

## COMPLETE CAUSES

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1. As we don't subscribe to a view of knowledge and reality anything like Hume's, why is our understanding of the causal tie so readily regarded as the preanalytic datum of Hume's *analysans*? The answer will be that despite the remoteness of Hume's sensational atomism, his account of causation contains a *structurally* accurate rendering of our domestic concept. I do not believe this answer is satisfactory. The gap between Hume's understanding of the world and ours is too great to permit the easy assumption of structural agreement on causation.

Donald Davidson's recent and influential analysis of singular causal statements<sup>(1)</sup> affords a marvelous opportunity to set the record straight. What looks like a parallel between Davidson's position and Hume's, a parallel unmatched by familiar treatments of cause in terms of necessary and sufficient conditions, puts us on the trail of the deeper disparity. The root ideological difference between the treatments is revealed by resolving an ambiguity as to what Davidson and Hume mean by the family of terms comprising «complete», «partial», «whole», «incomplete», etc.

One cautionary word about method is apposite. As my efforts are directed for the most part at Davidson's analysis of causal relations, the contrast with Hume will be developed in a negative and approximative way, i.e. by stressing how Davidson fails to respond to Hume's requirement of causal completeness. Evidently, such a method has its limitations. How far am I likely to succeed in explaining what «bank» means as applied to financial institutions by pointing out that the probability of my getting sunstroke or landing a carp there is low? The present case is, no doubt, not as bad as this. But the pitfalls of modelling our ancestors' views in our own terms are underestimated at the investigator's peril.

2. To get down to business, let me work out the *prima facie* parallel between Davidson and Hume.

Davidson's main critical point is contained in this claim: «What is

partial in the sentence 'The cause of this match's lighting is that it was struck' is the *description* of the cause» (88). A distinction must be observed, in other words, between the incompleteness of the description, and the incompleteness of what is described thereby. «Mill», Davidson goes on to say, «was wrong in thinking we have not specified the whole cause of an event when we have not wholly specified it» (89). Those who follow Mill, maintaining that a sentence like the one quoted gives only a (necessary) condition for the result which ensued, «share Mill's confusion [;] they think every deletion from the description of an event represents something deleted from the event described» (*ibid*).

Singular causal claims, then, do not specify only component parts or limited features of causes (and effects); in a well-formed singular causal claim, the whole cause is specified. Thus Davidson's persuasive response to one who, denying that «The striking of the match caused it to light» specifies the whole cause, backs this up by pointing out that if there had been no oxygen present, or if the match had been in a damp condition, ignition would not have occurred: «It cannot be [Davidson rejoins] that the striking of this match was only part of the cause, for this match was in fact dry, in adequate oxygen» (88), and so on. It follows that a singular causal claim in which, *per impossibile*, only part of the cause is specified automatically counts for Davidson as false: it is necessarily the case that causes, as specified in singular causal claims, are complete.

The idea of causal completeness plays a prominent part in Hume's thinking as well. Though Hume discusses *causal fundamentals*, i.e. agents and patients involved in change, not the states of affairs or events in which they figure, which I shall refer to as «causal relata», the *prima facie* parallel is clearly visible. Here is the directly relevant remark, from *Treatise* 1.1.4:

Two objects may be considered as placed in [a causal] relation, as well as when one is the cause of any of the actions or motions of the other, as when the former is the cause of the existence of the latter. For... that action or motion is nothing but the object itself, considered in a certain light.

The key words are those of the last sentence. Consider the claim

that the spin of the cue ball causes the slice of the eight ball. In saying that «the motion is nothing but the object itself, considered in a certain light», Hume is answering the critic who argues that the very possibility of a causal proposition like «The spin causes the slice» refutes his analysis, inasmuch as it specifies, as causal fundamentals, abstract items which, on that analysis, are inappropriate to serving in this role. According to Hume, in other words, the truth conditions of the quoted proposition do involve concrete objects – the billiard balls – as causal agent and patient, not the abstract features which might seem to be designated as causal fundamentals by the singular phrases «the spin» and «the slice».

Thus, just as the subject phrase in «The striking of the match causes it to ignite» specifies, for Davidson, the whole event of the match's being struck as cause, not just a feature of it, the striking, so Hume takes the truth conditions of «The spin causes the slice» to involve not an abstract characteristic, viz. the spin, as causal agent, but the concrete cue ball.

In laying bare the logical skeleton of his causal proposition, Davidson argues that the gerundive nominal «the striking» enfolds a variable ranging over events. The form of «The striking causes the match to light» is given by «There is an event,  $x$ , such that  $x$  is a striking of the match, etc.». One can, it seems, smoothly adapt this logic to Hume's meaning. Hume can be construed as saying that the subject phrase in «The spin causes the slice» engages a variable ranging over causal fundamentals of the type required by his analysis, viz. (what he calls) objects. When this is made explicit, we end up with a sentence like the preceding quantified one: «There is an object,  $x$ , such that  $x$  spins, etc.». The variable in the first *analysans* ranges over events, i.e. concrete causal relata; in the second, over objects, i.e. concrete causal fundamentals.

3. With the *prima facie* parallel available for future reference, let us turn for a closer look at Davidson's position.

In the quotations from Davidson's article above, we note his emphasis on the distinction between

a partial or incomplete description of a cause

and

a description of a partial or incomplete cause.

Mill, that causal relata are represented completely by singular causal claims, it is not, in his view, a sense on which the possibility of describing them completely has any bearing. The reason for this is that causal relata are, according to Davidson, specified *referentially* by singular causal propositions, not descriptively, a fact made plain by the appearance of (event-)variables in his *analysantia*. Because events related causally are introduced referentially, the completeness or incompleteness of the descriptive resources which typically aid in introducing them, i.e. under which they are identified, is simply not pertinent to determining whether the whole event or only part of it is specified.

These last sentences set out Davidson's main point, and lay bare the basic mechanism of his argument, *viz.* the distinction between referential and descriptive specification. The question leading forward is as follows. Is Davidson justified in maintaining, on the strength of the thesis that events are referentially introduced as causal relata by singular causal claims, that the whole cause is introduced by such a claim? I think the answer is «No». This does not mean, in logic, that the whole cause is *not* introduced by a proposition of this kind. But to see that Davidson's conclusion outruns his premises will illuminate why Hume would express principled dissatisfaction with Davidson's account of cause, claiming that it is, if at all, only accidentally keyed to the requirement of causal completeness, on which Hume insists. And this will return us to the issue of complete description.

4. Considering the phrase «complete description» (here and below, in its natural sense) it is easily seen that descriptions can be roughly graded on a completeness scale. Descriptions may be full or spare, sketchy or detailed, selective or indiscriminate. Davidson's own talk of «partial descriptions» also bears witness that description is thus scalar, like heat, a matter of more-or-less. By contrast, reference is non-scalar; like circularity, it is a yes/no, an all-or-nothing, affair. While references may be oblique or direct, definite or indefinite, they cannot be characterised by the adjectives applied to descriptions.

Suppose, for instance, that I describe a wall as red. The description is poorer than it would be if I were to describe it as bright red. However, if I refer to the wall either as «the red thing» or as «the bright red thing», the referential content remains the same, i.e. I make exactly the same reference.

According to Davidson, there is, *pace* Mill, no valid transition from the first to the second. Also, the sense in which causes represented by our singular causal statements are partial or incomplete is, again *pace* Mill, the sense expressed by the first, not by the second, phrase.

If we repeat the first phrase, the following question virtually poses itself. Could there be a complete, a non-partial, description of a cause? While Davidson does assign a meaning to «complete description» – he says that we can render a description of a cause complete by adding to it until we reach «the point where we can deduce, from this description and laws, that an effect of the kind described would follow» (88) – this is quite an unnatural construal. A description complete in Davidson's sense may well be intuitively incomplete, i.e. selective with respect to features of a cause. The unnaturalness of Davidson's usage is driven home by noting that we may be able to *subtract* from a cause's description without damaging its completeness, so understood. Suppose, for instance, that the volume of a vessel containing a gas decreases as a result of the vertical (rather than horizontal) application of hydraulic (rather than pneumatic) pressure. These two features, irrelevant to deducing the mentioned effect with the aid of Boyle's Law, can be deleted. But to say that pressure is applied to a vessel is to describe what occurs in a less complete way than by saying that hydraulic pressure is applied vertically.

I can only conjecture here, but possibly as a result of his special reading of «complete description», Davidson doesn't address himself to whether a description might be complete in the natural sense of the phrase. This may seem to be a potentially dangerous omission, in view of the importance attached in the overall argument to denying that the transition set out above is valid. For inasmuch as a description's Davidsonian completeness is compatible with – in fact well nigh entails – its natural incompleteness, the transition's invalidity for descriptions which are complete *à la* Davidson might, as a result of the co-option of the word «complete», be mistaken for the invalidity of the transition when a description is complete in the natural sense.

Fortunately, without commitment as to whether the omission is a flaw, we are not forced to rely on conjectures in concluding that Davidson, had he bothered to raise the issue, would have denied that the notion of complete description, understood naturally, is relevant to his position. Whatever sense it is in which he maintains, as against

But if reference is non-scalar, how are we to regard the phrase «complete reference»? It could be claimed that because one reference cannot sensibly be said to be more complete than a second – just as one of two circles cannot be described as rounder – the phrase is ill-formed. Alternatively, actuated by the thought that all circles are round, one could argue that «complete reference», like «round circle», is pleonastic, and therefore that «incomplete reference», like «circle part of whose circumference is straight», is objectionable because implicitly self-contradictory.

I confess to finding the latter line odd: it looks more like an excuse to forgive the phrase «complete reference» despite its objectionability than an explanation of why it is really unobjectionable. But it might be claimed that any preference for one of the two readings is really a mere matter of taste; inasmuch as both respond to the same truth, that reference is non-scalar, the opposition between them is literary, not philosophical.

I see no cardinal reason for objecting to this amicable settlement between the two lines. But there are grounds for thinking that because Davidson leans towards the second, softer, line on the phrase «complete reference», he is led to misrepresent the content of his analysis of singular causal propositions.

Consider Davidson's crucial critical remark, already quoted, that «Mill... was wrong in thinking we have not specified the whole cause of an event when we have not wholly specified it». What does the term «specify» mean here? «Describe» could be substituted for it at both occurrences. But if this substitution captured Davidson's meaning, then apart from the fact that it would be puzzling that he doesn't use the clearer word, the resulting point would fail to express his objection to Mill, viz. that causal relata are *referentially* introduced by singular causal claims. The first «specify» should be glossed accordingly, so that the notion of referential specification explicitly surfaces when the passage's content is fully unpacked. «Mill», Davidson can be paraphrased, «was wrong in thinking we have not specified the whole cause because of his belief that causal relata are specified descriptively, not referentially, i.e. because he takes the specification of causal relata to be a scalar matter».

While disclosing Davidson's meaning, this also reveals a glaring *non sequitur*. To say that causal relata are specified in a referential

fashion, and to conclude from this that the whole cause, not part of it, is specified, on the grounds that referential specification, by contrast with descriptive specification, is non-scalar, involves moving from «complete» as a property of the semantic function of reference to «complete» as a property of referents, i.e. items referred to. Davidson is at most entitled, if we accept his analysis of singular causal propositions, to the claim that whatever it is that is identified as a causal relatum by a singular causal proposition is identified, if it is identified at all, in an all-or-nothing manner, i.e. *it* is identified irrespective of the richness or paucity of the accompanying descriptive resources under which it is identified. This much follows from (i) the fact that causal relata are specified referentially, and (ii) the non-scalarity of reference. But how does this entitle Davidson to claim that «the whole cause», as he calls it, is identified? Even granting unreservedly, in other words, that Mill slips up in thinking that a singular causal claim does not specify the whole cause due to his mistaken belief that causal specification is descriptive, Davidson is not *ipso facto* right to say that the whole cause is specified because the specification is referential. It simply doesn't follow. All that follows, again, is the somewhat unexciting result that whatever it is that is picked out as the causal relatum is picked out, not merely the feature or features of it expressed by the descriptive terms under which it is picked out. But it is a substantial question, as yet unanswered, whether this is indeed the whole cause.

The fact that a philosopher takes the soft line towards the phrase «complete reference» explains how he could allow this error to pass unnoticed. One who denies that «complete reference» makes sense thereby effectively scotches the danger that «complete» will be inadvertently transposed from «What is picked out as cause is picked out completely» to «The complete cause is picked out». Because such a one outlaws the phrase «picked out completely» as a variant of «referred to», he sees to it that the question of transposition will never be framed. To allow the phrase is to leave the door open to the illicit move.

It emerges on this diagnosis that the gap in Davidson's reasoning traces back to an error which is something of a counterpart to the fallacy he pins on Mill. Davidson correctly denies the validity of the move from the incompleteness of the description of an item specified

by a singular causal claim to the incompleteness of the item specified. But he himself argues that the item specified is the complete cause from the fact that it is specified referentially or in a non-scalar fashion, i.e. (to use the problematic synonym) specified completely.

5. The above criticism does not establish that Davidson is mistaken to claim that a singular causal proposition like «The conflagration resulted from the match's being struck» picks out the whole cause. It confirms only that the conclusion overreaches the premises. But examples of apparently well-formed singular causal propositions can be found which, if accepted as genuine, show categorically that Davidson is mistaken here as well. For reasons to be given below, I do not think this evidence is compelling. Nevertheless, it is worth presenting because of the light it helps to shed on the contrast between Davidson and Hume concerning causal completeness.

Consider the proposition: «The striking of the match causes the flame». Davidson himself presents this as a singular causal proposition. In a claim already quoted, he answers his Millian opponent by saying that «It cannot be that the striking of this match was only part of the cause». Now a singular gerundive phrase like «the striking of the match», it can be maintained, picks out not the event of the agent's striking the match, but a feature of it, viz. the striking.<sup>(2)</sup> The event would be designated by the subject nominal in, for instance, «John's striking the match took place at noon». If the former is an acceptable singular causal proposition – and we have Davidson's unintended word that it is – then he would be mistaken here as well.

Were Davidson mistaken here, his position would to all intents and purposes collapse back into Mill's. I will explain two paragraphs hence why the evidence falls short, but first let me clarify the apodosis of the preceding sentence, as the underlying point will prove significant in the sequel.

At one stage, Davidson states that his analysis is incompatible with Mill's on the grounds that particular events are specified as causal relata by his analysis: «talk of particular events as conditions is bewildering» (84). But consider «The striking of the match causes the flame», interpreted as above. The content of the subject phrase «the striking», inasmuch as it specifies a feature of an event, an accident of the agent, matches that of the predicate (the verb) «strikes». Now there is nothing bewildering in talk of predicates specifying condi-



tions: that is precisely what predicates do. So don't we have, in the sample proposition, a condition represented as a particular? It is quite true that the particular singularly designated by «the striking» is an abstract particular. There is, in general, a reciprocal relation between singular terms for abstract particulars and cognate predicates, as illustrated by the factual coincidence of «The wall is bright red» and «The red colour of the wall is bright». But reciprocity is just that, reciprocity. Awkwardly or not – and in many instances with no awkwardness at all – we can reformulate any proposition in which a general term « $\Phi$ » operates in predicate position as a proposition in which the singular term «the  $\Phi$ » appears referentially. Here is a causal example. Rather than saying «The water in the beaker becomes twice as hot as a result of being heated», I can say «The heat of the water doubles as a result of the beaker's being left on the flame». Mill can therefore reformulate his position so as to bring it into agreement with Davidson's demand that causes be referentially specified *without going back on the thesis that to specify a cause is to specify a condition*! While Davidson is descriptively right, I think, in claiming, against Mill, that events, not features of events or conditions, are specified as causal relata by singular causal claims, we see how far even this (which itself falls short of the claim that the whole cause is specified by such claims) is from being a consequence of the fact that causal relata are referentially, not descriptively, specified.

I will pick up the lesson of this point in a moment. First I want to explain why the above counterexample to Davidson is less weighty than it seems. Even given cases in which, by strict linguistic criteria, the singular designator in a causal proposition picks out what even Davidson would agree is less than the whole cause, he can still point to those other cases, in whose analysis a variable ranging over events appears, and argue, to my mind convincingly, that these are standards from which the problem cases intuitively deviate. «Do you really mean», Davidson can be conceived to ask rhetorically, «that it is *the striking* that causes the flame? Surely it is the match's being struck?». I think our agreement is forthcoming.

However, while we are not therefore to dwell on the counterexamples for their intrinsic interest, they open onto a deeper point.

6. Suppose we agree that «the striking of the match» designates only an aspect of an agent's striking a match. The striking is not, by

definition, an independent element or temporal portion of the event. It is, again, an accident of the agent, a feature of the event. To speak about the striking is to focus linguistically on a characteristic disposition of the match-wielder's arm through a span of time.

Exploiting the classification of «the striking» as a designator of a dependency, an argument can be framed for an analysis of «The striking of the match causes the flame» which resembles Davidson's. If the striking is essentially a dependency, it follows that when an utterance of the sentence is true, so is «There is an event,  $x$ , such that the striking is (a feature) of  $x$ , etc.».

This *analysans*, though resembling Davidson's, is reached along quite a different line from the one he takes. The introduction of the reference to an event is not warranted here by what Davidson himself understands by «analysis», viz. uncovering logical structure.

The same result emerges in the following example, which abstracts from the issue of causation.

A perceiver, viewing a wall, utters: «The red I see is bright». It is certainly incorrect to say that an analyst of logical form could hope to extract from this «There is here an object,  $x$ , such that  $x$  is brightly red». Even if it is admitted – as it ought to be – that a colour like red must, qua accident, be the colour of something, e.g. an object like the wall, this does nothing to prevent the speaker from singularly specifying the colour, as distinct from the object which has it. However, pointing to the admission that the colour is abstract, an analyst would be within his rights to claim that when «The red I see is bright» is true, so is «There is an object,  $x$ , such that  $x$  has a bright red colour».

In these examples, the introduction of the variable ranging over, respectively, events and objects, is not justified under the rubric of revealing logical form. If a word is wanted, it is justified *ontologically*, i.e. by the fact that the singularly designated items, in the first case the striking, in the second the red colour, are dependencies, hence beholden to the richer items which have them for their existence.

Re-examining Hume's claim, quoted in section 2, along with the attendant discussion, it emerges that the preceding reasoning lies behind the talk of variables which I put into Hume's mouth, not the imperatives of Davidsonian penetration to deep structure. When Hume says that «the motion is nothing but the object», his point is not

that the singular designator «the motion» *means* «the object which moves», but rather that if «the motion» successfully refers, there is *ipso facto* an object to which «moves» applies.

This enables us to cash the ambiguity concerning «complete» which divides Hume and Davidson in a more formal way. Hume's requirement of completeness of causal fundaments is first and foremost a requirement which objects, which may be referred to in causal propositions, must satisfy. Davidson's point, expressed in his thesis that complete causes are specified by singular causal propositions, is the far weaker one that the causal relation is represented by such propositions as holding between items picked out referentially by means of features of them.

7. Armed with the distinction between the two bases for introducing variables into the *analysantia* of singular causal claims, we are in a position concretely to illustrate how Hume would react to Davidson's analysis. I will work with an example which is causally neutral.

Suppose a speaker, viewing a brightly red wall, states: «This brightness is dazzling». The Humean reasoning concerning «the motion» would reapply to «the brightness». Because a chromatic tone is essentially of a colour, when what the speaker asserts is true, so is «There is here a colour,  $x$ , such that  $x$  is bright». But the singular term in the specific proposition whose form this displays, *viz.* «The red here is bright», also designates an abstraction. So, making the same move again, we can say that when this last is true, «There is an object,  $x$ , such that  $x$  is red» is true as well.

The illustration shows that the question of completeness, which arises for «the brightness» in the first sentence and is answered negatively on ontological grounds, may arise again for the item presented as discharging the former's incompleteness, in this case the (bright) colour referred to by the subject phrase in the second sentence. Hume would thus say that Davidson has given us no reason, even if we wholeheartedly accept his analysis of the logical form of singular causal claims, to agree that the items referred to as causal relata by the latter are complete, a charge backed up by the preceding discussion. Davidson either argues fallaciously for this, or does not argue for it at all. Because Hume's requirement of causal completeness is an irrevocable precondition of the possibility of an item's serving in the first place as a Humean causal fundament, it follows

that Davidson's analysis differs fundamentally – in motivation and possibly in consequences – from his own. For that analysis is compatible with causal fundamentals which are, in Hume's lights, incomplete.

After the preceding exertions, this may seem an anticlimactic result. Nothing has been said to show that Davidson's causal relata are incomplete in Hume's sense. Moreover, if we take our cue from the preceding example, it would seem that showing this requires us to demonstrate that an event like John's striking a match stands to something more basic in the way that a chromatic tone stands to a colour, or a colour to a material object: an unlikely prospect, to say the least.

This complaint, though expected, is not quite fair. It is not so much that one man's anticlimax is another's gripping *dénouement*. Rather, as I mentioned at the start, Hume's position has been approached throughout the discussion in Davidsonian terms. This fact is to blame if the contrast elicited seems disappointing. If I may be permitted briefly to break my historical silence, it will take but little effort to make this clear.

According to Hume, as we all know, the causal relation holds between (what he styles) *distinct existences*. To proceed, as we have proceeded, on the assumption that material objects (matches and billiard balls) are causal fundamentals, and that Hume's account of cause is in this respect our own, is thus to assume that material objects are Humean distinct existences. But why should this be true? I know of no more striking way to convince you that this question, odd as it no doubt sounds to modern ears, needs to be asked than by calling upon one of Hume's near contemporaries. Spinoza, alone among the philosophers of the era who expressly treat the issue, allows causal relations to hold at the basic level of world-description between items which are classified ontologically as incomplete or non-substantial, viz. modes of substance.<sup>(3)</sup> Causal fundamentals, for Spinoza, are incomplete. Now for all we have seen, Davidson's analysis might well apply within the framework of a Spinozistic ontology. But it would write *finis* to Hume's critique of causation were it to emerge that causal relations hold between items which, by his own admission, are not distinct existences. It is of the very essence of that critique, and hence of the very essence of Hume's positive view on which it is

based, that items causally related meet Spinoza's definition of substantiality, viz. «being in themselves». To me, it is one of the great conundrums of contemporary historical scholarship that Spinoza could be *attacked* for claiming that causal relations are necessary when, on perfectly Humean grounds, this is presumptively true given Spinoza's ontology.<sup>(4)</sup> What more decisive historical testimony could one wish that Davidson's claim of causal completeness is an age away from Hume's?

Finally, what of the notion of complete description, left hanging since section 3? A condition of the availability of an item for service as a Humean causal fundament is that it be complete. This, we have seen, does not mean that it is an object of singular reference of a standard causal proposition like «The cause of the match's lighting is that it was struck». The notion of complete description models what Hume has in mind. Consider for the last time Hume's claim that «the motion is nothing but the object itself, considered in a certain light». As concerns the subject phrase in «The spin causes the slice», this means that the general term «spin» applies predicatively, if this statement is true, to an item to which, necessarily, some other general term applies, e.g. «ball». Until one reaches a term whose application presupposes the application of no other, a genuine fundament will not have been specified. One cannot be guided in this search for ground level by the semantic notion of reference; as the sentence «The spin causes the slice» itself illustrates, one can perfectly well refer singularly to an item which, in Humean terms, is incomplete. The criterion of completeness – and there is no reason to believe that this criterion is effective so far as our standard linguistic resources and patterns go, a fact which will only surprise those who forget that Hume is a critic of language, demanding that linguistic representation be disciplined by ideas – is that nothing more can be said descriptively. For Hume, then, the move from

a complete description of a cause

to

a description of a complete cause

is valid.

## Notes

(<sup>1</sup>) Page references in the text are to Davidson's «Causal Relations», in E. Sosa, ed., *Causation and Conditionals* (Oxford: Oxford University Press, 1975). The piece originally appeared in the *Journal of Philosophy*, 64 (1967), pp. 691-703.

(<sup>2</sup>) See H.J. McCANN, «Nominals, Facts, and Events», *Philosophical Studies*, 35 (1979), p. 144: «It is above all the singing that [«John's singing of the Marseillaise» and «the singing of it»] contrive to name – the singing that belongs to John as an accident, and to his action as a constitutive feature». The distinction may seem too subtle to be read into, or out of, unreflective discourse. It is enough for me, however, that there is a distinction. But let me seize the opportunity to protest the aggressive use of such distinctions, which is widespread in the literature. According to McCANN, there are no nominals of the form «the singing the Marseillaise» and «the singing it», and ontological conclusions are drawn from this fact. But Shakespeare says of Macbeth that «nothing in his life became him like the leaving it», and Berkeley, e.g. at *Principles* Intro. 6, uses phrases of the allegedly non-existent form: «the easier conceiving what follows», «the unraveling this matter».

(<sup>3</sup>) Leibniz is no counterexample. While he accepts causal relations, this is only on the phenomenal level.

(<sup>4</sup>) I attempt to set *this* record straight in «Causation, Cognition, and Historical Typology», *Dialectica*, 34 (1980), pp. 211-227.

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