1 The Unity of Transaction

Aristotle’s list of the “categories of being” concludes with the mention of action and passion.\(^1\) What is immediately striking about this final pair is simply the fact that they are a pair, introduced in tandem and as complementary terms. The examples of action are burning and cutting; of passion, being burned and being cut. That action and passion are complements, and not mere neighbors on a list, reveals itself in the curious fact that together they exemplify a third category of being—that, namely, of relation.\(^2\) Aristotle says that the definition of action is “relative to” (pros ti) that of passion, and vice versa, so that neither of them is intelligible except in connection with the other. According to him, action and passion are complements in that each one supplies what the other must have so as for them together to form a certain kind of whole, the kind of whole that is on display if a man is burning a pile of leaves, or cutting a loaf of bread.

A whole of this kind is what I will call a transaction. The peculiar sort of relation it bears to action on the one hand and to passion on the other is not completely foreign to contemporary philosophy. Much like Aristotle, Frege explains the mutually-dependent logical categories of concept and object by reference to an antecedent unity—the unity of a thought. Though a thought is, for Frege, a unified whole, it is one that can be analyzed into complementary parts, so that one part (the concept) contains, as it were, an empty space, while the other (the object) is logically such as to fill that space. Thus, the complete thought expressed by, “The wine is sweet,” can be analyzed into the concept expressed by “...is sweet” and the object expressed by “the wine.” Frege invites one to think of the relation between concept and object as like that between a paper silhouette and the remainder out of which the silhouette is cut.\(^3\)

\(^{1}\) Aristotle, Cat. 1a24 ff.
\(^{2}\) Aristotle, Meta. (V.15) LINE?
\(^{3}\) Of course, Frege emphasizes that the latter sort of imagery must be taken with “a pinch of salt.” Otherwise, it is liable to produce the impression that a concept is itself an object, and that would ruin everything. For it would prevent one from seeing precisely was is essential about a concept: namely, its predicative nature. According to Frege, it is only in its characteristic relation to an object that a concept is seen for what it is. But Aristotle’s vocabulary
Admittedly, it may seem rather strange to mention Frege, of all people, in the course of introducing the topic of action and passion. For Frege himself was fond of repeating that the various natural-linguistic means of marking a contrast between “doing” and “suffering” are utterly insignificant from a logical point of view. And the grammatical distinction between active and passive voice, which existed in Attic Greek, and which Aristotle exploited, falls squarely within the scope of Frege’s critical remarks. According to Frege, the difference between “Eve gave an apple to Adam,” and “Adam was given an apple by Eve,” does not correspond to anything in reality; it is only a difference of style, or of emphasis—of what he calls “mere coloring”:

A sentence can be transformed by changing the verb from active to passive and at the same time making the accusative into the subject. In the same way we may change the dative into the nominative and at the same time replace ‘give’ by ‘receive’. Naturally such transformations are not trivial in every respect; but they do not touch the thought, they do not touch what is true or false.

Frege is certainly right to insist that whatever follows from an active sentence follows, also, from the corresponding passive. “It is the very same thing that is here capable of being true or false.” But this is, I think, just another way if expressing the Aristotlean insight that a single indissoluble fact, a single way the world could be, or a single state of affairs, presents itself in two different ways, depending on one’s point of view: either as, say, the victory of the Greeks over the Persians at Platea, or, conversely, as the defeat of the Persians by the Greeks in that place. So if it is indeed the case that Eve gave an apple to Adam, then, to be sure, Adam received an apple from Eve. But these were not two different events. There was, at most, a single transaction. Eve’s gift was Adam’s receipt. That is Aristotle’s point.

Of course, in identifying action as the complement of passion, Aristotle is not just thinking of intentional action, like gift-giving, which can only be done by a rational agent. For him, the relevant contrast of “doing” and “suffering” pertains up and down the scala naturae to any form of change. Whether a change has its source in a nature that is physical, chemical, vegetable, animal or rational, it is always, he thinks, an asymmetrical trans-action between two different terms, or parties, one of which is the source of change in the other. It is, as we say, a trans-formation—one thing’s giving “form” to another, and hence a kind of gift after all.

From this perspective, the discipline known as the “philosophy of action” appears to misdescribe itself, and doubly so. First, because it is not the study permits one to dispense with the potentially misleading idea that a concept has “hole” in it, or is logically “unsaturated.” One could say, instead, that by its nature a concept is pros ti an object, and vice versa.

4See “Thought” (1918), 331; “Begriffsschrift” (1879), 53, 68; and “On Concept and Object” (1892), 188, all reprinted in The Frege Reader, ed. Michael Beaney (Oxford: Blackwell Publishers Ltd, 1997). Page references to Frege’s works will refer to this volume.
of “action” in general, but only (or primarily) of that which is intentional. And second, because if “doing” and “suffering” are rightly portrayed as complementary categories, as Aristotle supposed, then the philosophy of action, properly conceived, is at the same time equally a philosophy of passion. Indeed, if Aristotle is right, then a theory of intentional action that takes no account of passion must have about as little promise as a theory of the grammatical subject that pays no attention to predicates, or a theory of the logical object that does not bother with concepts.

It is therefore a very striking fact that modern accounts of intentional action have little or nothing to say about the corresponding passion. More often than not, the passive side of the ancient equation simply drops out. When it is not completely ignored, passion is portrayed as an effect of intentional action, which promptly excludes their identity—supposing, at least, that cause and effect are distinct.

My aim in what follows is to defend a conception of intentional action compatible with the thesis that action and passion are two aspects of a single material reality. I will begin, in Section 2, with the clearest expression of the thesis found in modern action theory, Anscombe’s pithy formula, “I do what happens.” After explaining what I think the formula means, I will say why it is in tension with the leading causal analyses of transaction. I will argue in Sections 3 and 4 that a causal analysis is not necessary, and in Sections 4 and 5, that it is not possible. My conclusion will be that a transaction is like a relation—an irreducible form of bipolar reality.

2 Doing What Happens

How can it be that, as Anscombe says, “I do what happens,”—if the latter is meant to include, not only what happens with me, but also with something else? Anscombe reports that when she first came out with her formula, “everyone who heard [it] found it extremely paradoxical and obscure,” and she ventures that the source of enigma lay in her independent claim that intentional action is known to the agent “without observation.” But this may be a false diagnosis. Though Anscombe’s epistemology can only have added obscurities, there is reason to think that the root of the problem lay elsewhere. After all, the enigmatic formula makes no reference to knowledge. Its icy abstraction gives the appearance of stating a thesis of pure metaphysics. And the thesis it appears to state has mysteries of its own.

For a symptomatic expression of this, see Donald Davidson’s essay, “Aristotle’s Action,” reprinted in Truth, Language and History (Oxford: Oxford University Press, 2005). Davidson’s essay begins as follows: “Aristotle’s Organon covers several of the areas into which we sometimes divide philosophy. . . Yet when we look at the ten categories, only the ninth can comfortably be identified with a contemporary field of study, and that is action” (277). Only the ninth (only action). Not the tenth (not passion). Of course, Davidson’s claim is literally true: contemporary action theory takes no account of passion. What is false is the suggestion that the one-sidedness of the current field can be laid at Aristotle’s feet.

Intention, 53.
If it is read literally, the formula appears to state that what the agent does in acting on a patient is what the patient suffers, this being “what happens.” Thus, it appears to assert the identity of the agent’s action and the patient’s passion. In that case, if I am moving a matchbox, what is happening with the matchbox—what it is experiencing, or going through, or suffering, or enduring—that movement on its part is nevertheless my doing, no less then what is happening with me: it is what I am doing under the aspect of what I am doing it to.

Notice that there is nothing in Anscombe’s formula, taken by itself, to suggest that its application is restricted in any way. In particular, there is no restriction to cases in which the agent and patient are (continuously, intermittently, or ever) in unmediated physical contact, without the intervention of an instrument or machine. The formula implies that the movement of a matchbox, which I am intentionally moving, is identical to my moving of it, whether I happen to be pushing it with a finger, prodding it with a spoon, hoisting it with a pulley, or tossing it into a drawer—that, whatever the case, I do what happens. Anscombe’s apparent identification of what is done by the agent and what happens to the patient accords with a striking feature of our pre-theoretical thought about action. More often than not, in ordinary life, the question what a person did is answered by mentioning some transaction—that is, by saying of the agent that she did something to something else: “She closed the door.” “She turned on the light.” “She set down her bag.” “She hung up her coat.” It is equally so when the question is posed directly to the agent and answered in the first person: “I closed the door, turned on the light, set down my bag and hung up my coat.” In the typical case, the agent both is represented by others, and represents herself, as acting under one or another transitive description.

What is striking about such descriptions, apart from their ubiquity, is that in them we find no distinction between what is done and what happens. A simple transactional sentence, like “Isabelle turned the doorknob,” mentions two individuals (Isabelle and the doorknob), but uses only a single verb to say what has transpired—as though it were a single thing that had gone on between them, a single adventure that was, at once, what she did and what happened to it: a turning ‘of’ it ‘by’ her. In the ordinary transitive descriptions under which we act, and under which we see others as acting, there is no suggestion of anything but a simple seamless episode in the history of the world.

Of course, these transitive descriptions may amount to nothing but a façon de parler. And that is in fact the verdict of contemporary action theory. Across what might at first appear a wide range of diverse opinion, philosophers agree that transaction is far from the seamless whole imagined in ordinary practical life. The consensus is not only that transactions are composite, and that they must be decomposed, but also that they must given a causal analysis. This agreement sets the stage for the only remaining question, “Which causal analysis to endorse?”

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9But see “‘Under a Description,’” reprinted in Metaphysics and the Philosophy of Mind (Oxford: Basil Blackwell, 1981), where Anscombe’s position is more ambiguous.
On the one side, in the majority, are defenders of “event causation,” who claim that an ordinary transitive statement, like “I closed the door,” though seeming to mention one episode, in fact records two—that is, two discrete unipolar “events” related as cause and effect. According to Donald Davidson, what the intentional agent does is always strictly to move her body; her doing so is one event that is causally related to others, including, most importantly, what the patient does. Now, a causal relation between events is said to be either “direct” or “indirect.” If someone turns a doorknob, the relation between the movement of her hand and that of the knob is “direct” in the sense that it is unmediated by the movement of anything else. Whereas, if she sinks a battleship by shooting it with a torpedo, there is an “indirect” relation between the movement of her body and that of the ship to the bottom of the sea, because these two movements are mediated by, *inter alia*, that of the button she pushes, that of the launching mechanism, and that of the torpedo itself. But the basic structure is always the same: there are, at the ends, two unipolar events, one being the agent’s movement, the other being the patient’s movement, and the first causing the second. Thus, action and passion are always related as cause and effect. Supposing only that cause and effect must be, in Hume’s words, “distinct existences,” it follows that action and passion cannot be identical.

The point is very simple, but bears emphasis. Within the framework of event causality, there can be, at best, a nominal unity of action and passion. And that is in fact what Davidson offers. On his view, what the agent does, though strictly only a bodily movement, receives an *ex post facto* “redescription” in light of its consequences. This prevents Davidson from having to deny the truth of simple transaction reports, like “I closed the door.” It is meant to assure us that of course we do more than just move our bodies, that we also do whatever it is we intend to do thereby—provided it actually happens. But the latter proviso belies the assurance. For we are told, in addition, that whether the rest actually happens isn’t up to us: as Davidson famously says, “the rest is up to nature.” Here one probably ought to wonder why an event that is not up to me should be considered my action, or an expression of my agency, rather than that of whatever it is up to. But the crucial point, in the present context, is that on the Davidsonian view, I never do something like “close the door,” except, as it were, by courtesy: strictly and philosophically speaking, *what I do* is move; and *what happens* (if I’m lucky) is that the door closes; but these are distinct existences and not a real unity. If the ‘furniture of the universe’ consists of discrete unipolar events, and not of bipolar transactions, then ordinary transitive thought partakes in a shabby illusion—one may as well drape two chairs with a sheet and call ‘it’ a ‘sofa.’

But the same is true on any theory according which *what happens* is a mere effect of *what I do*; and this commitment is hardly unique to Davidson and his followers. It is equally shared by the spirited minority who defend a doctrine of “agent causation.”10 These philosophers argue, against the Davidsonian view,

10See, for example, Hyman and Alvarez (1998), who write, “the deepest division among philosophers on this matter is between those who claim that genuine agency can be understood
that the first term of the causal relation must be the agent herself. Importantly, though, they do not question that the second term is a unipolar event.\footnote{Hyman and Alvarez identify the rejection of event causation with acceptance of agent causation. Their doing so underscores the fact that what they call the “deepest division” stands on the even deeper consensus: namely, that the only legitimate options include one or another causalist theory.} Both sides agree that my closing of a door must be understood in terms of cause and effect, where the relevant effect is the door’s closing. What they disagree about is only whether my causing of this effect consists in my doing something else, like moving my body, which causes the door to close (event causation), or immediately in the exercise of some causal power (agent causation).

According to the causalist, I do not do what happens: what I do is cause what happens, and this—my causing of it—is something distinct from what it effects. In that case, the unity of transaction is a superficial appearance, an artifice of language, or a fiction of the mind. That causalist theories are so much at odds with ordinary practical thought is reason enough to raise the question whether they are necessary. What philosophical problems are these theories meant to solve?

3 The Problem of Variable Polyadicity

3.1 The Analogy Between Transactions and Relations

The question is all the more pressing because causalist theories oppose themselves, not only to ordinary practical thought, but also to a tradition that is long enough, and broad enough, to include such otherwise disparate figures as Aristotle and Frege. According to this tradition, transactions and relations have a common generic logical form that is irreducibly bipolar.

To see the formal analogy, simply consider the commonplace that a dyadic relational predicate, such as “...is the parent of ...” or “... > ...,” can be transposed, converted, or flipped around, so that the very same relation—i.e. the same state of affairs—is described from the opposite point of view. All that is required is that we switch the order of the arguments and the terms in which the relation is described. Logically speaking, there is nothing to choose from between “Abraham is the parent of Isaac” and “Isaac is the child of Abraham,” or between “2 > 1” and “1 < 2.” The same holds for a transactional predicate like “...is burning ...” or “...is cutting ...”. The sentences, “Smith is burning the leaves,” and “The leaves are being burned by Smith,” are logically equivalent, as are, “Jones is cutting the bread,” and “The bread is being cut by Jones.” Just as there is, for every relation, \( R \), a converse, \( \bar{R} \), such that \( aRb \) in terms of causal relations between events, and those others—so-called agent causалиsts—who deny this, p. 221. Hyman and Alvarez identify the rejection of event causation with acceptance of agent causation. Their doing so underscores the fact that what they call the “deepest division” stands on the even deeper consensus: namely, that the only legitimate options include one or another causalist theory.

\footnote{There is an exception: one version of agent causation, articulated recently by Ursula Coope and Jennifer Hornsby, maintains that the causal relation holds between an agent and the terminal state in which the patient’s suffering concludes—so that, e.g., what the agent causes in closing a door is not the door’s closing, but rather its being closed. Coope attributes the view to Aristotle; and Hornsby to Anscombe. I dispute this view and these attributions in Section 4.3, below. Until then I simply ignore the exception.}
and $b \tilde{R} a$ express the same thought, so, also, there is for every transaction, \( T \), a converse, \( \tilde{T} \).

Or so one used to think. In a discussion that would have a lasting impact on Davidson—and, through Davidson, on the subsequent development of action theory—Anthony Kenny argued for a break with this tradition, claiming that “actions . . . exhibit a variable polyadicity which is foreign to relations.”

Kenny explains the problem as follows:

If “Brutus killed Caesar” is taken as expressing a dyadic relation between Brutus and Caesar, it is difficult to see how one can deduce from it “Caesar was killed”. “Caesar was killed” is a complete sentence, exhibiting no ‘unsaturatedness’; and it is not a relational sentence. But the logic books give us no rules by which we can pass from a dyadic relational proposition to a proposition made up a single-place predicate and a name. From “Brutus was younger than Caesar” one cannot deduce any proposition about the same subject-matter in which one of the terms of the relation has disappeared. “Caesar was older than” makes no sense, and “Caesar was older” means something quite irrelevant . . . If therefore we are to class actions with relations, we must find some way of showing that the variability of their polyadicity is only apparent. (109, 110)

Taking Kenny’s lesson to heart, Davidson then considers the sentence, “Jones buttered the toast in the bathroom with a knife at midnight.” He observes that if this sentence is analyzed as containing a five-place place predicate, with places for the agent (Jones), the patient (toast), a location (the bathroom), an instrument (the knife), and the time (midnight); and if “Jones buttered the toast in the bathroom with a knife” is then said to have a four-place predicate; and so on; then traditional inference rules will not explain why the original sentence entails all the rest: they will not explain it, because they do not permit the transition from a sentence containing an \( n \)-place predicate to one whose predicate has fewer places.

This is what first led Kenny and later Davidson and many others to abandon the traditional view that transaction and relations are of the same generic logical type. Henceforth it was open season: in hopes of explaining the observed entailments, transactions were decomposed, in one way or another.

Among the many philosophers who have come, at least implicitly, to deny the reality of transactions, few would deny that relations are real. Though at home with the claim that transaction-forms, like “... opened ...,” or “... melted ...,” cloak a pair monadic ‘events,’ few would accept the parallel claim

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12See *Action, Emotion and Will*, ch. 7. Kenny’s discussion is inspired by Aristotle’s distinction between the categories of action (poiesis) and that of relation (pros ti). Kenny does not mention Aristotle’s claim that action (poiesis) is relative to (pros ti) passion (pathē). This is the claim that set the agenda for Davidson’s analysis in “The Logical Form of Action Sentences,” as Davidson openly acknowledges, p. 107. Davidson restates his indebtedness to Kenny in “The Individuation of Events,” p. 166, and in his contribution to a symposium, in 1966, on events and event-descriptions, *Fact and Existence*, ed. Joseph Margolis, p. 83
that run-of-the-mill relation-forms, like “... is the square root of ...,” or “... is the cousin of ...,” disguise what is really only just a pair of monadic states. Ever since Russell’s debate with Bradley, analytic philosophers have taken it for granted that relational thought is atomic and therefore indivisible. We can therefore proceed dialectically and focus on the question whether there is, as many suppose, a relevant disanalogy.

Notice, first, that relational thought, like transactional thought, is subject to modification. We do not only think things like that Shem was taller than Shaun, but also, for example, that Shem was taller than Shaun in 1771 (though shorter in ’72), that Shem was more famous than Shaun in France (but less so in Italy), and that Shem was better—much, much better—than Shaun with a rapier (but worse with a cutlass). A relational sentence often expresses, not just that a relation obtained, but when, or where, or with respect to what, or in what way, or to what extent.

But now consider this sentence: “Jones was a teacher of Smith at Oxnard High in Oxnard in 1969.” From this it surely follows that Jones was a teacher of Smith at Oxnard High in Oxnard; that Jones was a teacher of Smith at Oxnard High; and that Jones was a teacher of Smith. The pattern of entailments is just like the one that Davidson found. And again, if we analyze the first sentence as containing a five-place predicate, the second as containing a four-place predicate, and so on, traditional inference rules cannot explain the entailments. What are we to make of it?

Well, to begin with, it will probably not be on these grounds that someone abandons the view that relational thought is atomic and therefore indivisible. Nothing here portends the unreality of relations.

Confronted with the fact that “Jones was the teacher of Smith” is logically entailed by the other more elaborate sentences, and desiring to understand these entailments, the natural thing to say is that in all of the relevant thoughts what is represented is a certain bipolar relation between two individuals: Jones and Smith. So understood, the polyadicity of the relevant predicates is invariably dyadic; the only thing that varies is the degree to which, and the ways in which, the dyadic relation is specified. Here it may be concede that the different specifications of how things are between Jones and Smith stand in palpably logical relations, and also that these are not the relations enshrined in traditional inference rules. But this need not be a problem. After all, the relations enshrined in inference rules are the not the only relations that we recognize as logical. That something is red, or that something is blue, entails that it is colored, and logically entails it, but not by traditional inference rules. And we find this kind of logical entailment not only between sentences containing determinate one-place predicates (e.g. “... is red” or “... is blue”) and sentences containing less determinate one-place predicates (“... is colored”), but also between sentences containing more and less determinate two-place predicates: for example, “X is a daughter of Y” and “X is a son of Y” separately entail “X is a child of Y”—as does the more elaborate sentence, “X is the seventh son by the seventh wife of Y.” The relevant kind of entailment is perfectly familiar. Then why not suppose that this is the sort of logical relation holding between “Jones was the teacher
of Smith” and the various more elaborate sentences from which it follows?

But now, the corresponding thing to say about “Jones buttered the toast” and the sentences from which it follows is that what is represented in all of the relevant thoughts is a certain bipolar transaction between two individuals, an agent and a patient: Jones and the toast. So understood, the polyadicity of the predicates is, as before, invariably dyadic. This invariability prevents one from giving a mechanical explanation of the relevant entailments (i.e. by appeal to traditional inference rules). But that is no more a problem here than it is in the other case. It does not prevent one’s seeing them as logical entailments.

Evidently, the “strange goings on” that set the agenda for Davidson’s theory are not so strange after all. The relevant phenomenon pertains as much to relational thought as it does to transactional thought. Polyadicity varies either in both cases or in neither. There is not, on this score, any disanalogy.

3.2 Two Kinds of Relation

Still, we have not gotten to the bottom of it. For Davidson, the problem of variable polyadicity concerned the movement of thought between predicates whose places numbered five, four, three and two. But originally, for Kenny, the problem had been about the move from two to one. As Kenny saw it, the problem was that while the action sentence, “Brutus killed Caesar” entails “Caesar was killed,” the relation sentence, “Brutus was younger than Caesar,” does not have a like entailment.

About this example Kenny is right: “one cannot deduce any proposition about the same subject-matter in which one of the terms of the relation has disappeared.” However, this does not show that variable polyadicity is “foreign to relations,” but only that Kenny has chosen a bad example. Instead of the relational predicate, “...is younger than ...,” consider, for instance, “...is a guest of....” Just as “Brutus killed Caesar” entails “Caesar was killed,” so, also, “Brutus was a guest of Caesar” entails “Caesar was a host.”

One might object at this point that I have ignored a special way in which transactional thought is modified. Davidson makes much of the fact that two descriptions of a single action can be linked with the preposition “by”—as in, “Brutus killed Caesar by stabbing him to death.” But this grounds no objection, as it is not unique to transactional thought. Two descriptions of a single relation can also be linked with that preposition: for example, “Shem was a better friend than Shaun by being less competitive.” What the latter sentence means is that Shem’s being a better friend consisted in his being less competitive. Likewise, Brutus’ killing Caesar consisted in his stabbing him to death. We are thinking neither of two friendships, nor of two killings, but only in each case of one. That the preposition “by” conjoins two different descriptions of a single (putative) state of affairs is clear if we consider its role in ordinary exchanges. Told simply that Shem was a better friend than Shaun, someone might ask, “How so?” and receive the response: “He was less competitive.” Told simply that Brutus killed Caesar, someone might ask, “How?” and receive the response: “He stabbed him to death.” Of course, the person questioned in each scenario might have volunteered the details right from the beginning, without any special prompting, by using the preposition ‘by’ to link the first thought to the second (as in this sentence).

This might have been clear already. In discussing the entailments of, “Jones was a teacher of Smith at Oxnard High in Oxnard in 1969,” I stopped at the sentence, “Jones was a teacher of Smith,” a sentence employs a two-place relational predicate. But I could have continued:
3.2.1 Ordinal Relations

The problem with Kenny’s problem is that there are two kinds of relation. It is characteristic of what I will call an ordinal relation that it positions its terms along a continuum in amongst a potentially infinite series of other like terms. Examples include comparative relations (e.g. “...is younger than...”), spatial relations (e.g. “...is to the left of...”), and temporal relations (e.g. “...is after...”).

Arguably, a thought expressing an ordinal relation does entail something about each of its terms: namely, that it stands on the relevant continuum. For example, if X is younger than Y, then X has an age, and Y has an age. If X is to the left of Y, then X and Y are each in space. If X is after Y, then X and Y are both in time. Not everything is any age, or is in space, or is in time: the number 3 is none of these. So there is

That each of the terms of an ordinal relation stands on the relevant continuum is all that we know about them, considered individually, just in virtue of their being so related. The reason we know nothing more about them individually is precisely that they are placed on a continuum, which is infinitely divisible. There is no such thing as being large tout court, since, however large a thing may be, there is always the possibility of something else’s being larger, in relation to which the first is small. A question like, “Is it large?,” if it is asked just like that, always invites the reply, “Relative to what?”—unless, of course, the answer to the latter question is already understood (as, in practice, it typically is). Ordinal relations are, so to speak, relative all the way down.

3.2.2 Bipolar Relations

There is, however, a vast and diverse array of relations whose logic is quite different. The function of what I will call a bipolar relation is not to place its terms in a potentially infinite ordered series of formally similar terms, but, rather, to join each term exclusively to exactly one other. Thus, in calling them “bipolar” I do not mean simply that the relations are dyadic. They are distinguished, not only by joining two terms, but by joining the two in opposition.

Here are some examples, loosely arranged by type:

“Jones was a teacher of Smith,” entails, “Jones was a teacher,” which only employs a one-place predicate. And since “Jones was a teacher of Smith,” is logically equivalent to “Smith was a student of Jones,” we also get the entailment: “Smith was a student.”

On these grounds, one might think that Kenny has overstated his case, even with respect to ordinal relations, in denying that there is any entailed proposition about the same subject matter employing a one-place predicate. But this will depend on thinking that, e.g., “Brutus is in space” is a contentful proposition, rather than an assignment of Brutus to the relevant logical category. But the question is irrelevant for my purposes.
It is a feature of all such relations that there is something to be predicated of each of the two opposed terms in virtue of their being so opposed. Thus, they all underwrite a transition from a sentence employing a dyadic predicate to one employing a monadic predicate. Their variety ought to convince one that variable polyadicity, far from being “foreign to relations,” is rather quite typical.

The purported disanalogy between transactions and relations is one of the most influential reasons for having sought an analysis of transactions. But unless one is prepared to deny that bipolar relations are genuine relations, it will have to be conceded that there is no disanalogy here and no reason yet to abandon the thought that transactions, like relations, are logically atomic.  

### 4 The Problem of Causative Verbs

#### 4.1 From Transitive to Intransitive

I will take it as established that “variable polyadicity” provides us with as little reason to doubt the unity of transactions as we have to doubt that of bipolar relations. But the foregoing discussion does to point to a second problem, whose solution has also been said to require the decomposition of transitive thought.

Davidson considers it a virtue of his theory that it “explains what would otherwise be a mystery: the relation between the transitive and intransitive

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16 If anything, the analogy is even more impressive than at first it may have seemed. For it is not limited to the fact that relations and transactions are both convertible. Convertability—the equivalence of $a R b$ and $b R a$—is characteristic of all relations. We have seen, however, that bipolar relations have something much deeper in common with transactions: namely, their oppositional form.
forms of many verbs.”

17 The verbs that Davidson has in mind are a subclass of what linguists call “causatives.” The mark of a causative verb is that it supports the following entailment:

\[ X \ldots s Y \rightarrow X \text{ causes } Y \text{ to } \ldots \]

Sometimes this entailment can be expressed by using different forms of a single verb: for example, “X moves Y” entails “X causes Y to move.” But only sometimes. Often enough a natural language will lack any single lexical item to play both roles. The causative verb “to teach” is a case in point: “X teaches Y” does not entail, “X causes Y to teach,” but rather “X causes Y to learn.” Either way, a second entailment follows upon the first. For it is equally clear that, e.g., if X causes Y to move, Y moves; and if X causes Y to learn, Y learns. In general:

\[ X \text{ causes } Y \text{ to } \ldots \rightarrow Y \ldots s \]

In combination, these two entailments allow us to pass from the transitive to the intransitive—from “X moves Y” to “Y moves,” or from “X teaches Y” to “Y learns.” If anything, Davidson radically understates the appeal of a causalist theory by linking the would-be “mystery” to the special subclass of causative verbs that allow this passage by way of a single lexical item. The appeal of a causalist theory is that it promises to explain, for any causative verb, why there is an entailment from a sentence of the form “X \ldots s Y” to a sentence of the form, “Y \ldots s.”

It is, of course, the middle term—the mediating causation sentence, “X causes Y to \ldots”—that is supposed to do the explanatory work. In a moment we will consider whether in fact it can. 18 What matters for now is only that this is where a causalist introduces the claim that the suffering of a patient is a discrete unipolar event, which is caused by the agent or the agent’s deed. Once this much is granted, it only remains to add that the intransitive sentence “X \ldots s Y” refers to the caused unipolar event—i.e. to the patient’s suffering. For in that case, what explains the entailment from “X \ldots s Y” to “Y \ldots s” is simply the idea that the transaction described by the first sentence is, beneath its seamless veneer, a composite reality, one of whose components is truly described by the sentence “Y \ldots s.” In fact it is the analysis of a transaction—its decomposition into simpler parts—and not the invocation of causality as such, that promises to explain why the transitive sentence entails an intransitive one.

But notice that there are, in principle, two possible ways of explaining the entailment from “X \ldots s Y” to “Y \ldots s.” One is to found the truth of the transitive sentence on that of the intransitive sentence. The other is to reverse this order, and to found the truth of the intransitive on that of the transitive. The causalist adopts the first strategy, arguing that the existence of a unipolar event of Y’s doing something, when combined with this event’s being caused

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17 “Aristotle’s Action,” p. 287. Though in the context Davidson is advertising a virtue of an event-causal analysis, it is claimed with equal right by agent-causalists.

18 See 4.3.
by X (or X’s deed), underwrites the fact that there is a transaction between X and Y. And no doubt, if a transaction consists in (1) a unipolar event, and (2) the causing of this event by an agent (or her deed), then, yes, the entailment is valid: it will never be true that X transacts with Y, unless it is also true that Y is the subject of a unipolar event. But this explanation comes at a cost, since, as I mentioned, it does a certain violence to ordinary transitive thought, which bears to trace of bifurcation, and therefore also to practical thought, which is overwhelmingly transitive. What seems to force the conclusion that everyday practical consciousness is subject to an illusion is simply the appearance that, as Jennifer Hornsby puts it, there is “no hope” of finding an explanation that leaves transactions whole by founding the truth of the intransitive on that of the transitive.——But this may be the counsel of despair.

4.2 The Pathetic Syllogism

Consider a pattern of reasoning that I will call the Pathetic Syllogism:

1. If X is ...ing Y, then Y is being ...ed by X.
2. If Y is being ...ed by X, then Y is being ...ed by something.
3. If Y is being ...ed by something, then Y is ...ing.

∴ If X is ...ing Y, then Y is ...ing.

It is sometimes possible, sometimes not, to fill in every ellipsis with a form of a single English verb. The relevant forms of “to move” and “to change” supply valid substitution instances. Instructively, the OED lists an archaic but now vulgar use of the English verb “to learn,” according to which it means the same as “to teach.” Thus, an English speaker could once have reasoned that if Socrates is learning Plato, Plato is being learned by Socrates; so Plato is being learned; so Plato is learning. But upper-class English now requires the use of two verbs. One now has to say that if Socrates is teaching Plato, then Plato is being taught by Socrates; so Plato is being taught; so Plato is learning. Or else one must use the active voice throughout, saying that if Socrates is teaching Plato, then Plato is learning from Socrates; so Plato is learning from someone; so Plato is learning. However we choose to put it, the pattern of thought is exactly the same.

Not coincidently, a similar pattern of thought applies to what I have called strictly bipolar relations, though again we must make allowances for the quirks of a natural language:

1. If X is the ... of Y, then Y is the ... of X.
2. If Y is the ... of X, then Y is the ... of something.
3. If Y is the ... of something, then Y is ....

∴ If X is the ... of Y, then Y is ....
For example:

1. If X is the owner of Y, then Y is the property of X.
2. If Y is property of X, then Y is the property of someone.
3. If Y is the property of someone, then Y is property.

∴ If X is the owner of Y, then Y is property.

That “owner” and “property” are unrelated words does not obscure their logical opposition, and it will not prevent one’s apprehending the soundness of this reasoning. As it happens, the English lexicon also contains the word “proprietor”—a synonym of “owner” and a relative of “property”—but it would not matter if it did not. For we are perfectly able to separate the “verbal husk from the kernal with which, in any given language, it appears to be organically bound up.”\(^{19}\)

This parallel should embolden us to search for the kind of explanation that Hornsby despaired to find—one that founds the truth of the intransitive sentence, “Y . . . s,” upon that of the transitive sentence, “X . . . s Y.” After all, it would certainly be misguided to try to explain the fact that X is the owner of Y by appeal to any prior fact of Y’s being property: X does not own Y because Y is property; rather, Y is property because X owns it.\(^{20}\) What is first in the order of explanation is the fact that a certain relation holds between X and Y. It is only on account of this that there is also something true to say of Y all by itself. There is in that case reason to hope—and, indeed, to expect—that the same is true of transactions.

Returning now to the case at hand, the Pathetic Syllogism clearly has a logically valid form. What is more, each of its three premises appears to be a logical truth. That is, each of the three conditional statements seems to be true because the consequent is contained in the antecedent. In that case, of course, the end is in the beginning—the third consequent in the first antecedent—and the progress of thought represented by the syllogism consists in nothing more, or less, than unfolding what is already implicit in the thought that one thing is acting on another.

It should be observed immediately that the entire syllogism can be shifted into any possible temporal register, and that nothing depends on my having introduced it with sentences whose aspect is imperfective and whose tense is present. Throwing the whole thing into the past, we arrive at the conclusion that, “If X was ...ing Y, then Y was ...ing.” Leaving it in the past, and shifting its aspect from imperfective to perfective, we get, “If X ...ed Y, then Y ...ed.” Likewise, casting it into the future yields either an imperfective conclusion, “If X is going to ... Y, then Y is going to ...,” or a perfective one, “If X will have

\(^{19}\)Frege, “Logic” 243

\(^{20}\)In a world where almost everything is property, this claim could be doubted. The skeptic may consider instead the entailment from “X is the employer of Y” to “Y is an employee.” If X employs Y, the two have entered a relation, thanks to which, not prior to which, the one is an employer and the other an employee.
...ed Y, then Y will have ...ed." The syllogism can even be framed in timeless
generic propositions, so that, “If X ...s Y, then Y ...s.” 21

Of course, we must hold the tense and aspect fixed throughout a given
course of reasoning. If in the first premise we join an imperfective antecedent
(e.g. “If X was ...ing Y”) with a perfective consequent (“Y was ...ed by X”) the
conditional is false, and the whole syllogism founders. Owing to what linguists
call the “openness” of the progressive, it may be the case that an agent was
doing something that it never did and never will have done. Thus, the truth
of “X was ...ing Y,” entails neither “X ...ed Y,” nor “Y was ...ed by X.” But
so long as we avoid changing tempo mid-syllogism, the reasoning appears to be
sound in every temporal register, if it is sound in any.

Since the form of the syllogism is a logically valid, the question of its sound-
ness reduces to that of the truth of its premises. Let us examine them each,
beginning with the first: “If X is ...ing Y, then Y is being ...ed by X.” In moving
from the antecedent to the consequent, we pass from a proposition employing an
active verb construction to one employing a passive verb construction. Insofar
as we see the conditional statement as expressing a logical, rather than a sub-
stantive truth, we must understand the antecedent and the consequent to refer
to the same process. If a child is wetting a cat, and the cat is being perturbed
by the child, that is a substantive truth. It is, by contrast, a logical truth, that
if the child is wetting a cat, the cat is being wet by the child; or that if Eve
is giving an apple to Adam, then Adam is given an apple by Eve. 22
So interpreted, there is no conceivable state of affairs in which the antecedent is
true, but the consequence is false. They speak of the same unfolding process
and say the same thing of it. 23

21Here we are in the area of the single most important difference between the Pathetic
Syllogism and the parallel pattern of reasoning having to do with relations: namely, that the
former can be cast in the imperfective. Unlike relations, transactions unfold in time; thus,
there are times when they are in progress and when they can be interrupted. Relations, by
contrast, do not progress: they have the temporality of states; at any given moment, they
either obtain or fail to obtain; they never break off incomplete. This is the truth in Kenny’s
claim that transactions and relations are formally distinct. The distinction will be crucial
later, in Sections 5 and 6, where I argue that a causal analysis of transactions is, not only
unnecessary, but impossible. To anticipate, the causal relation invoked in causal analyses is
precisely that: a relation. And because it is a relation, it has the wrong kind of temporality
to capture the form of transitive thought.

22Notice that the sentence, “Adam is being given an apple by Eve,” which has a passive
linguistic voice, is truth-functionally equivalent to the sentence, “Adam is receiving an apple
from Eve,” whose linguistic voice is technically active. Despite this difference of voice, both
sentences depict the process from, so to speak, the patient’s perspective. On this score, both
will be contrasted with “Eve is giving an apple to Adam.” The same relation holds between
“Socrates is teaching Plato,” “Plato is being taught by Socrates,” and “Plato is learning from
Socrates.” The first is not only in the active voice, but from the agent’s perspective; the
second and third are from the patient’s perspective, though only the second is in the passive
voice.

23The logical insight that a relation and its converse are in reality the same requires one
to see through the superficial linguistic differences between “X is greater than Y” and “Y is
less than X,” or between “X is before Y” and “Y is after X,” or between “X is to the left of
Y” and “Y is to the right of X.” And just such an insight is needed in the present case to
see through the difference between “X is giving an apple to Y” and “Y is receiving and apple
The second premise of the syllogism has a different explanation, but is no more controversial: “If Y is being ...ed by X, then Y is being ...ed by something.” As before, we may suppose either that the antecedent and consequent refer to a pair of distinct processes (as in “If the cat is being wet by the child, then the cat is being perturbed by something”), or that they refer the same process (as in “If the cat is being wet by the child, then the cat is being wet by something”). And as before, the conditional is a logical truth, if a single process is meant. The only difference between the two passive sentences, “The cat is being wet by the child,” and “The cat is being wet by something,” is that the latter conveys less information: it assures us that there is an agent, at the hands of which the patient is suffering, but it does not tell us who, or what, the relevant agent is.

The third premise is the only one about which there is much to say: “If Y is being ...ed, then Y is ...ing.” What is striking, here, is not so much that the antecedent and the consequent have different linguistic voices (for that was true of the first conditional), but that the two propositions also describe the same subject as “doing” something. Since the agent and patient of a single process must be distinct, it might seem that the third conditional had to refer to two different processes, in the first of which Y was the patient, and in the second of which it was the agent. This would be the case, e.g., if a cat was being wet and also hissing. If its being wet led to its hissing, that would be a substantive, and not a logical truth.

It is, by contrast, a logical truth that the cat is being wet by something, only if it is becoming wet. For if it is not becoming wet, then nothing—neither the child nor anything else—is responsible for its doing so; so it is not being wet, as the antecedent supposes. This means that the same unfolding process that validates the antecedent (“Y is being ...ed by something”) validates the consequent (“Y is ...ing”). And in that process, Y has the role of a patient. One must therefore be careful not to assume that the linguistic voice of a sentence reveals the metaphysical character of what the sentence describes. Although “Y is ...ing” is an active intransitive sentence, what it describes in the third premise of the syllogism is a fact—or rather, an aspect of a fact—that is in reality passive, and therefore also transitive. Thus, the third conditional is true for the same trivial reason that the second one is, because its antecedent and consequent refer to a single process, about which the consequent conveys less information.

The proposition, “Y is ...ing,” as it appears in the third antecedent, is what we might call an internal intransitive, the truth of which falls out of the fact that Y is being acted upon by something distinct from itself. But not every intransitive sentence expresses such a thought. Unlike the intransitive sentence, “The cat is becoming wet,” intransitive sentences such as, “The cat is hissing,” and, “The cat is walking,” do not refer to the passive side of any transaction. What is more important to recognize is that the very same intransitive sentence

from X” or between “X is teaching Y” and “Y is learning from X.”

24At this point I have explained the transition that so concerned Kenny—the transition from, e.g., “Brutus killed Caesar” to “Caesar was killed.” Importantly, though, I have done this without resorting to any sort of analysis.

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that is used in one circumstance to describe the suffering of a patient may be used in other circumstances to describe what is by no means passive. So, for example, the sentence “Plato is learning” may express a thought whose truth falls out of the fact that someone is teaching him. But it may also be used to describe a situation in which Plato is learning through his own observation and reasoning. The same goes for the intransitive sentence, “Plato is moving to the agora.” His moving there may be an aspect of the sort of transaction described by the sentence, “Socrates is dragging Plato to the agora.” But it may not: for Plato may be walking to the agora, in which case his moving there is not a matter of his suffering anything.

The Pathetic Syllogism illuminates Aristotle’s claim that the change of one thing by another is a change that is “in” the patient. Kenny observes that the English language, like many others, associates a change with the patient, rather than with the agent. In general, if X changes Y, the change is a change of Y, not of X. Thus, if the sun is melting the snow, we speak of the snow’s melting, not of the sun’s melting: what melts is the snow. The underlying metaphysical truth is that whether X is changing Y ultimately depends on what is happening with Y. For that is where the action is: it is “in” the patient. The patient is that which must change, if change is to occur. And the reason is plain if we read our premises backwards: if Y is not changing, it is not being changed; so it is not being changed by X; so X is not changing it.

This is why you cannot do just anything to just any thing. It is why, for example, you cannot wet the ocean. You can water it, if you like. But you cannot wet it for the obvious reason that the ocean is already wet. Because it is already wet, it cannot become wet; and that is what it would have to do in order for you to wet it. Notice that the restriction stems from what the patient, for its part, can do. You, for your part, could follow whatever procedure you would in wetting a patch of desert sand. But what you did, if you did it to the

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25This is just an application of Davidson’s point (“Agency,” p. 44) that “very often a sentence will record an episode in the life of the agent and leave us in the dark as to whether it was an action. Here are some examples: he blinked rolled out of bed, turned on the light, coughed, squinted, sweated, spilled the coffee, and tripped over the rug. We know whether these events are actions only after we know more than the verb tells us.”

26The point here is not that the intransitive sentence, “Plato is learning,” is ambiguous, but rather that its unambiguous truth conditions are satisfied by two metaphysically different states of affairs. The sentence, “There is a rodent in the kitchen,” has a single set of unambiguous truth conditions, which conditions are satisfied whether there is a mouse or a rat in the kitchen, “rodent” being an abstract noun that applies in either case. Likewise, the sentence “Plato is learning” speaks, though unambiguously, at an abstract level of discourse, from a height at which the metaphysical distinction between being an agent and being a patient is simply invisible. It is, moreover, extremely useful to have verbs that work in this way. Just as we may know there is a rodent in the kitchen, though not whether it is a rat or a mouse, we may know that a thing is moving, but not whether it is the agent or the patient of its movement: in such a case, we want to say what we know, and nothing more than that. And just as we often do not care (even if we know) whether the rodent is a mouse or a rat, there are many purposes for which it is irrelevant whether someone is learning on her own or being taught by someone else. But whether we know, or care, or not, there is a real distinction.

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28Ibid., p. 126.
ocean, would not be wetting anything, because the ocean could not do its part in the relevant transaction.

Now the ocean cannot become wet under any circumstance whatsoever; but a certain student who could be taught, and who could learn, if only he put his mind to it, may not in fact be learning, because in the present circumstances he is not putting his mind to it. In that case, he is not being taught, and (sorry to say) no one is teaching him. You cannot teach someone who is not paying attention, who is whispering to a neighbor, or reading the newspaper, or fiddling with a gadget. There are things the student must be doing, and things he must refrain from doing, if he is to suffer your teaching. And likewise with other forms of giving. You cannot give a gift to what cannot accept it: for example, to a tree. But Eve could give an apple to Adam. Her actually doing so required not only that Adam could accept it, but that he did actually do so. Exactly what is required in order to accept a gift depends on many things, including the object given and peculiarities of local custom; but it always requires something of the recipient, if only not rejecting it, which again may take on different forms in different circumstances. For a gift is an act of the recipient as much as of the donor, and it is famously an act for which both may be held to accounts.

The point is perfectly general. You cannot act on anything that does not meet you halfway. You cannot push what does not push in equal measure back; nor pull what does not pull in the other direction; nor move what does not stay its course; nor hold what does not hold together; nor stand, nor sit, nor lean upon what gives no support; nor strike what does not receive a blow. You cannot even touch what puts up no resistance.  

But again, we cannot always read this off the surface of a language. The salient verbs and prepositions, the passive or active voice of the sentence, the case-endings of nouns—all of this is “coloring,” which may or may not tend to hide the unity of a transaction. But this is not in principle different, or any more bewildering than the unity of a relation, which natural languages also dress in colorful disguises.

Reflection on the Pathetic Syllogism alerts us to the fact that “doing” is said in many ways. If Socrates is teaching Plato, then each of them is “doing” something: Socrates is teaching; Plato is learning. If Milo is pushing a boulder from $\alpha$ to $\omega$, the boulder is succumbing, or giving way, from $\alpha$ to $\omega$—as not just

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$^{29}$Newton’s third law of motion, that “to every action there is always opposed an equal reaction,” is explicated as follows: “Whatever draws or presses another is as much drawn or pressed by that other. If you press a stone with your finger, the finger is also pressed by the stone. If a horse draws a stone tied to a rope, the horse (if I may so say) will be equally drawn back towards the stone: for the distended rope, by the same endeavour to relax or unbend itself, will draw the horse as much towards the stone, as it does the stone towards the horse, and will obstruct the progress of the one as much as it advances that of the other.” Newton may seem like a strange ally to call on in the present context, since, historically, his physics is the main inspiration of the views that will be opposed in the following pages. For now it may be enough to observe that a force of whatever kind is exerted on something by something (even if one knows not what), and that the unreduced terms of mechanical explanation—terms like pulling, pushing, drawing, pressing, attracting and repelling—are all manifestly transitive. It detracts nothing from Newton’s discoveries to point out that the bipolarity, or two-sidedness of physical action is constitutive of the very thought that one thing is acting on something else.
anything could (think of a shadow or the fourth of July). There is, on the one side, the active “doing” of the agent, which consists in its acting on something else, and, on the other, the passive “doing” of the patient, which consists in its being acted upon. But these are only different aspects of a single material process.

We have at least enough, I think, for the provisional conclusion that, if properly interpreted, the Pathetic Syllogism is not only valid, but also sound. When an agent acts on something else, what it does includes, as a necessary part of itself, what happens “in” or “with” or “to” the object of its action. It does what happens. Every agent does.

4.3 The Notion of Cause

But has transaction been explained? That I did not appeal to the notion of cause is apt to enliven a chorus of doubt. But here I propose to return the suspicion—that is, to question the assumption that a “cause”-invoking analysis advances our understanding, and to argue that, on the contrary, it is the primitive form of a transitive thought, already displayed in the Pathetic Syllogism, that explains whatever truth there is in the leading causalist theories.

Doubts about the notion of cause have been raised before. Russell famously quipped that it is an obsolete philosophical relic that plays no role in actual science, and that like the British monarchy it has been allowed to survive only because it is erroneously thought to do no harm. But Anscombe herself has a subtler position. Unlike Russell, she does not deny that cause is sound philosophical concept, but only that it is prior to the concrete forms of transitive thought:

The word “cause” itself is highly general. How does someone show that he has the concept cause? We may wish to say: only by having such a word in his vocabulary. If so, then the manifest possession of the concept presupposes the mastery of much else in language. I mean: the word “cause” can be added to a language in which are already represented many causal concepts. A small selection: scrape, push, wet, carry, eat, burn, knock over, keep off, squash, make (e.g. noises, paper boats), hurt. But if we care to imagine languages in which no special causal concepts are represented, then no description of the use of a word in such languages will be able to present it as meaning cause.\(^\text{31}\)


\(^{31}\)The verb “to make” is only superficially like the other verbs on Anscombe’s list. Making a paper boat is not causing it to do anything, since there is no “it” to speak of, until the boat is made. Notice that if I am touching or pushing a boat, the boat and I must both exist throughout the transaction in which we share. But as long as I am making a boat, no boat exists with which to transact. Of course, in order to make a boat one must transact with the material out of which the boat will have been made. But to make something is not to transact with what one is making.
These remarks are strictly about the acquisition of concepts, but it is clear from the context in which they appear that Anscombe’s true animus is logical or metaphysical. Her suggestion is that “cause” signifies whatever is common to all of the various concrete ways that one thing might transact with another. On any interpretation, that is something “highly general.” But Anscombe’s point is not, I think, that causality is a common ingredient, like the corn in American food. Her point is, rather, that cause is a determinable genus, under which determinate species fall—as, for example, being red and being blue fall under the genus being colored.32

In that case, “cause” stands to all transactions as “relation” stands to all relations. Notice that the word “relation” could be (and was) added to a language in which were already represented many relational concepts. However, if we care to imagine a language in which no special relational concepts are represented, it will be one in which no sentence exemplifies the Fregean form, ψ(ξ,ζ), the Russellian form, aRb, or the Aristotelian form, pros ti. A language bereft of relational concepts, such as we have imagined, would lack the means of representing the thought that one thing is related to another.

The word “relation” is an abstract deliverance of logical reflection: it does not explain what relations are, but only gives them a name. Anscombe claim, as I understand it, is that “cause” is such a word: it does not explain, but is explained by, a prior understanding of causative verbs.33

4.4 The Logical Form of Causation Sentences

As I noted earlier, causative verbs are distinguished by the following entailment:

$$X \ldots s Y \rightarrow X \text{ causes } Y \text{ to } \ldots$$

But if Anscombe is right, this is nothing more than a rule for introducing the word “cause” into a language that could do fine without it. Compare the rule for “cause” to a similar rule for “color”:

$$X \text{ is } \ldots \rightarrow X \text{ is } \ldots \text{ in color.}$$

For example, “X is red” entails “X is red in color.” And to both of these, compare this rule for “relation”:

$$X \text{ is } \ldots \text{ of } Y \rightarrow X \text{ stands to } Y \text{ in the relation of } \ldots$$

32For a fuller discussion of this idea, see my “Action and Generality,” in Essays on Anscombe’s Intention.

33This view has the advantage of explaining why the so-called ‘order of causation’ is the same the so-called ‘order of time’—the explanation being that there is only one order. On this view, there is no such thing as ‘backward causation’ for the same reason that there is no such thing as a process that begins at the end and ends at the beginning.
For instance, “X is kin to Y” entails “X stands to Y in the relation of kinship.”
Neither the rule for “color,” nor the rule for “relation” is apt to be mistaken for the basis of a theory. But is the rule for “cause” any better?
To answer this question, we need to consider the entailed causation sentences—sentences of the form, “X causes Y to ....” What is striking about these sentences is that with them we can produce another Pathetic Syllogism:

1. If X is causing Y to ..., then Y is being caused to ... by X.
2. If Y is being caused to ... by X, then Y is being caused to ....
3. If Y is being caused to ..., then Y is ...ing.
∴ If X is causing Y to ..., then Y is ...ing.

It is clear, as before, that the syllogism is sound across variations of tense and aspect. What is equally clear, I think, is that no appeal to the notion of cause could explain its soundness.

On the one hand, the notion of cause plays no role in explaining why it is valid. It does not explain why, if A entails B, and B entails C, and C entails D, then A entails D.
On the other hand, the notion of cause cannot explain why the premises are true. After all, the first premise is a logical truth. It is true because, e.g., “X is causing Y to move” is logically equivalent to “Y is being caused to move by X.” But insofar as we recognize these as logically equivalent expressions, we must apprehend that there is, in reality, a single state of affairs, which has only been described in different ways. In that case, we must understand the expression “causing ... to move” as a logical unit, which, with the appropriate change of variables, can be transposed into, “being caused to move by ...,” without any change of meaning. That is, we must treat “X causes-to-move Y” and “Y is-caused-to-move-by X” as we do “X is-the-owner-of Y” and “Y is-the-property-of X,” or as in general we treat “aRb” and “bR[a.”

34 To someone tempted in this direction, we might explain that color and relation are determinable genera, of which red and kinship are determinate species, and that a determinate species cannot be explained, without circularity, by reference to its genus. See, again, “Action and Generality.”
35 This line of thought suggests that the relevant sentences of the form “X ... s Y” and “X causes Y to ...” are equivalent. Their equivalence is sometimes denied on the grounds someone may cause something to be done without doing it herself, by persuading, or ordering, or asking, or telling someone else to do it. But this is a sophistical illusion. “Truman blew up Hiroshima,” is a true and well-formed English sentence employing a causative verb. And I repeat: He did it—Truman did—he blew it right up. If the objection is that Truman didn’t “do” the deed, in the relevantly narrow sense that he wasn’t in the Enola Gay and didn’t push the button himself, the answer is that, in exactly the same narrow sense, he didn’t “cause” the city to blow up—the pilot, Tibbets, did. Just as there is a narrow sense in which Tibbets, and a broad sense in which Truman, caused Hiroshima to blow up, there is a narrow sense in which Tibbets, and a broad sense in which Truman, blew up Hiroshima. The fact about Truman, like the one about Tibbets, can be expressed in two equivalent ways: either in a sentence of the form “X ... d Y,” or in one of the form “X caused Y to ....”

The illusion is produced by an arbitrary regimentation of English, whereby a philosopher associates one locution (“X ... d Y’) with the narrow context, and the other locution (“X
the remaining premises can only be explained as I explained their counterparts in the original syllogism—that is, purely by appeal to formal considerations.

The charm of the original syllogism was its naked, contentless abstraction. Apart from a series of ellipses, it contained nothing but the logical connectives, “if” and “then,” variables for the agent and patient, and such verb-endings and auxiliary verbs as were necessary, on the one hand, to keep track of tense and aspect, and on the other, to mark transitivity. Since the temporal inflection of the propositions was always held constant, it was clear that the relevant inferences derived from the form of a transitive thought. The latest version of the syllogism reveals exactly the same form, in a rather more cumbersome way, but it does have one advantage: it demonstrates that we do not advance our understanding by introducing the word “cause.” On the contrary, as it appears in sentences of the form, “X causes Y to . . . ,” the talismanic word “cause” is nothing but an auxiliary verb that helps to express a transitive thought.

Having considered the principle reasons that action theorists have pursued a causal analysis, I now turn to a problem for the causalist.

5 The Problem of Imperfective Transaction

5.1 The Disanalogy Between Transactions and Relations

The leading causal analyses of bipolar transitive thought understand the notion of cause in terms of a relation—“the causal relation.” Though there is, as I mentioned, a perennial debate over whether the causal relation holds between two events, or between an agent and one event, or between an agent and the

caused Y to . . . ) with the broad context, in defiance of the plain fact that standard usage permits one to employ both locutions in both contexts.

It is irrelevant to object, here, that Truman blew up Hiroshima by giving Tibbets an order (down through the chain of command). Since what Truman did can be broadly and truly described either as blowing up Hiroshima, or as causing Hiroshima to blow up, we can record the fact regarding his means in two different ways: we can say, “Truman blew up Hiroshima by giving Tibbets an order,” or “Truman caused Hiroshima to blow up by giving Tibbets an order.”

In the vast majority of cases, what makes it true to say, “X caused Y to . . . ,” also makes it true to say, “X . . . d Y .” If there are exceptions, this will show us something about the relevant English sentences. But, importantly, it will not show that there is any difference between the thoughts they express about the state of affairs in which X . . . d Y. Earlier, I relied on the reader to recognize that “Socrates is teaching Plato,” “Plato is being taught by Socrates,” and “Plato is learning from Socrates,” might all express the same thought. Arguably, though, these three English sentences have subtly different truth conditions. Arguably, “teaching” requires the intention of the teacher to teach the one who is taught; so that it is possible to “learn from” someone who is not “teaching” you in return—if, say, you just follow her good example, unbeknownst to her. Empirical surveys of English speakers might confirm the hypothesis. But it is wholly consistent with this to affirm that wherever it is true to say, “Socrates is teaching Plato,” and therefore also true to say, “Plato is learning from Socrates,” the two sentences express one thought. It is similar with the hypothesis that an English causation sentence sometimes has application where the corresponding transaction sentence does not. The latter linguistic hypothesis is consistent with the logical claim that where both sentences do apply, they express one thought in different ways.

One ought to have expected this anyway since

36One ought to have expected this anyway since
terminal state in which an event eventuates, this debate unfolds against the background of a consensus that a transitive action sentence, like “Isabelle closed the door,” has the logical form $$(\exists x)(\exists y)(xRy)$$, and that it therefore employs a relational predicate. I will represent this predicate as “$$aR_c b$$”, where the subscript “$$c$$” reminds us that the relation in question is causal.

Thus, the crux of a causal analysis turns out to be a relation. This is a little ironic since what first seemed to make it necessary to analyze transactions was Kenny’s allegation that transactions and relations are formally distinct. The problem for a causalist, or so I will argue now, is that Kenny was half right: he was right insofar as he thought that there was an important formal distinction between transactions and relations, but wrong insofar as he thought it concerned their polyadicity.

The real disanalogy is temporal. Earlier I noted that by changing the tense of the relevant verbs, the Pathetic Syllogism can be cast into the past, the present or the future, and that the same is true of the corresponding reasoning about bipolar relations. I also noted that, in addition to changes of tense, the Pathetic Syllogism can undergo changes of aspect: thus, in the past tense, there is a contrast between the perfective version of the syllogism, which yields the conclusion, “If X ... d Y, then Y ... d,” and the imperfective version, which yields, “If X was ... ing Y, then Y was ... ing.” The temporal distinction between transitive and relational thought reveals itself in the fact that there is no imperfective version of the relational syllogism. The reason there is not one is that relational propositions do not admit of a contrast between the imperfective and the perfective. There is no such thing as a relation’s having been in progress, and hence, no such thing as its having been completed. In the past, X either was or was not the owner of Y. Those are the only two possible states of affairs.

In short, transactions progress, and relations do not. I will now argue that this formal distinction rules out the possibility of any relational analysis of transitive action sentences—and, a fortiori, any that appeals to the so-called “causal relation.”

### 5.2 The Putative Causal Relata

In exchange for the perfective sentence, “Isabelle closed the door,” a causalist offers the paraphrase, “Isabelle caused the door to close,” and then submits the latter to one of three analyses:

**Perfective Transaction**

**Event-Event Causality:** Isabelle’s deed caused the door’s closing.

**Agent-Event Causality:** Isabelle caused the door’s closing.

**Agent-State Causality:** Isabelle caused the door to stand closed.
On all of these analyses, we have to do with a thought of the form: $(\exists x)(\exists y)\ldots xR_c y$. The dispute between causalists is whether the values of $x$ and $y$ are, respectively, an event and an event, an agent and an event, or an agent and a terminal state.

But now consider the imperfective sentence, “Isabelle was closing the door.” This will have to be paraphrased as, “Isabelle was causing the door to close.” If we then subject the paraphrase to the three corresponding analyses, we get the following:

**Imperfective Transaction**

**Event-Event Causality:** Isabelle’s deed was causing the door’s closing.

**Agent-Event Causality:** Isabelle was causing the door’s closing.

**Agent-State Causality:** Isabelle was causing the door to stand closed.

Here, again, the dispute concerns the logical character of the relata. The form of the imperfective sentences is, as before, $(\exists x)(\exists y)(xR_c y)$.

The problem for all three analyses is that both terms of a relation must exist. But as long as someone is closing a door—that is, as long as the transaction is still in progress—there is, as yet, no event of the door’s closing, nor a terminal state of its being closed. Thus, there is, as yet, no event, and no state, to which the agent, or a deed of hers, could possibly be related. Without the existence of a second relatum, there can no relation, and *a fortiori*, no causal relation.

It is true that in the fullness of time an event of the door’s closing, or a terminal state of its being closed, may come to exist. But if they do, this can only be *after* agent has closed the door—that is, after the process is over. The question, though, is what made it true, back when she was closing the door, that she was closing the door. In what did the fact consist? The answer cannot be that she, or a deed of hers, stood in some relation (e.g. the causal relation) to an event of the door’s closing, or to a state of its being closed, because there was, at the time, no such event or state. Thus, the second putative relatum arrives on the scene too late to constitute the process through which it comes to be.

Or rather, it arrives on the scene too late, *if it arrives at all*. Remember: the salient event or terminal state may *never* come to exist. It may be, for example, that the agent was closing a door, innocently enough, when the house in which she stood was vaporized by a meteor. At the fateful moment, the agent and the door were in the middle of a transaction: she was closing it; and conversely, it was being closed by her. But she never did, and she never would, close that door; and the door itself never stood, nor ever would stand, closed.

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37 Or rather, both must have existed. My grandfather was taller than my great-grandfather, and I am taller than each of them, though both of them are no more.
The point, here, is perfectly general and has nothing to do with the fact that we happening to be considering a rational agent. The above three causal analyses confront exactly the same problem in connection with merely mechanical, chemical, vegetable and animal processes. It may be that, when the meteor struck, one domino was knocking another over; that water was dissolving a sugar cube; that a plant was fixing carbon; and that a dog was burying a bone. Though all of these things were happening, none of them them ever happened. In each case it is clear that there was not, is not, and never will be, an event or terminal state to which the agent, or the agent’s deed, could stand in any relation. Up and down the scale of nature, causal-relational theories (of no matter what variety) fail to account for the imperfective.

5.3 The Putative Causal Relation

If we now put aside the disputed relata, “a...b,” and focus on what is supposed to relate them, “...Rc...,” the problem of the imperfective emerges in a different guise. There are, as we saw, two transitive action sentences in the past tense, one imperfect, the other perfect: e.g., “Isabelle was closing the door,” and “Isabelle closed the door.” And as I mentioned, the first may be true though the second is false.

Logically adequate paraphrases of these two sentences must have truth conditions that exhibit the same contrast. But now, are the proposed causation sentences, “Isabelle was causing the door to close,” and “Isabelle caused the door to close,” logically adequate paraphrases?

Here the causalist faces a dilemma. On the one hand, if the answer is no, then the causalist has not explained what we wanted to understand. We wanted to understand transitive action sentences, and it clearly will not help us to be given an analysis of sentences with different logical behavior.

On the other hand, if the answer is yes, then the relational predicate “...Rc...” cannot do the needed work. It cannot, because while there are two distinct past-tense thoughts in need of representation, there is only one past-tense thought in which the predicate can appear. A relation either obtained in the past, or not; and if it was obtaining, it obtained. There is, therefore, a single past-tense thought of the form (3x)(∃y)(xRc,y). In that case, the distinction between the two past-tense sentences, “Isabelle was causing the door to close,” and “Isabelle caused the door to close,” collapses into nothing, as of course does that between “Isabelle was closing the door,” and “Isabelle closed the door.”

5.4 Is a Causal-Relational Analysis Possible?

As they stand, the leading causal analyses fail. But it may seem that their champions were guilty of at worst a minor oversight. For it may seem that an event- or agent-causalist simply needed to add a claim to the effect that, where a transaction is incomplete, and therefore represented with imperfective aspect, the second relatum of the causal relation is not an event, or a state, but a process.
This proposal would preserve the spirit of the original analyses. It would retain the idea that a sentence describing a complete transaction has the logical form \(((\exists x)(\exists y)(xRc y))\), adding, now, that a sentence describing an incomplete transaction also has this form, so that the perfective and imperfective sentences would both employ a static relational predicate, \(aRc b\), to represent “the causal relation.” The amended analyses may seem able to account for the contrast between imperfective and perfective transactions as follows:

<table>
<thead>
<tr>
<th>Event Causation</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perfective</td>
<td>Imperfective</td>
</tr>
<tr>
<td>((\text{event})Rc(\text{event}))</td>
<td>((\text{event})Rc(\text{process}))</td>
</tr>
<tr>
<td>((\text{agent})Rc(\text{event}))</td>
<td>((\text{agent})Rc(\text{process}))</td>
</tr>
</tbody>
</table>

Leaving aside the disputed question whether the causer is an event or an agent, the contrast between the perfective and the imperfective is presented as the contrast between “(...)Rc(\text{event})” and “(...)Rc(\text{process}).”

But this is no solution. What we have now are two distinct relational predicates masquerading as one. After all, relations that have different restrictions on their arguments are simply different relations. In that case, there is no such thing as “the causal relation”: at best we are confronted with two causal relations.

Perhaps there is some other way for a causalist to avoid the problem posed by the imperfective. But at some point we have to ask ourselves, “Why continue down this road?” I observed in Section 2 that a causalist theory of transaction implies that everyday practical thought is subject to an illusion, and that such a theory should be pursued only if it proves necessary. I then argued (in Section 3) that one of the two philosophical problems that has seemed to make it necessary is, upon reflection, no problem at all, and (in Section 4) that the other is not a problem that a causalist can solve. Most recently, I have argued that, far from being necessary, a causal analysis of transaction seems to be impossible. I will now suggest a solution to these problems.

6 Three Problems, One Solution

The solution is to accept that ordinary transitive thought, and therefore also practical thought, reflects the strict philosophical truth in representing a transaction as a single seamless whole. This requires us to distinguish more logical
forms of thought than analytic philosophers typically acknowledge, but, importantly, it does not require us to acknowledge any unfamiliar type of logical distinction.

The first step is to accept the traditional distinction between unipolar and bipolar forms of predication, as well as the traditional claim that transactions and relations are both irreducibly bipolar. This is the intended upshot of Sections 3 and 4, below. The second step is to recognize another formal distinction, though one of exactly the same kind, between between static and dynamic predication. We saw in Section 5 that a static condition, whether unipolar or bipolar, can be predicated of a thing in the past, present or future. It may be that Shem was handsome, and likewise that he is taller than Shaun, that he is taller than Shaun. Dynamic predication is formally distinct insomuch as it admits of a further temporal contrast, between the imperfective and the perfective. The same dynamic predicate may attach to a subject expression, or to a pair of subject expressions, either imperfectively, as in “Shem was spitting,” and “Shem was kicking Shaun,” or perfectly, as in “Shem spat,” and “Shem kicked Shaun.” The product of these two distinctions is a four-fold division of forms:

<table>
<thead>
<tr>
<th></th>
<th>Unipolar</th>
<th>Bipolar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static</td>
<td>$\alpha(\xi)$</td>
<td>$\beta(\xi,\zeta)$</td>
</tr>
<tr>
<td>Dynamic</td>
<td>$\gamma(\xi)$</td>
<td>$\delta(\xi,\zeta)$</td>
</tr>
</tbody>
</table>

We may think of these as representing four different types of logically atomic sentence.\(^{39}\)

Acceptance of this division of forms provides a ready solution to the three problems discussed above. However, it commits one to the thesis that there are

\(^{39}\)Michael Thompson argues that the distinction of rows is a logical distinction in “Naive Action Theory.” For the benefit of readers familiar with Thompson’s essay, I will orient my project in relation to his. The dynamic predicate, $\delta$, in $\delta(\xi)$ and $\delta(\xi,\zeta)$, is what Thompson calls a “process-or-event form.” He gives it this unwieldy name, because the very same form that appears in imperfective thoughts of unfolding *processes*, like “Shem was walking to school,” or “Shem was sawing the plank,” appears, also, in perfective thoughts of completed *events*, like “Shem walked to school,” and “Shaun sawed the plank.” This feature of Thompson’s theory is preserved in my notation, since a thoughts of the form $\delta(\xi)$, or $\delta(\xi,\zeta)$, are determinable in both of those ways.

But a further continuity is worthy of mention. The notion of cause enters standard accounts of human action at two different places. Philosophers appeal to causation, first, where they say that a mental state *causes* a “basic action” (typically conceived as a bodily movement); and second, where they say that the latter *causes* further things to happen. One of the targets of Thompson’s essay is the first appeal to causation. My own efforts, here, have been directed against the second. In both cases, the strategy is to argue that the invocation of “cause” obscures what is properly a logical or metaphysical feature of dynamic reality as such. Thompson’s topic is the dynamism of the bottom row, as distinct from the top. Mine has been the bipolarity of the righthand column, as distinct from the left. The convergence of the two topics is the bottom right cell.
two fundamentally different ways of representing agent as acting, one of which is unipolar, the other bipolar; and this might seem unattractive to a philosopher of action. Shouldn’t we prefer a theory on which all action is the same?

The objection seems compelling only until one notices that by parity of reasoning one would have to reject Aristotle’s distinction between poion and pros ti, Russell’s distinction between Fa and aRb, and Frege’s distinction between φ(ξ) and ψ(ξ,ζ). To the question whether we shouldn’t to prefer a monolithic theory of static reality, the answer is simply, “No, we should not.” The proposed conception of dynamic reality is only as extravagant as that.

Notice, finally, that philosophers of action are, as a whole, happy to mark a distinction between “basic” and “non-basic” actions, where the former are said to be actions performed “directly,” or “just like that,” or “without employing means,” or “without doing anything else.” For better or for worse, this distinction has established itself as a ubiquitous tool in contemporary action theory. The actions put forward as basic include pure bodily movements, like raising one’s arm or turning one’s head, and acts of locomotion, like walking, hopping, skipping and jumping. But what action theorists mean to exclude by speaking of a “basic action” is precisely what I have called a transaction—action by which the agent works on something distinct from herself. If a human agent is embodied, she does not stand to her body as other. And if her body is not other, she stands in no relation to it (except, if you like, identity). So her body is not a patient in relation to which she is an agent: she does not transact with it, as she might with an external object. What lies behind the contrast between basic and non-basic action is, I think, the perception that moving oneself from place to place, or changing (simply) the position of one’s limbs, is fundamentally different from transacting with something else. And that distinction, incipient in the thought of most contemporary philosophers of action, is what I mark by difference between γ(ξ) and δ(ξ,ζ).

Of course, many important questions remain. If there are, as I claim, two different forms of action, it is reasonable to wonder how they are related, which is fundamental, and whether can they be integrated into a unified theory of agency. But these are topics for another occasion.

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40His legitimacy has been recently questioned by Douglas Lavin, “Must There Be Basic Action?”

41Thus, despite the fact that “She raised her arm,” and “She raised her glass,” are both transitive sentences, the first is a thought of the form γ(ξ), the latter of the form δ(ξ,ζ).

42See my “Three Conceptions of Agency.”

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