

Apostolos L. Pierris

**Remarks on the Notion
of Complete Determination
and Related Notions**

[Working, uncorrected copy, sometime in 1973]

I/ The intuitive idea behind the notion of complete determination is that of the set of all properties of a given concrete thing.

2/ The explication of the idea, i.e. its formulation in terms of our theory and its "position" within that theory, may be effected as follows, summarily:

(i) Concrete things are determined by abstract determinants.

(ii) Abstract determinants are structured in a system.

(iii) One of the "relations"¹ structuring the system of determinants is the determinate-determinable "relation".

(IV) There are also other structuring connections.²

1. I write ' "relation" ' and not 'relation', because relations themselves are determinants determining concrete things.

"Relations" relate entities categorially homogeneous (i.e. entities or objects belonging to the same category). Ties connect entities or objects belonging to different categories. Connectors include ties and "relations". In this sense, relations are "relations" relating concrete things.

2. See, for example, Essay V, pp. 9-12, for an incomplete and mainly negative in its results discussion of this topic.

(v) Regarding (iii): it follows that if a concrete thing is determined by a certain determinant, then it is also determined by all determinables of that determinant, as well as by all differentiae constitutivae of the determinant in question and of the determinables of the determinant.

(vi) From (iii) also it follows (given our explanations of the notions involved) that if a concrete thing is determined by a certain determinant, then it is also determined by one of the determinates under the said determinant (but by one only) --- and so on till the absolutely determinate determinants have been reached. (Also, it must be determined by the differentiae constitutivae of the determinants characterising it and lying under the initial determinant). ((The Law of Determinateness and the Law of Incompatibility in Determinateness)).

(vii) Regarding (iv): it follows that if a concrete thing is determined by a certain determinant, then it is also determined by all determinants which are connected with the said determinant in any other way than that of the determinate-determinable connection but such that the exemplification of the former necessitates the co-exemplification of the latter (in the same concrete thing)¹, in the appropriate way.

(viii) In general, the structure of the determinants would provide the ground for the validity of three kinds of metaphysical Laws governing the way concrete things are and are connected (in the sense that the particular ways must comply to them)

I. Of course these connections must be defined positively and not only negatively, as here, by means of the contrast to the determinate-determinable connection. Then, also, it would be clear exactly how (vi) follows from (iv).

One might object that a structuring "relation" may not affect the tie-connections of the structured entities (determinants) to concrete things in the above required sense, or in any other indeed. But is this possible? After all, we may claim the separate subsistence of determinants in themselves (and their independence, in this sense, from concrete things) without abandoning the view according to which the way determinants are (and are connected) in themselves, is necessarily connected with the way concrete things can be (and can be connected). It is important, I think, that the compatibility of that claim with this view, bereaves the anti-realist metaphysician of one of his main weapons against realism.

in all possible worlds¹.

(L₁) The exemplification of a determinant metaphysically² necessitates the co-exemplification of other(s) in the same concrete thing(or in specially connected concrete things).

(L₂) The exemplification of a determinant metaphysically requires the co-exemplification of one(or some) among a class of determinants(in one---or other(s) than the first one, but specially connected concrete thing(s)), but it does not necessitate specifically the exemplification of a particular one among them. In such a case the said exemplification necessitates indeterminately(or indifferently) the exemplification of another(or others) determinants, from a definite,determined class of them.

(L₃) The exemplification of a determinant metaphysically precludes or is incompatible with the co-exemplification of certain other(s) determinant(s) (in the same concrete thing or in other(s) specially connected concrete thing(s))³.

S/ And now the crucial point:

I form the conception of a set of determinants regarded as co-exemplified in one concrete thing and satisfying the following conditions;

1.

We preserve here the spirit of Essay IV regarding the double claim that determinations(and not determinants) are entailed, required, presupposed, necessitated etc. from(or:by----as the case may be) other determinations; and that nonetheless the necessitation etc. is grounded on the structure (through certain "relations", other, of course, than the mentioned ones) of the determinants in themselves. We here expand, though, the notion of structure of determinants so as to include structuring from "relations" other than the determinate-determinable "relation", too.

2.

I say 'metaphysically' just in order to avoid begging and confounding too many questions by saying 'logically'. One principal out of the many: whether the dichotomy necessary-contingent singly understood is all-sufficient and adequate for the purposes of discriminating among the modalities of states of affairs and propositions.

(Again I speak of 'states of affairs' and not of 'facts', because I have, till now, introduced 'fact' technically to signify only simple(atomic) determinations of the proper-predicative kind.

(e₁) For every determination included in the set, all other determinations necessitated by all relevant Laws of the L_x-kind (laws necessitating the obtaining of other determinations, of the same concrete thing, i.e., necessitating the co-exemplification of other determinants (other than the one directly involved in the initial determination) in one and the same concrete thing) are also included in the set.

(e₂) For every determination included in the set, all undeterminedly necessitated determinations (according to relevant laws of the L_y-kind) have been determined ("specified") and included in the set, in so far, of course, as the necessitated determinations are in respect of one and the same concrete thing.

(e₃) The "specification"² of the undeterminedly necessitated determinations is such as to exclude any inconsistency originating in the set as a result of this "specification". And generally, the set must be self-consistent; that is it must not include incompatible determinations----in the sense of inconsistency

5. (from the previous page)

In the special case of the determinate-determinable "relation", a law of the present type would state that the exemplification of any "monadic" determinant which is a determinate under a certain (proximate) determinable determinant, precludes the exemplification in the same concrete thing of any other determinate under the same determinable.

I.

The determinant not in itself but qua determining is one of the discerned senses of the 'determination'. It is not the determination as a whole (i.e. the fact) because we here abstract from the concrete thing determined.

2.

I put "specification" in double inverted commas to emphasise the objective settlement or determination, on which our mental subjective activity of forming the set depends and is modelled.

or incompatibility defined by the L_3 -laws¹.

Call such a set of determinations, 'complete determination'.

4/ We may now define the notion of a possible concrete thing by means of such a complete determination. Not that a possible concrete thing is such a (possible)² complete determination----any more than an actual(existing) concrete thing is its complete determination. But the latter is determined or characterised by it (strictly speaking, it is determined by the determinants whose determining constitutes the determinations included in the complete determination in question), and similarly, a possible

I.

Impossibilities are of various kinds.

Firstly, there is the categorial impossibility---the one corresponding to a syntactically ill-phrased sequence of signs purporting to be a meaningful sentence in an ideal language. Such is for example the impossibility "expressed" in the "sentences": 'a is P-ness' or 'P-ness is (a) tie' etc.

Secondly, there is the contradiction--- the impossibility of there obtaining something expressly contradictory, or something which can be formally logically transformed into such an express contradiction.

Thirdly, there is incompatibility as above explained. (Corresponding senses of 'necessary' and the other modal words can be conceived, on the same pattern).

But now, notice that from the nature of our case impossibility of the first kind is out of place. For we are thinking of determinations of concrete things by determinant and this is categorially all right. (But see p. ,n.).

Again, what is perhaps more interesting, impossibility of the second kind is out of place here, too. For determinants being positive entities (indeed a categorical necessity) and determinations following suit as being positive objects (again a pleonasm) (see Essay IV for these two claims), there is simply no room left for the intrusion of any contradiction in any class of them.

2.

By 'possible complete determination' I mean (keeping the well known ambiguity) either an unactualised complete determination or an (actualised or no) complete determination qua having the potentiality of being actualised.

concrete thing is possibly(or potentially) determined by a (possible) complete determination¹.

5/ But now, before proceeding in the manner of Essay III, an objection may be urged and must be faced. The objection may be stated as follows:

"Every concrete thing stands in various and multifarious relations to any other concrete thing in the World: relations of action and passion, of causal interactions, of spatiotemporal connections etc. At least the last mentioned relations provide a network in which every thing is related to all others. Now all this variety of relations must find a place in the complete determination of any concrete thing, if the regulative intuitive idea from which we started is to be preserved at all. But then in the complete determination of an (existing) concrete thing, what corresponds to a complete description of no less than the whole of the World must be somehow included (think of Leibniz). And similarly, in the complete determination of any possible thing, what corresponds to the description of the entirety of the possible World to which the possible thing in question belongs (or is considered as belonging) must be somehow contained. But if this is so, the whole procedure of Essay III, in so far as it depends on the examined notion, it would seem to be invalidated".

6/ The objection is valuable. For, at least, it shows and calls attention to the existence of a lacuna in the system --- or rather a "vacuum" and defect in the development of the system concerned till now. In trying to answer it, or at least to loosen the

I.
For example: let a be an (existing) concrete thing, $'e'$ signify a possible concrete thing, and P -ness be a determinant included in the complete determination of both a and e . Then p is-actually P and e is-potentially P . e is not (actually) P . (When I use forms of the verb 'be' unqualifiedly, I mean actual being).

knit it produced(in the appropriate sense of answering an objection to a system), I shall make some remarks, each one of which could provide a radical way out of the difficulty---but almost none of which I should accept absolutely unmodified, for the simple reason that in such a case the "therapy" might seem to be worse than the illness or create other illnesses (regarding a good, valid objection to a system, as an illness of the system).

7/ (I) Firstly, it might be proposed that one of the premises of the objection is false---namely that anything is somehow related to everything else in the World. One could have supported this apparently paradoxical counter-claim by adducing the following considerations:

(i) Causal interactions do not extend, in respect of their influences, very far from their respective centres of action. The testimony of science (say, physics) is irrelevant in philosophical problems. And besides, Science changes her mind from time to time. The Newtonian gravitational action from a distance, gave way to the Einsteinian view of the gravitational properties of space. Now I do not know the "Last Word" of Science in the presently studied respect---but one thing is certain: whatever it is, it is not the Last Word. Be that as it may, the philosophical examination of philosophical problems has no philosophically valid systematic connection with any kind of scientific inquiries, either in respect of subject-matter (problems studied) or of methodology. On the other hand, it seems intuitively plausible that, for example, my action is indeed very restricted in respect of its influence and effected results. And so, more or less, with the case of any other concrete thing. And further, notice that it is with such ordinary concrete things with which we are here concerned---not with physical atoms or wave-lengths.

(ii) Regarding the apparently hard case, the spatiotemporal relations, a disjunctive remark is in place:

(a) Either space and time are relative, and then by arbitrarily specifying an origin of spatiotemporal coordinates we can fix the relative "position" of anything by sets of four numbers¹,

(b) Or space and time are absolute (whatever this might turn to mean precisely), and then anything has specific determinations of space and time attached to it (position in space and time), determining it like any other quality or monadic predicate characterising it---and from such "monadic" determinations, when conjoined with the respective absolute spatiotemporal position of other things, all the indefinite variety of spatiotemporal relations to these other things "flows", as it were. The derivateness of these relations would bereave them of the right to be included in complete determinations, just as, in an analogous way, we have not to include to the complete determination of a red thing, besides that it is red, that it is similar to b---if it happens also that b is red. (Mutatis mutandis the same remark holds in case (a) above).

8/ Before commenting on the validity of this "way out", let me proceed to a second one.

(II) Secondly, then, it might be agreed that anything seems to be indeed related to anything else (in one way or another). Only, it could be said, this is only appearance. If we restrict ourselves to the World "as we find it", or even to the World as science "discovers" it---then indeed the objection in 2.5 is valid;

I.

Needless to say that I shall keep within the framework of classical conceptions of time and space for simplicity's sake. Taking account of scientific sophistications would only complicate the formulations and the nature of the examples given, without substantially adding or otherwise affecting the philosophical content.

that is, it holds good in this respect. But the real World (the philosophically and absolutely real World) just is not all this show of phenomena. And our metaphysical analyses are meant, of course, to apply to the real World, not to the semi-reality (if not pseudo-reality) of appearance. Therefore, the objection instead of proving that something wrong happens to our analyses, tends rather to show that causality and space-time (at least as ordinarily or even scientifically understood) pertain to appearance rather than to (absolute) Reality.¹

¶ Before discussing, still another proposal:

(III) Suppose that aRb---that is, that the relation R-ness is exemplified in the couple (a,b). The "weight" of determination by R-ness, to speak figuratively, is born jointly by a and b. Derivatively, we may say in such a case, that a has the relational property of being R to b (or some similar phrase may be used, according to grammatical propriety).

Now, in general, it may be the case that a's having this relational property necessitates, either categorially or logically or metaphysically or naturally², its having some other(s) non-relational properties; or it may not be the case that this is so. Again, considering conceivable possibilities, the subject's having a relational property may entail (in one or other of the above mentioned four ways) its having other(s) relational properties, too---or it may not be so.

I. Perchance it is important to be noticed that this is, in effect, Leibniz's solution, arrived mainly from a different though connected quarter (i.e. problems concerning the principle of the identity of indiscernibles and the principium individuationis). Only, and this is very curious from a structural point of view, he combines this solution with the idea towards which the objection itself drives and against which the solution may be used: that each "monad" "portrays", however defectively, the World in its entirety.

2. I conceive of natural law extremely generally, to cover every law, fundamental or not, of the actual World, not deriving its validity from a logical or a metaphysical law (though, of course, it presupposes them).

Let us call the class of all relational properties whose being possessed by the subject is necessitated in the above ways by the subject's having the initial relational property of being R to b, " $RP_a(Rb)$ ".¹ Also, let us call the correspondingly formed class of non-relational properties of a, associated with its having the initial relational property, " $NRP_a(Rb)$ ". Finally let us call the class of all non-relational properties of a, whose being possessed by a is necessitated by any one (or by a combination of them) of the relational properties included in $RP_a(Rb)$, " $NRP_a^*(Rb)$ ".²

The proposer asks here: Does it not follow from the subject's having $NRP_a(Rb)$, that it is R to b? Or, to strengthen the case, Does it not follow (is it not "deduced" in the appropriate sense) from the subject's having $NRP_a(Rb)$ and $NRP_a^*(Rb)$, that it is R to b? (Of course the logical, metaphysical and natural laws are given). Notice that it is no good reply to say that the above mentioned classes are "defined" by reference to the relational property Rb . For the question is not whether we could know the class, except as the class connected in such and such ways to a's being R to b; the question is rather whether the class itself (I mean, of course, the members of the class) suffices for the ontological deduction of a's being R to b---the class which, let us grant for the sake of argument, we cannot conceive, but through a general reference to a's being R to b.

In case that we think that, still, the proposer's claim is not strong or plausible enough, he may strengthen it further as follows:

Consider the totality of non-relational properties of a. Call it " NRP_a ". This, of course, includes $NRP_a(Rb)$ and $NRP_a^*(Rb)$. (But obviously it does not include the relational property Rb ---in spite of the latter's name occurring in the name of the two above mentioned classes).

1. RP = relational property of a; NRP = non-relational property of a.

2. As far as conceivability goes, any one of the three mentioned classes may be the null class. Also, $NRP_a^*(Rb)$ may be identical with $NRP_a(Rb)$.

Then the present proposer propounds a stronger thesis:

Given MRP_a and all logical, metaphysical and natural laws connecting relational and non-relational properties, there follow from them all relational properties of a , and, therefore, *inter alia*, that aRb .

But we may reasonably object to him: at most, from the conditions you have set up, it may follow that a is R to something, not just to b . So, you cannot, even with your stronger thesis, absorb the whole of the content of the relational property being R to b .

And now, it strikes both the proposer and us, that the above strong thesis, appropriately supplemented, may be used as a solution of the initial objection.

Consider the thesis:

(T) Given:

(a) MRP_a

(b) the totalities of the non-relational properties of all other various things in the World,
and (c) the (categorial, logical), metaphysical and natural laws,

then there "follow" all relational properties of anything (and, in particular, it follows that aRb).

Now it must be conceded, at least, that (T) is intuitively very plausible. Hence, it can be profitably used against the criticised objection. According to this line of thought, complete determinations include only non-relational properties---and this can be done without detrimental effects on their philosophical validity or adequacy for the roles they are intended to serve.

10/ I may continue the exposition by mentioning still another possible proposal.

(IV) We may at the beginning be reminded that even in ordinary thinking, the notion of property does not exactly corresponds to that of a grammatical predicate(I am not saying simply the obvious:that they are not the same or nearly the same thing). A property is supposed to be such that its possession or non-possession by the subject-thing concerned should make some difference to the latter----as we may, ordinarily speaking, say. The property, we are inclined to say, intrinsically determines or characterises the thing of which it is a property. To emphasise this feature, let us speak of proper properties which, in this way, really "affect" their respective subjects, there being a real difference¹ in them, in their intrinsic constitution, between the case when they have such properties and the case when they do not have them².

I do not think of the above indicated distinction between proper and improper properties as a doubtful one----at least in so far as ordinary thinking extends. There remains, of course, the task of giving an adequate assay of it and of showing its ground³. But granted that we can discover such an assay of it, we may use it even in its ordinary "dress" for the present purpose as follows:

-
1. Needless to say, the real difference and affection insisted on, have nothing to do with the importance and magnitude of this difference and affection. A real difference is required---however small or insignificant. On the other hand a very important (ordinarily) property may be nonetheless an improper property in the explained sense, by lacking this characteristic of affecting a real modification in its subject---I mean, of affecting such a modification in and through itself, and not through its various (and of many kinds---logical, metaphysical or natural) consequences or other concomitants.
2. I have already made use of this idea in Essay V, pp. 43-45----when discussing the claim of the "property" being member of a class C to the status of a proper property.
3. One pointer to such a complete assay, is provided by the notion of instanced relations, defined in § 13, (D), p. .

leaving out aside the effect of the said distinction in the domain of non-relational properties, we may be asked, instead, what we would have thought concerning the application of this distinction to relational predicates. Surely, one could say, we do not wish to claim that all relational predicates are proper predicates. Indeed rather a minority of them really are such. And even, in the cases belonging to this minority, we may substitute for the relational property the modification or affection of (produced in) its subject, ensuing upon the subject's having it in so far as the subject has it (that is, apart from its other consequences of any kind). Possibly, of course, we might not be able to specify that modification but by referring to the relational property; but, obviously, this is beside the point; for ontologically the modification and the relational property are distinct, even if the former is just the modification effected in the subject through its having the latter and in so far as it has it (apart from any other consequences^I of whatever kind).

Clearly then, the proposer may conclude, we avoid the difficulty posed by the objection, by insisting on including in the complete determination only proper properties of things---and not everything belonging to it in some way or other, nor, much more, each of all the "things" curiously supposed sometimes to correspond to each of the grammatical predicates we may correctly predicate (linguistically) of it.

I.

I say 'other consequences' because the modification itself is a consequence of the (having the) relational property. But then, it may be objected, how could I differentiate between it and the other consequences. I answer that the modification must be a quite particular kind of logical consequence (of consequence according to logical laws, as distinct from metaphysical and natural laws): part at least of what it is to have the relational property should be to suffer the modification.

(I refrain from translating the above to the modern idiom, and saying that the concept of the said modification should be part of the meaning of the relational predicate in question, because there is a tendency nowadays to include too much in the meaning of a concept, almost putting in it everything which we may at the present believe to belong universally to the item signified by it).

II/ Finally, we may be faced with a last proposal.

(V) Admitted, the completed determination of a thing would have to contain its relational properties as well as its non-relational ones. Admitted also, everything is somehow related to anything else. Still the objection of § 5 does not lead where it drives. To see which, let us firstly distinguish two different things: first, the complete determination of a concrete thing; second, the complete description of such a thing.

Having made the distinction, we observe that what the objection really shows (granted its assumptions) is that the complete description of an (actual) concrete thing must contain the names of all other (actual) concrete things existing in the World (through the inclusion of all relational properties of the given thing). Now, of course, if in the place of the names of the things we substitute their corresponding complete descriptions, then naturally (only to be expected) the complete description of the given thing presents the complete description of the World "seen", as it were, from the point of view of the thing in question.

But this, surely, does not in the least present us with grave, unforeseen or undesirable consequences. In particular, as even the phrasing of the underlined clause above clearly shows, it has not the least tendency to discredit and abolish in any way the individuality of the things concerned, their separateness and their independence, one from another.

Even transposing ourselves to the level of the objects themselves (as distinct from descriptions of them), we find that what the objection (again: granted its premises) shows, is the harmless and only to be expected (under such premises) circumstance, according to which everything is in some ways "determined" by reference to anything else. But we must keep clearly before the mind that the meant determination may be nothing more than the joint exemplification in a given thing together with others, of a relation; so that, *inter alia*, the individuality and plurality of concrete things are again presupposed instead of being threatened.

Let us further be reminded of one particular use made in Essay III of the notion of complete determination in order to see whether the objection, after the above explanations, invalidates it. We had said, that a complete determination "defines" or corresponds to a certain possible concrete thing. We then remarked that possible things may be incompatible in existence in that the actualisation of any one of them precludes the existence of all others belonging to the same group. And next, we proceeded to some further remarks and applications.

Now the notion of incompatibility in existence is far from being clear as regards what it involves specifically. Yet so much is certain----that the studied objection affects it only by way of some clarification or partial explanation, and not otherwise. For it makes clear(what anyway should be evident) that things incompatible in existence are things belonging to different possible worlds; that compatibility in existence is necessarily connected with co-actualisation in, or co-belonging to, the same (possible) world. Nothing more follows----in particular no tendency towards Monism.

I2/ We have expounded summarily above, five possible responses to the challenge offered by the objection produced in 25.

Recapitulating:

Proposal (I) attacked the main assumption of the objection.

Proposals (II)-(IV) responded to it by making some modifications to the notion of complete determination.

So, proposal (II) introduced the distinction between Reality and Appearance,

proposal (III) excluded from the complete determination of concrete things relational properties,

proposal (IV) restricted the complete determination to proper properties.

Finally, proposal (V) accepted the objection, with the remark that it is not inconsistent with the theory so far expounded, nor does it introduce, if properly understood, any further addition to that theory.

13/ Now there remains the synthetic task of the
eclectic combination.^I

Firstly, I remark that complete determination contains only real determinations by real determinants. The force of this remark (which is a common ingredient in proposals (II)---(IV)) lies in that it brings clearly under notice that not all ordinary (linguistic) predications of ordinary things are ipso facto (qua linguistically appropriate and correct and true, ordinarily speaking and thinking) to count as real determinations by real determinants. To bring that one example: we may be ordinarily quite happy to say that John is not clever or that John is white and tall; these may be true statements; and so far so good; but as we have noted and insisted on in Essay (IV), it does not ipso facto follow that we have two character-determinants, one: non-cleverness, two: (white-and-tall)ness; indeed, we have seen, if cleverness is such a determinant,

66

I. I must say that, as I believe, proposal (V) adequately meets the objection. And it meets it, further, in the most conciliatory way possible; by admitting its validity and showing its consistency with the theory so far expounded. But yet, I think, worthy challenges deserve, and ought, to be answered by something more than the minimally sufficient required reply. Their fertility constrains us to utilicise them in developing further or even re-structuring the system, against whose inadequate articulation so far achieved, such objections really are, or should be, directed. Their role, thus, is positive---not aiming at sheer, negative disputation, which is usually sterile---for any argument in philosophy, in so far as it is considered in itself and apart from a system in whose attachment acquires precise meaning and significance, could be met by a counterargument (sometimes consisting in turning the former argument upside-down); whether a certain disputant is able to produce such a counter-argument is of course something profoundly irrelevant to the point, depending as it does on questions of relative, respective cleverness, abilities, culture etc; equally profoundly irrelevant is the question of the respective appeal of the two arguments in various classes of people.

and whiteness and tallness are appropriately distinct such ones, then there are no such entities as non-cleverness and (white-and-tall)ness; and if we have no real determinants here, then the corresponding determinations are similarly and equally unreal¹.

Having said this, I remark, secondly, that the doctrine

(D) every concrete thing is somehow related to any other concrete thing,

must obviously be understood in the light of the above first remark. That is, the all-extending and all-encompassing relations, or kinds of relation, indeterminately referred to in it, must be real entities and not simple, uncritical transcriptions of what we may truly, but ordinarily, predicate of concrete things. For any one ordinary relation or kind of relation which might be proposed as candidate for rendering (D) true, the question must be previously faced of whether it is a real relation, a really subsisting abstract thing --- a question which is distinct and separate from the one concerning ordinary linguistic or other appropriateness.

After the above two remarks, we may observe now that the doctrine (D) may be enunciated in one or both of two forms:

Consider for this purpose the two (Law-)statements:

(D₁) every concrete thing is related in some ways, other than spatiotemporally, with any other thing in the World,

(D₂) every concrete thing is spatiotemporally related to any other concrete thing in the World.

Now, according to the initial two remarks, the first question that should be asked in respect of D₂ is whether

I.

Notice that this unreality has nothing to do with ordinary propriety, correctness or even truth, being consistent with them.

spatiotemporal relations are real¹ relations. I do not, of course, intend to embark here in the very intricate problems concerning the metaphysical status of Space and Time, but I may note the possibility of construing them not as determinants (relational or "absolute" or both) but as certain sui generis operators, operating on determinations as wholes². According to this view, obviously, spatiotemporal "determinations" could not be included in the complete determination at all, since in it only proper determinations of concrete things are included, and not "determinations" of such proper determinations.

1.

Notice by all means that this sense of 'real' is not the same as the one used in § 8 above, i.e., the one opposing Reality to Appearance. It may be really (not phenomena) P and Q, and yet 'a is P and Q' be not a real determination (P-and-Q)ness not a real determinant). But of course the two senses are connected. This shows the similarity and the difference between proposal (II) and our present treatment of the problem of spatiotemporal relations and their reality (the difference corresponding to the noticed ambiguity of 'real'). Let us seize the opportunity to say, that, on my opinion, proposal (II) would not, anyway, provide a satisfactory solution. For one thing, the genesis of appearance should be explained in general terms, (presumably, as the result of the interaction, or at any rate of some form of connection, between concrete things and a special kind of concrete things), and then the connection of spatiotemporal relations with this form of connection should be studied in respect of its bearing on real (non-phenomenal) determinations of real things. For a second thing, in appearance as well as in reality the distinctions of particulars, determinants, etc. are required, and so the problems presented by the initial objection would be found once more in a different attire.

2.

In such a construal, a being P at (a certain time) in p(a certain place) would be of the form '(p, t)P(a)', and not, say, of the form 'P(a)&p(a)&t(a)'.

Not wishing to discuss at the moment this very complicated issue, I shall proceed on the (questionable) assumption that spatiotemporal determinations are proper and real determinations of concrete things. Similarly, the relation(s) implied in D_1 is(are) assumed to be real ones.

Coming now to an examination of (D_1) and (D_2) as well as of their effects in our problem, we preface firstly a few remarks regarding their status and truth-value.

Regarding their status, I should think that D_1 cannot pretend to be more than a "natural" statement---- a statement purporting to state a natural law. (And indeed, I believe, not a very fundamental kind of natural law for that matter; not one, I mean, pertaining to the fundamental structure of the World----as I have put it in Essay III [not very near to its core]). On the other hand, D_2 can aspire at most for the metaphysical level. I say "at most" because I wish to leave open the case of a possible World without spatiotemporal particulars¹; for if there is such a possibility, then D_2 cannot be more than a natural law, albeit a most fundamental one.

Regarding the truth-value of D_1 and D_2 , I may remark that D_1 appears to be, commonsensically, patently false².

I.

If there "is" such a possible World, then, the old-time problem of the status of spatiotemporal characterizations becomes more acute and complicated in certain further ways (than the above noticed), which I shall not explore in this Essay.

2.

Though the statement that every concrete thing is somehow related (apart from spatiotemporal relations) to some other(s) concrete thing(s), is, at least, "naturally" true. (Yet it may still not be true on the metaphysical level).

D_2 is, on the contrary, "naturally" true¹--- it is a fundamental natural law of our World, at least.

Therefore, we recognise the following possibilities:

- (a) D_2 is "naturally" true but metaphysically false, and D_1 is even "naturally" false.
- (b) D_2 as in (a), but D_1 is "naturally" true though metaphysically false.
- (c) D_2 is metaphysically true and D_1 as in (a).
- (d) D_2 is metaphysically true, but D_1 as in (B).

Regarding these possibilities then, I should like to make the following remarks.

(A) If D_1 , in whichever of its two forms, is metaphysically false, then what is established by the objection as explained in § II², does not hold for all possible Worlds, but only

I.

Avoiding some more or less important complications, I shall mean here by 'metaphysically true', holding good in all possible Worlds, and by 'naturally' true', holding good in the actual World, but not as a result or consequence of holding good in all possible Worlds.

One complication which I avoid here is that 'possible' may mean (as contrasted to natural possibility) metaphysical in stricto sensu or logical or categorial possibility. (See above p.5, n.1).

A second complication which I also avoid here, is that concerning the alleged distinction between Natural Law and (accidental, as it were) Generalisation.

Some linguistic trivialities are also left unexplained here, for example my apparent inconsistency as regards whether we should so use words that a Metaphysical Law is also a Natural Law (though, of course, not vice versa) or so that something metaphysically true cannot be something simply, as it were, naturally true. The 'Natural Law' of the first way of using words would signify either a Metaphysical Law or a Natural Law in stricto sensu (the sense corresponding to the second way of using words).

2.

That is, that a complete determination of any one concrete thing would "refer" somehow to all other concrete things of the same World (to which the former belongs)---and that this is without any serious, doctrinal or otherwise undesirable effects on our theory.

for the actual World, and those among the possible Worlds which are similar to the actual one in this respect.

This provides an opportunity, which I shall not seize, of consistently varying what I am about to say in the sequel in accordance with the possibility((a)-(d)) happening to be studied in each particular case.

(B) In case (a), the complete determination of a thing could be restricted so that to include among spatiotemporal determinations only those relating to things with which the thing in question is otherwise related. (And these other things, in this case, are not all things.)

(C) Regarding spatiotemporal determinations we may utilise the remarks in 7(I)(ii) above. In this way, and in either case (a) or (b), we may consider each concrete thing determined spatiotemporally by the places and the times which it occupies ----whether these are absolute (i.e. "monadic" determinants) or relative(relational determinants, relating to an arbitrarily chosen origin of coordinates). All the multifarious nexus of spatiotemporal relations of concrete things follows clearly from their "positions" in space and time----whether absolute or relative space-time.

This provides us with a cue for the introduction of the notion of Minimal Complete Determination. We have introduced (Essays I and III) alongside the concept of Complete Determination the concept of Complete Absolute Determination. The CAD forms a subset of CD----the one comprising all determinations(of a given concrete thing) by absolutely determinate determinants. We can now restrict further this notion, and so we arrive at the concept of Minimal Complete Determination. We define:

A MCD is a subclass of CAD which fulfills the following conditions:

(i) all non-relational determinations of CAD "effected" by absolutely determinate determinants are included.

(ii) It is included in it a subset of relational determinations of CAD "effected" by absolutely determinate (relational) determinants, such that, from this subset together with the determinations under (i), all remaining determinations of CAD follow

according to metaphysical, logical and categorial¹ laws.

(iii) the subset mentioned in (ii) is minimal in that any other subset adequately performing the same function, would have to include at least as many members as the present one.

(IV) if more than one differing subsets able to serve the same purpose are available, the metaphysically more fundamental among them is considered as included in MCD².

By means of the concept of MCD we have also somehow incorporated in our own account, one aspect of the spirit of proposal III. More digest of this proposal will follow soon.

(D) Let us now concentrate on D₁. Let us begin by considering a real relation R-ness. In Essay V, we introduced instances, besides concrete and abstract things, ties and (simple) facts. The question naturally emerges: How are we to conceive of an instance of a relation? Take, for example, a dyadic relation, and suppose that aRb. Instances inhere in concrete things, are in them. Now the instance of R-ness in the above example, cannot inhere in either a or b to the exclusion of the other; for suppose it inheres in a and not in b; then a would be R, which is

)

I. The addition of Categorial Laws is rather beside the point, since we are working essentially within only one category: that of determinants. Of course we study it in connection with concrete things--- but we can rather safely assume that there is no real danger here (provided we have grasped the intended distinctions) of fancying concrete things as exemplifying ties and generally making this sort of mistake. But still, one must never underestimate the difficulties: a little while ago, we were in a puzzle regarding the correct categorial assignment of space and time! (p. 18).

2. Conditions (i)-(iii) are designed to minimise the possible variety of MCD for one and the same CAD. Condition (iv) can be safely relied as securing the uniqueness of such a MCD. Evidently, we give a negative definition of MCD in lieu of the only proper positive one, which would have to specify the kinds of relational property which do not follow from others and those which do (the ultimate and the secondary ones).

even countercategorical¹, and b would be left entirely unconnected to a. Equally impossible is for one and the same instance to be in both a and b. (It would be two then, and not one)².

These being excluded, there remain two other possibilities. Either relations have no instances (though, of course, they are exemplified by groups of concrete things---that is, concrete things jointly exemplify them); and in such a case there presents itself a radical difference between relations and non-relational determinants. Or relations have instances in a quite peculiar way; that is, for example, an instance of R-ness in the above case consists in two elements r_a and r_b , inhering (in the proper way in which instances inhere in subjects) respectively in a and b. But then, that allb can be analysed into two constituents, that $R'(a)$ and that $R''(b)$, where R' -ness and R'' -ness³ are the (non-relational) determinants whose respective instances are r_a and r_b . This also amounts to an important difference between relational and non-relational determinants, though an attenuated one compared with the difference resulting upon the first possibility above. But the attenuation is bought at the price of an analogous, corresponding "degradation" of the relations, by making them stand in need of a collaboration from non-relational determinants in order to be able to fulfill the characteristic function of all determinants: the determining of concrete things⁴.

-
1. Contracategorical: the strongest, as it were, kind of impossibility. It is perhaps meet to observe here that I use 'category', very strictly, for the ultimate and highest genera of whatever is or subsists in whatever way (of all objects whatsoever). A categorial difference, in this sense, is not a simple difference in kind.
 2. Some adaptation from Ockham's arguments has been made in the immediately preceding remarks.
 3. R' -ness and R'' -ness lie on the same level with R-ness in respect of determinateness (determinate-determinable "relation").
 4. Notice that R-ness is not necessarily claimed to have been reduced in any ontological sense to R' -ness and R'' -ness.

But the two alternatives may be reasonably viewed as complementary rather than as opposing each other; and this is really the point of the second alternative. Namely, we may consider relations as lacking proper instances when exemplified, and instead of them have only "instances" in the way presented by the second alternative.

In spite of my not having proceeded very far in a thorough metaphysical analysis of the present situation, I venture to say that we have better, at least provisionally, to admit both types of exemplification of relations. Consider, for example, the two relational facts:

- (i) a is at distance 1 from b,
- (ii) A loves B.

In (i) no instances and no monadic determinants (corresponding to the relation involved, in the way R' and R'' corresponded to R) could be reasonably assumed. The initially plausible candidates, that is the respective positions of a and b, even if construed absolutely as monadic properties, turn to be really unacceptable and inadequate for the role required. For, of course, in the above enunciated second alternative, it is assumed that if aRb then a is R' and b is R'' , and vice versa; whereas simply it does not follow from the fact that (i), that a and b must occupy certain particular positions (definite positions). Besides, even in the reverse direction there is defect: from the fact that a and b are in certain definite positions, it follows that a is at distance 1 from b--- but this only follows, and further it follows by means of the structure and nature of space; in other words it follows because of certain metaphysical laws (or perhaps only natural laws) concerning the structure of real space (to be obviously distinguished from the various mathematical constructions of space in abstract calculuses); whereas it is required that it must not simply follow, but "follow" just in virtue of a's and b's occupying their respective positions, without the help of extraneous metaphysical (or only natural) laws. To put it in another way, a must be R to b just qua being R' and b's being R'' . (Just in so far as it is R').

and b is R''). For a to be R' and b to be R'' is for a to be R to B.

Contrariwise with (ii). It would seem that A has a quite peculiar feeling L' qua being in love with B, and vice versa. Metaphysically, we should construe that feeling as a monadic determinant¹. Hence we obtain the pattern required by the second of the above mentioned alternatives, with the notable difference that no corresponding R'' could be easily supplied for B as being loved by A. Therefore, we have better to amend the formulation by requiring one at least monadic determinant corresponding to the relation in the way indicated.

Now let us call relations² which can be exemplified without instances 'un-instanced relations'. And relations exemplifying themselves through peculiar instances 'instanced relations'. Obviously, according to the above explications, we can dispense with all determinations by instanced relations in the notion of complete determination and the dependent notions. Equally well, we can, if we choose, dispense with all determinations by un-instanced relations which are such that their exemplifications be entailed from determinations of another sort(i.e. either from determinations by instanced relations or from determinations by non-relational determinants) in the way spatial relational determinations follow upon positional determinations. When these restrictions have been imposed, we may call the ensuing set of determinations 'Strict Complete Determination'.³

-
1. That A loves B and not, say, C, would make according to this supposition some qualitative difference to the corresponding love-feeling or monadic determinant involved. This is not, I think, as great a difficulty as it might appear *prima facie*. But to show this is beyond the scope of the present Essay.
 2. Of course I am always speaking of real relations, in the sense explained in the first remark right at the beginning of § 15.
 3. In the above distinctions we have absorbed something of the import of the distinction between proper and improper properties in proposal (IV) above; more strictly speaking we have absorbed something more than that which we have absorbed through the notion of real determinant and determination.

A metaphysically very important question in the present connection is the following: Are there any un-instanced relations whose exemplification is un-entailed by exemplifications of other kinds of determinant? If the correct answer is: No(call it the thesis T'), then strict complete determination involves only non-relational determinants¹. On the other hand, an affirmative answer to this question is, I submit, strongly counterintuitive². But even if correct, the *onus probandi* would fall upon our initial objector----if he wishes to claim that among those un-instanced

1. Hence, we have shown the ground, and incorporate wholly in our account the true core of proposal III (and thesis T, p.II). And even if the correct answer to the above question is affirmative, we would have absorbed much of the content and the point of thesis T.

2. I shall leave this theme without further development and elaboration here. But I cannot prevent myself from presenting two remarks.

Firstly, as to the counterintuitive character of the affirmation. The idea is that things stand in the relations in which they stand, ultimately in virtue of their possessing non-relational characteristics. (This lies at the bottom of thesis T in p.II).

Secondly, as to a plausible counterexample to a negative answer. If space and time are relational, then positions are really relational, being relative to the origin of coordinates. But then a's lying at a distance 1 from the origin 0 seems to be an exemplification of an un-instanced relation, and such an exemplification which is not "derived" from other, ultimately non-relational determinations.

I fully admit the importance of the clash between the above made two remarks. But is the antithesis insoluble? Is not it significant that we have again to resort to space and time, in the second remark? What of the case, in which one would claim that there are no un-instanced, "un-entailed" relations apart from the possible (depending upon their relativity) exception of spatiotemporal positions? And anyway the intuitive certainty of thesis T would decisively weight in favour of a negative answer to our problem here; the analysis of space and time, a separate problem in any case, would have to be regulated so as to conform to this thesis and its correlative claims, rather than the other way round.

and "un-entailed"¹ relations there is at least one kind, which relates every concrete thing to any other². A most difficult undertaking, given, on the one hand that this feature would seem to imply some kind of systematic interconnection among the relational determinations brought under the said kind of relation, whereas, on the other hand, such systematic interconnection would be excluded by the "un-entailed" nature of this kind of relation³. Besides, the objector would have anyway to overcome such apparently plausible claims as the ones put forward in § 7(I)(i) above.

1.

Strictly speaking, only exemplifications or determinations are entailed or un-entailed. Yet to save words we may say that determinants are "entailed" if their (possible) exemplifications are entailed. And correspondingly for ' "un-entailed" ' and 'un-entailed' .

2.

To be sure, strictly speaking he would only be required to show that there are such (real) relations, not necessarily of one kind, succeeding in jointly relating any concrete thing to every other. But this, then, obviously, could not be believed, save as an article of faith; I mean in case one could not indicate which these relations are. And the difficulty of such indication is manifest; indeed to speak of 'difficulty' in this context seems to be a wild understatement.

3.

Meaning, of course, by an "un-entailed" kind of relation, such a one that its specific forms (determinates) would apply to the various concrete things in such a way that the ensuing determinations neither do follow from other determinations by, ultimately, non-relational determinants, nor even follow from a definite number of determinations by un-instantiated "un-entailed" in the above way relations. (The second clause is modelled on the case of space and time considered as relative).

14/ Concluding, with a series of brief remarks.

(i) We are all along concerned with real determinants, with this particular category of objects involved in the real structure of all Worlds. The 'real' in both occurrences above is of course, strictly speaking, pleonastic; it is added for dialectical purposes and serves an ad hominem point.

(ii) Even if our notion of complete determination requires in fact¹ that in the complete determination of any concrete thing a reference (by way of relations) is involved to all other things of the same World to which the former belongs, even so, our procedure and system are not hampered thereby; *inter alia*, no undesirable consequences follow (for example, we are not committed to any kind of Monism).

(iii) And at any rate, we must always take full account of the plausibility, when fully developed and articulated, of the views indicated in 7,(I), i.

(iv) Space and time determinations pose, of course, a special problem. But leaving for the moment unexplored the possibility (hinted at, in p.18 above) of their being not real determinants by determinants², and granting that they are such, then the points made at 7,(I), ii, and b (as used in p.21,(C)) are ready at hand.

1.

I say 'in fact', because a certain condition has to be fulfilled in order for this to be the case (a condition not included, in principle, in our notion itself); namely that the World to which the concrete thing in question belongs, is such that any thing in it is (really) related to every other thing of the same World.

2.

I shall again stress, in spite of becoming tedious, that 'reality' here is not meant to oppose phenomenal being---as in the cases, say, where it is used in discussions about epistemological (not metaphysical) realism, phenomenalism etc. (See also p.18,n.1). Not that I denounce the metaphysical significance of the distinction between Reality and Appearance; only that it is just a special application of this general distinction between Being and Appearing, which is utilised in the problems concerning the above mentioned theories: the one concerning the being and the appearance of concrete things and their properties. On the other hand, in our problems here we need another application of it, though a connected one; the application to determinants and facts-as-determinant-dependent.

(v) We must by all means emphasise the significance of the notions correlated to that of Complete Determination: that is, the notions of Complete Absolute Determination (Essay I and p.21 above), of Minimal Complete Determination (p.21) and of Strict Complete Determination (p.25). The significance lies in the circumstance that we can impose restrictions on the notion of Complete Determination, which are able to ensure that a reference to the whole of the World is not necessarily involved in the determination of concrete things (in the way it may be involved de facto in that of Complete Determination as initially defined) --- and can do this, without in the least affecting the completeness of the determinations concerned (the Complete Determination can always be reconstructed). The notion of Strict Complete Determination succeeds in doing this under the provision of the truth of T' (p.26), or, what amounts to the same effect, of T (p.11). But even if these claim claims T and T' are false? the likelihood of the notions still fulfilling its purpose is, as I have indicated, overwhelming.

(vi) We can combine easily the notions of Minimal Complete Determination and of Strict Complete Determination in order to obtain the notion of Strict Minimal Complete Determination, a notion still more restricted in respect of its actual contents, though equivalent in power with the others.

(vii) A rather trivial detail: I have ignored the distinction between the thesis claiming that any concrete thing is related somehow to every other thing belonging to the same World, and a very weaker thesis according to which only some (at least one) concrete things are so related^I. I have concentrated attention to the strong thesis. The second can be reasonably held only on special grounds---- and, of course, it is

perfectly compatible with the system so far expounded.

(viii) A note of warning may be struck here profitably: the views discussed in this Essay are far from being fully developed and articulated; hence, they must be defective in various ways. But the defects in development, just as the similar defect pointed at by the initial objection from which the whole Essay took its origin, necessitate further development, which in its turn brings into the surface of philosophical awareness hidden connections. The (possibly humanly unattainable) ultimate aim is, of course, that of a complete articulation of our real intuitions concerning a given philosophical discipline, an articulation adequately representing all multiplicity and variety of the systematic interconnections in the subject-matter of the said discipline.