subsequent discussion. Due to time considerations, I will have to leave this issue out for now. I *may* be able to squeeze it into the lecture on causation...
- Note: Realists with respect to facts will probably have to avoid the awkward phrase 'Facts exist.', which seems to commit a category mistake (although the more neutral 'There are facts.' seems ok).

Lecture 5: Facts and Events

2. Facts > 2.2. Nature and Properties of Facts

- Ok, let's grant the existence of facts, for sake of argument. Is there anything interesting that we can say about facts?
- The question of location. It is generally (although by no means invariably) conceded that facts, if anything, are abstract objects lacking spatiotemporal location. Indeed, there appears to be no sensible answer to a request to locate a certain fact in space or time. (e.g. where is my going to the office this morning / the fact that I went to the office this morning?).
- Identity conditions for facts. Facts have relatively strict identity requirements (as we will see shortly, matter are arguably different for events). Two facts are identical only if they 'involve' the same properties and objects. Thus, my arriving at the office and my arriving late at the office are considered to be two different facts, because they 'involve' two different relational properties: arriving-at and arriving-late-at. One might of course wonder *why* there is this requirement on fact identity...

Lecture 5: Facts and Events

2. Facts > 2.2. Nature and Properties of Facts

- The question of reduction. One natural answer to the previous question is to claim that facts are identical only if they 'involve' the same objects/properties, simply because they are 'made up' of objects and properties (or tropes), because they have objects and properties as constituents. Of course, as we saw a couple of slides up, treating facts as aggregates of objects + properties wouldn't work out if we want facts to do the truthmaking job we have in mind. However, some have claimed that facts are sums of objects + properties + a relation of exemplification. However, as we saw in lecture 2, this leads us into a regress (Bradley's Regress), which many find objectionable. Realists with respect to facts would perhaps be well-advised to be non-reductionists.
- Note that Armstrong hangs on to the idea that facts have properties and objects as constituents. However, rather controversially and, I would say, obscurely, he stops short of claiming that two facts that have identical constituents are thereby identical. Facts, according to him, are more than just aggregates.

Lecture 5: Facts and Events

2. Facts > 2.2. Nature and Properties of Facts

- A good overview of the literature on the nature of facts is: Vallicella (2000) 'Three Conceptions of States of Affairs' *Nous* 34:2, pp 237-259. I have put a copy on the course webpage.
- Before moving on to events, a quick word on an important area of debate in the literature on facts...

Lecture 5: Facts and Events

2. Facts > 2.3. Non-Basic Facts

- A basic fact is a fact involving an object having a property, or an n-tuple of objects entering an n-place relation.
- Candidates for non-basic facts include, but are by no means limited to:
 - disjunctive facts, as truthmakers for disjunctive sentences (e.g. 'My keys are either on the mantelpiece or in the kitchen drawer.')
 - negative facts, as truthmakers for negative sentences (e.g. 'My keys aren't on the kitchen table.')
 - indicative conditional facts, as truthmakers for indicative conditional sentences (e.g. 'If my keys are on the mantelpiece, they are not in the kitchen drawer.')
- For various reasons, there is a long tradition of scepticism with respect to the existence of these facts (Russell, Wittgenstein, Armstrong,...). The problem is to provide an alternative account of the truth of the relevant truth-bearers...

Lecture 5: Facts and Events

2. Facts > 2.3. Non-Basic Facts

- Disjunctive sentences. This is an easy one, disjunctive sentences have multiple truthmakers: they are simply made true by any fact that makes one of the disjuncts true.
- Negative sentences. A more contentious issue. There are a number of proposals on the market, including most notably an amendment the truthmaker principle: claiming that positive truth-bearers are made true by various facts whilst their negative counterparts are made true by the absence of these facts (for a further overview of this proposal, as well as a few others, including an appeal to higher-order facts, see Oaklander's entry on negative facts in the *Routledge Encyclopaedia of Philosophy* (now available on the course webpage), as well as the Rodriguez-Pereyra article mentioned above).
- Indicative conditional sentences. This is an *extremely* tricky topic. If you are interested in the issue I can provide you with further reading.

Lecture 5: Facts and Events

3. Events > 3.1. Motivations for Realism

▪ As was the case with facts, we have evidence for a commitment to events (occurrences, happenings,...) from a wide range of linguistic constructions. First of all we have a variety of nouns or noun phrases derived from verbs, verb phrases or even entire sentences:

(4) 'Jamie hasn't been the same since the birth.'

(5) 'Jamie hasn't been the same since the birth of his child.'

A subset of gerundial nominalisations, known as 'perfect' gerundial nominalisations, perform a similar function:

(6) 'Steven's swift resolving of the problem earned him a great deal of respect.'

Finally, it would appear that we refer to events by means of proper names:

(7) 'Inhabitants fled in droves as Katrina approached the coastline.'

Lecture 5: Facts and Events

3. Events > 3.1. Motivations for Realism

▪ Note that (6) is the perfect counterpart of (3) above. It is now widely accepted that imperfect nominals refer to facts, whilst their perfect counterparts single out events (following Vendler's (1967) *Linguistics in Philosophy*): the grammatical distinction supposedly reflects a semantic one. With respect to semantics, we have already seen that imperfect gerunds don't seem to be able to take spatiotemporal predicates. Some grammatical differences:

▪ In INs (but not PNs), the gerund can be negated, modalised or tensed (e.g. ⊗ Brutus' not stabbing of Caesar vs Brutus' not stabbing Caesar, ⊗ Brutus' having to stab of Caesar vs Brutus' having to stab Caesar, etc.)

▪ In PNs (but not INs), the nominal can be pluralised (e.g Brutus' stabbings of Caesar vs ⊗ Brutus' stabbings Caesar)

Lecture 5: Facts and Events

3. Events > 3.1. Motivations for Realism

▪ Leaving explicit mention of events to one side, there is also a long-standing view according to which the sentences lacking explicit event nouns nevertheless have an underlying logical structure that makes reference to (technically 'quantifies over') events. The supporting argument for this view was first put forward by Davidson (see Davidson, D. (1967) 'The Logical Form of Action Sentences', in his *Essays on Actions and Events*)...

▪ Consider the following sentences:

(8) 'Brutus stabbed Caesar.'

(9) 'Brutus stabbed Caesar violently.'

(10) 'Brutus stabbed Caesar violently with a knife.'

Note that:

- (10) entails (9) entails (8).
- there appears to be no upper limit, in principle, to the number of iterations of the procedure generating (9) from (8), or (10) from (9).

Lecture 5: Facts and Events

3. Events > 3.1. Motivations for Realism

▪ Call the 'Many Predicates Interpretation' of action sentences the view that the move from (8) to (9) or (9) to (10), etc., involves the introduction of different primitive relational predicates, taking different numbers of relata:

- (8) has the underlying structure Stabbed(B, C).
- (9) has the underlying structure Stabbed-violently(B, C).
- (10) has the underlying structure Stabbed-violently-with(B, C, K).

▪ Call the 'Quantification over Events' interpretation of action sentences the view that the move from (8) to (9) or (9) to (10), etc., simply involves conjoining new predications within the scope of an existential quantifier quantifying over events:

- (8) has the underlying structure $\exists e$ (Stabbing(B, C, e)) (i.e. there was an event e such that e was a stabbing of Caesar by Brutus)
- (9) has the underlying structure $\exists e$ (Stabbing(B, C, e) & Violent(e)) (i.e. there was an event e such that e was a stabbing of Caesar by Brutus and e was violent)

Lecture 5: Facts and Events

3. Events > 3.1. Motivations for Realism

- (10) has the underlying structure $\exists e$ (Stabbing(B, C, e) & Violent(e) & Done-with(K, e)) (i.e. there was an event e such that e was a stabbing of Caesar by Brutus and e was violent and e was done with a knife)

- **Argument for Realism from entailment.** [1] If the Many Predicates interpretation is true, then the entailment (8) \leftarrow (9) \leftarrow (10) \leftarrow etc must be explained in terms of a huge series of special rules of inference. [2] If the Quantification over Events interpretation is true, then the entailment (8) \leftarrow (9) \leftarrow (10) \leftarrow etc needn't be explained in terms of a huge series of special rules of inference: it can be simply explained by the application of a general rule of 'and-elimination'. [3] It is psychologically implausible to claim that we apply the huge number of rules mentioned in [1] in drawing the relevant inferences. Therefore [4] the Many Predicates interpretation is false.

- Note: here again, as we saw with respect to facts, 'Events exist.' seems like a weird way to phrase the Realist's metaphysical claim (although, again, the more neutral 'There are events.' seems ok).

Lecture 5: Facts and Events

3. Events > 3.2. Nature and Properties of Events

- Among those who hold that events do indeed exist, one finds a number of views as to what their nature is. Views on the nature of events can be helpfully classified with respect to the following two dimensions of variation:

- *Repeatability.* A theory of events takes events to be repeatable iff it holds that the same event can occur more than once.
- *Cardinality.* There are various pairs of event names that certain accounts take to name distinct events while others do not. In other words, certain views on events have the consequence that there are many distinct events whilst others hold that there are relatively few.

Lecture 5: Facts and Events

3. Events > 3.2. Nature and Properties of Events > 3.2.1. Repeatability

▪ Although the view is now no longer popular, a number of influential philosophers have claimed that events are repeatable (Chisholm, Montague,...). They have offered the following supporting argument:

▪ **Argument for repeatability of events from linguistic surface form:** [1] *There are true sentences of the form: (11) Jeffrey took the same walk last night as he did the night before. [2] If such sentences are true, then it is the case that a certain event was repeated a number of times. Therefore [3] events are repeatable.*

Reply: [2] is false, (11) can be paraphrased to avoid the apparent identity claim.

(11)* There is a route along which, Jeffrey walked last night, as well as the night before.

Note however, that some have argued that the paraphrase move cannot so easily be pulled off for every case analogous to (11).

Lecture 5: Facts and Events

3. Events > 3.2. Nature and Properties of Events > 3.2.2. Cardinality

▪ There is a variety of views with respect to the issue of cardinality, depending on the strictness of the identity conditions imposed on events. Here is a very brief overview of two famous proposals, the first offering fairly lenient identity conditions, the second offering considerably stricter ones.

▪ First proposal: e1 and e2 are identical iff e1 and e2 occupy the same spatiotemporal region (Quine, later Davidson,...). On this view, arguably, Brutus' stabbing of Caesar is identical to Brutus' violent stabbing of Caesar and indeed Brutus' killing of Caesar: all three events arguably occupy the same spatiotemporal region. This identity strikes many as the intuitively correct result. Consider however the case of a ball rotating whilst simultaneously heating up. On the Quinean/neo-Davidsonian view, the ball's rotating and the ball's heating up are taken to be identical events. Many take this to be a counterintuitive result.

Lecture 5: Facts and Events

3. Events > 3.2. Nature and Properties of Events > 3.2.2. Cardinality

▪ Second proposal: e_1 and e_2 are identical iff e_1 and e_2 (a) occur at the same time or over the same time interval, and (b) involve the same objects exemplifying the same properties (Kim). On this view, Brutus' stabbing of Caesar, Brutus' violent stabbing of Caesar and Brutus' killing of Caesar are arguably all distinct events, because they involve different relational properties (albeit not completely distinct: as Kim points out, there is arguably a relation of containment that obtains). The same goes for the ball's rotating and the ball's heating up. Here, as with the first proposal, we have case of satisfying some intuitions and violating others, except that here the first result seems wrong whilst the second seems right. For this reason, many believe that the correct level of strictness with respect to identity criteria for events lies between Quine and Kim, the former being to lenient, the latter being too strict.

Lecture 5: Facts and Events

3. Events > 3.2. Nature and Properties of Events > 3.2.2. Cardinality

▪ Incidentally, note that Kim's view individuates events as finely as facts. In fact, this may be no coincidence at all. When justifying the strictness of his identity conditions in response to complaints about his handling of the Brutus/Caesar events, Kim makes the following appeal:

'It is not at all absurd to say that Brutus' killing Caesar is not the same as Brutus' stabbing Caesar. Further, to explain Brutus' killing Caesar (why Brutus killed Caesar) is not the same as to explain Brutus' stabbing Caesar (why he stabbed Caesar).' (Kim 1993: 232)

But as Bennett points out in *Events and their Names*, Kim is employing imperfect nominalisations here, which, as we have seen, are generally taken to name facts rather than events. Things don't work out the same if one inserts perfect nominalisations into the quote.

Lecture 5: Facts and Events

3. Events > 3.2. Nature and Properties of Events > 3.2.2. Cardinality

- To finish off, I would just like to mention in passing a third influential proposal: e1 and e2 are identical e1 and e2 have the same causes and effects (early Davidson). This may indeed be true, but the proposal is difficult to evaluate. This is because, in order to determine whether or not e1 and e2 are identical, one must determine whether or not the events that they are the causes/effects of are identical, but to do *this*, one must determine whether or not e1 and e2 are themselves identical.

Lecture 5: Facts and Events

Next week... Modality: Necessity and Possibility

- Set reading: Loux textbook, Chapter 5 'The Necessary and the Possible'.