

Anti-Positionalism's Regress

Jan Willem Wieland*

Abstract

This paper is about the Problem of Order, which is basically the problem how to account for both the distinctness of facts like a 's preceding b and b 's preceding a , and the identity of facts like a 's preceding b and b 's succeeding a . It has been shown that the Standard View fails to account for the second part and is therefore to be replaced. One of the contenders is Anti-Positionalism. As has recently been pointed out, however, Anti-Positionalism falls prey to a regress argument which is to prove its failure. In the paper we spell out this worry, show that the worry is a serious one, and distinguish four possible strategies for Anti-Positionalism to deal with it.

[*Axiomathes* 20: 479-93, 2010]

1. A three-fold problem

Consider the facts a 's loving b and b 's being loved by a . How many facts are we dealing with? Intuitively, we have just *one*. However, by the Standard View we should say *two*. The question is: do we have one or two facts?

Let me explain the Standard View. The Standard View is that relations by their very nature have a 'from-and-to' character, i.e. relations behave like arrows and run from one relatum to another (cf. Russell 1903: §94, 1913: 86). Thus, if a loves b , the loving relation runs from a to b . Similarly, if b loves a , then the loving relation runs from b to a . Furthermore, since both facts are composed of the same constituents (i.e. the particulars a and b and the relation *loving*), the sole difference between the facts a 's loving b and b 's loving a seems to consist in the direction of the loving relation.

After further consideration the Standard View breaks down, however. Here is the argument in brief: (i) if relations have a direction, then facts must be different from their converses; (ii) it is not likely that facts are different from their converses; (iii) therefore, relations have no direction.¹ Let us fill in the details of the argument for our example: (i) if the relations *loving* and *being loved by* have a direction, then the fact a 's loving b must be

different from its converse *b*'s being loved by *a*, because in the first fact the relation runs from *a* to *b* and in the second fact the relation runs from *b* to *a*; (ii) it is not likely that *a*'s loving *b* is different from *b*'s being loved by *a*; (iii) therefore, *loving* and *being loved by* have no direction. Furthermore, if the converses *loving* and *being loved by* have no direction, the difference between the two collapses. It follows that all converse relations collapse into one directionless or *neutral* relation.

Perhaps this is too quick.² To save the from-and-to character of relations one may propose a somewhat modified line of reasoning: (i) if relations have a direction, then facts must be different from their converses; (ii) it is not likely that facts are different from their converses; (iii) relations certainly have a direction; (iv) therefore, facts have no converses. Put in terms of our example: (i) if *loving* has a direction, then *a*'s loving *b* is different from its converse, (ii) it is not likely that *a*'s loving *b* is different from its converse; (iii) *loving* certainly has a direction; (iv) therefore, *a*'s loving *b* has no converse. This is just to say that in the world we only have *loving* from *a* to *b* and '*b* is loved by *a*' would be merely a non-transparent way of speaking about *a*'s loving *b*.

Unfortunately, the same strategy works for the *being loved by* relation. To say that *being loved by* has no converse is to say that in the world we only have *being loved by* from *b* to *a* and '*a* loves *b*' would be merely a non-transparent way of speaking about *b*'s being loved by *a*. In the former case you argue that *loving* exists, but not *being loved by*, and in the latter case you argue that *being loved by* exists, but not *loving*. For sure that we cannot adopt both strategies, because then we are left with both relations (as we had before), or neither. Probably there is no non-arbitrary way to decide between the two (cf. Russell 1913: 86-7; Fine 2000: 4; MacBride 2007: 54), and we should explore the idea that relations are neutral.

Because there is still a difference between the facts *a*'s loving *b* and *b*'s loving *a*, we cannot simply deny that relations have a direction and leave our investigation at that. Furthermore, if the Standard View breaks down, and if therefore the difference between *a*'s loving *b* and *b*'s loving *a* cannot lie in the direction of the amatory relation, their difference must lie in something else. But what could this else be? Hence, we should look for an alternative account of the difference between *a*'s loving *b* and *b*'s loving *a*. Stripping relations from their from-and-to character: yes, *but carefully*. This is basically the Problem of Order.

The problem was already singled out by Russell in a 1913-manuscript. Here are his pioneering words:

“We cannot find a vestige of difference between *x* preceding *y* and *y* succeeding *x*. The two are merely different names for one and the

same time-sequence. No doubt there is a difference in the order of our thoughts while we hear the two sentences spoken, but this difference is quite irrelevant. We must therefore explain the sense of a relation without assuming that a relation and its converse are different entities.” (1913: 87)

Russell makes three important claims in this text. First, the sentences ‘*a* precedes *b*’ and ‘*b* succeeds *a*’ are two different ways of describing one single time-sequence where *a* and *b* are temporally related in such a way that *a* is earlier and *b* later. Second, Russell admits that there might be a mental difference between the two sentences, i.e. one can associate different thoughts with them. However, a mental difference does not imply an ontological difference, i.e. a difference in the world. There is a deep metaphysical intuition working here, and we will consider some motivation for it in §3. Third, we are to explain the difference between the facts *a*’s preceding *b* (or *b*’s succeeding *a*) and *b*’s preceding *a* (or *a*’s succeeding *b*) without assuming that relations have a direction and that, in this case, *preceding* and *succeeding* are different entities. Hence Russell’s version of the problem has at least two aspects (to be sure: I am omitting several other aspects that Russell was concerned about). We are looking for a theory of relations that accounts for (1) the identity of converse facts, so that e.g. *a*’s loving *b* = *b*’s being loved by *a* (in short: $aRb = b\check{R}a$), and (2) the distinctness of certain facts with the same constituents, so that e.g. *a*’s loving *b* \neq *b*’s loving *a* (in short: $aRb \neq bRa$).

An important observation is still missing out. It is this: not all relations behave in the same way as the loving relation. Specifically, *loving* is non-symmetric and can hold between two relata in two different ways. By contrast, the symmetric *standing next to*, for example, cannot hold between two relata in two different ways, but in one way only. Thus symmetric relations lack a from-and-to character anyway. More precisely, symmetric relations are those relations for which $\forall x\forall y(xRy \rightarrow yRx)$; non-symmetric relations are those relations that are not symmetric, i.e. for which $\neg\forall x\forall y(xRy \rightarrow yRx)$; and asymmetric relations, then, are those relations for which $\forall x\forall y(xRy \rightarrow \neg yRx)$. Some simple examples: *standing next to* and *being simultaneous with* are symmetric; *loving* and *entailing* are non-symmetric but not asymmetric; *preceding*, *being a proper part of*, *causing*, and *being on top of* are non-symmetric and also asymmetric (at least, given some restrictions on the relata).

Metaphysically speaking, the difference between symmetric and non-symmetric relations is quite important. As said, the former relations can hold between the same relata in only one way, whereas the latter relations can

hold between given relata in a variety of ways (these number of ways depending on the adicity of the relation). This capacity of non-symmetric relations can be called ‘differential application’ (Fine 2000: 8). Now, for symmetric relations we want our theory of relations to give the strict identity (or non-distinctness) of facts with the same constituents, so that e.g. a ’s standing next to $b = b$ ’s standing next to a ; and for non-symmetric relations we want our theory of relations to give the non-identity (or distinctness) of facts with the same constituents, so that e.g. a ’s loving $b \neq b$ ’s loving a and a ’s preceding $b \neq b$ ’s preceding a . Notice that these metaphysical claims about facts are stronger than we can derive from the logic of symmetry and non-symmetry. More specifically, the symmetry of *standing next to* just says $\forall x\forall y(xRy \rightarrow yRx)$, which does not imply (what we want to have) $\forall x\forall y(xRy = yRx)$; and the non-symmetry of *loving* just says $\neg\forall x\forall y(xRy \rightarrow yRx)$, which does not imply (what we want to have) $\forall x\forall y(xRy \neq yRx)$. The metaphysical claims are about identity ($=$) and non-identity (\neq), not about necessary connections (\rightarrow) between distinct facts.

Let us formulate the Problem of Order more precisely by incorporating the symmetric/non-symmetric distinction (below by symmetric facts I mean those facts where the relata hold a symmetric relation, and by non-symmetric facts those facts where the relata hold a non-symmetric relation):

We want to have a *single* theory of relations that gives:

- (O1) the identity of converse facts, so that e.g. $aRb = b\check{R}a$;
- (O2) the non-identity of non-symmetric facts with the same constituents, so that e.g. $aRb \neq bRa$;
- (O3) the identity of symmetric facts with the same constituents, so that e.g. $aRb = bRa$.

So the problem has three requirements, and the problem is solved only if all three are accounted for (Orilia 2009: §5 presents the problem in a similar way). The emphasis on ‘single’ means that we are not satisfied with two different theories, i.e. one for symmetric relations and a different one for non-symmetric relations. In other words, our theory of relations must be uniform (cf. Fine 2000: 17, n. 10; MacBride 2007: 37). Perhaps one suspects that there is no real problem here, i.e. that the facts described at O1 and O3 are just identical, that those described at O2 are just distinct, and that there is nothing more to say (or even that it is impossible to say more). Yet in that case I think one is committed to the position that facts have no constituents.

Hence, if it is granted that facts have constituents (such as relations and relata), O1-3 need to be accounted for.

Yet the Standard View fails to account for O1. By this theory, *loving* runs from *a* to *b* (and not the other way around) and *being loved by* from *b* to *a* (and not the other way around). Assuming that items with incompatible features are distinct, *loving* \neq *being loved by* and so *a*'s loving *b* \neq *b*'s being loved by *a*. Hence, the Standard View conflicts with O1, and is therefore out of race. If no theory is able to respect O1, then we might reconsider the Standard View. Nonetheless, Fine (2000) develops two interesting alternative views, i.e. Positionalism and Anti-Positionalism, and we should consider those proposals first.

In the remainder of this paper we proceed as follows. In §2 we give the basics of Positionalism and Anti-Positionalism. In §3 we formulate the empirical and structural identity criteria for facts on all three accounts. In §4 we reconstruct the regress argument against Anti-Positionalism. In §5 we present an overview of four strategies available for Anti-Positionalism to deal with the regress. Drawing upon results from §§4-5, I conclude the paper with a brief reply to Russell's pioneering hypotheses about Anti-Positionalism (§6). Two disclaimers. First, in this paper I limit myself to dyadic relations, i.e. relations with two relata, and skip n-adic relations for which $n > 2$. Polyadic relations make the matter more complicated,³ and for discussing the regress problem dyadic relations suffice. Second, I am aware that the loving example is problematic (for it involves intentionality and actions). Yet I shall stick to it, as it is simple and the standard example in the literature.

2. Neutral alternatives

In this section, we first recapitulate the deficiency of the Standard View, so that we can see what any alternative view should avoid, and then look at Fine's alternative views.

In brief, according to the Standard View non-symmetric relations have a direction, which has the undesirable consequence that converse facts are non-identical. So by the Standard View, *a*'s loving *b* must be different from *b*'s being loved by *a*, because in the former fact the relation runs from *a* to *b*, whereas in the latter fact the relation runs from *b* to *a*. Instead of saying that relations are directional, Fine says that by the Standard View the relata of non-symmetric relations are ordered (Fine 2000: 2-3). This comes down to the same, however. If *loving* holds between *a* and *b* in that very order, then *being loved by* holds between *b* and *a*. Hence, *a*'s loving *b* must be different from *b*'s being loved by *a*, because in the two facts the relata *a* and *b* are

ordered differently, i.e. in the former fact *a* comes first and *b* second, in the latter fact *b* comes first and *a* second.

Thus in order to respect O1 any alternative theory of relations should strip relations from their direction and let relations relate relata in an unorderly way, i.e. in such a way that the order of the relata is unimportant. This is what Positionalism and Anti-Positionalism try to carry out. The main difficulty of this enterprise is that this should not be done on pain of violating O2 and O3. In particular, we should refrain from stripping relations from their direction in such a way that all facts with the same constituents, such as *a*'s loving *b* and *b*'s loving *a*, collapse into one.

Positionalism is the view that relations are neutral and endowed with argument-places or *positions* (Fine 2000: §3; cf. Russell 1913: 88). These positions are such that they can be filled or occupied by objects. For instance, by this view the dyadic amatory relation has two positions, which can be called *lover* and *beloved*. If *a* occupies the *lover* position and *b* occupies the *beloved* position we have the fact *a*'s loving *b*, whereas if *a* occupies *beloved* and *b* occupies *lover* we have the fact *b*'s loving *a*. Relations endowed with positions are neutral in the sense that the positions are unordered and the relations do not run from one position to another (e.g. the amatory relation does not run from *lover* to *beloved*, nor the other way around). By Positionalism relations are such items which connect lovers and beloveds, earlier and later, uppers and lowers, parts and wholes, firsts and seconds, lefts and rights, causes and effects, and so on. This view works quite simple. According to Fine, however, we should refrain from introducing positions in our ontology given the fact that a position-free account of relations is possible. This position-free account is Anti-Positionalism.

So Anti-Positionalism is the view that relations are neutral without being endowed with positions (Fine 2000: §§4-6; cf. Russell 1913: 84). See Fig. 1 for the three pictures of a relation by Fine (2000).

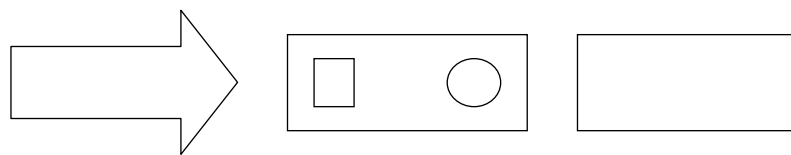


Fig. 1

The arrow is the Standard View. The block with the holes is Positionalism. The block without holes, then, is Anti-Positionalism. The latter view is quite original, but appears on first sight somewhat complicated. Roughly, the idea of Anti-Positionalism is that the role of positions in Positionalism is taken

over by objects of other facts. Thus instead of occupying positions, objects of a certain fact will be standing in yet to be specified relations to objects of other facts.

Important is that in Anti-Positionalism the identity of a fact is not fully determined by its constituents (i.e. a relation and several relata), but partly derived from how the fact is related to other facts. As Fine says: “Different states [i.e. facts] will be distinguished, not by how they derive from the given relation and its relata, but by how they are interconnected.” (2000: 21, cf. 32) More specifically, any fact of objects holding R is related to all other facts of objects holding R by the relation of *co-mannered completion*. As to the terminology, a *completion* of a relation R by certain objects is a fact of these objects holding R; and the co-mannered completion relation is

“a relation that holds between a state s and its m constituents a_1, a_2, \dots, a_m , on the one side, and a state t and its m constituents b_1, b_2, \dots, b_m , on the other, just in case s is formed from a given relation R and the relata a_1, a_2, \dots, a_m in the same way in which t is formed from R and the relata b_1, b_2, \dots, b_m .” (Fine 2000: 20)

We say for example that a 's loving b is a completion of *loving* by a, b in the same manner that c 's loving d is a completion of *loving* by c, d . Formulated for dyadic relations in general: fact xRy is a completion of R by x, y in the same manner that fact zRv is a completion of R by z, v . Furthermore, two facts with the same constituents, such as a 's loving b and b 's loving a , are different, roughly (we will turn to this in detail), because they are differently connected to other facts and their constituents.

Fine suggests that the notion of co-mannered completion should not be taken as primitive, and that it can be cashed out in terms of *substitution* (2000: 25-6). Then, to say that fact xRy is a completion of R by x, y in the same manner that fact zRv is a completion of R by z, v , is to say that xRy is a completion of R by x, y that results from simultaneously substituting x for z and y for v in zRv . So a 's loving b is a completion of *loving* by a, b in the same manner that c 's loving d is a completion of *loving* by c, d just in case a 's loving b can be obtained by simultaneously substituting a for c and b for d in c 's loving d . Notice that a 's loving b cannot only be obtained from c 's loving d , but from all facts of the form x 's loving y for which $x \neq y$. This substitution device seems to work perfectly. The question however is: how does it help Anti-Positionalism in tackling O2 and O3?

3. Empirical and structural identity

In this section we formulate identity criteria for facts. Regarding the Problem of Order, these criteria are of serious importance. Given a certain identity criterion, it follows that *a*'s loving *b* and *b*'s being loved by *a* are one or two facts, that *a*'s loving *b* and *b*'s loving *a* are one or two facts, that *a*'s standing next to *b* and *b*'s standing next to *a* are one or two facts, and so on. As we shall see, each of the three theories, i.e. Standard View (SV), Positionalism (P) and Anti-Positionalism (AP), provides its own criterion.

Fine distinguishes two types of identity criteria: empirical vs. structural criteria (1982: 55-62). He seems right by taking the structural criteria to be the more fundamental, but the empirical identity criterion may nevertheless be useful for the present discussion:

(EI) For any facts *s* and *t*, they are identical iff they are empirically indistinguishable.

In other words, EI says that there are no two different facts that are necessarily coexistent, i.e. that always if the one fact exists the other and different fact exists too. EI provides motivation for the metaphysical intuitions underlying the Problem of Order. As to O1, *a*'s loving *b* and *b*'s being loved by *a* are one fact, because they are empirically indistinguishable. As to O2, *a*'s loving *b* and *b*'s loving *a* are two facts, because they are empirically distinguishable (yes). As to O3, finally, *a*'s standing next to *b* and *b*'s standing next to *a* are one fact, because they are empirically indistinguishable. To be sure, EI is not plausible in its own right (because of counterexamples), and provides only the right *indication* of the number of facts at issue, i.e. tells us nothing what the world must be like for facts to be the same or not. This is where structural identity criteria (SI) come in. The general version of SI goes as follows:

(SI) For any facts *s* and *t*, they are identical iff they have the same constituents structured in the same way.

If facts are objects in a relation, then by the same constituents we can understand the same objects and the same relation. The main question is how 'structured in the same way' is to be cashed out, and here the three theories part ways. In the Standard View this structure lies in the direction of the relation, or, which is the same, in the order of the relata; in Positionalism the structure lies in objects occupying certain positions; and in Anti-Positionalism the structure lies in the co-mannered completion relations between (or the substitution operations on) facts.

Take any facts s and t of the form xRy and with the same constituents (again: we are only investigating dyadic relations). According to what criteria are they one, and according to what criteria are they two?

(Ad O1) If R is non-symmetric, then $s = t$ iff:

SV R has the same direction, i.e. the relata are ordered in the same way;

P the relata occupy the same positions of R ;

AP they are similar completions of R in the same manner that some third fact u is a completion of R / they can always be obtained by the same substitution operation on u .

(Ad O2) If R is non-symmetric, then $s \neq t$ iff:

SV R has a different direction, i.e. the relata are ordered differently;

P the relata occupy different positions of R ;

AP they are different completions of R in the same manner that some third fact u is a completion of R / they can never be obtained by the same substitution operation on u .

(Ad O3) If R is symmetric, then $s = t$ full-stop; however, for the sake of uniformity (i.e. we want to have a single theory of relations), we should add that then:

SV R has no specific direction, i.e. the relata are unordered;

P the relata occupy exactly similar positions of R ;

AP it is a completion of R in all the same manners as some third fact u is a completion of R / it can be obtained by different substitution operations on u .

Let us check O1's test case: a 's loving b and b 's being loved by a (which is to be one fact). By the Standard View, they are different because the relations have a different direction. Here is where all the trouble started, for this is the wrong result. By Positionalism, they are the same because in both cases a occupies the *lover* position and b occupies *beloved*. By Anti-Positionalism, they are the same because they can always be obtained by the same substitution operations on some third loving fact. If you can get a 's loving b from simultaneously substituting a for c and b for d in c 's loving d , then you can equally get b 's being loved by a .

Next O2's test case: a 's loving b and b 's loving a (which are to be two facts). By the Standard View, they are different because a and b are ordered differently. In the former fact a comes first and b second, in the latter b comes first and a second. By Positionalism, they are different because a

and b occupy different positions. In the former fact a occupies *lover* and b *beloved* and in the latter a occupies *beloved* and b *lover*. By Anti-Positionalism, they are different because they can never be obtained by the same substitutions in some third loving fact. If you can get a 's loving b by simultaneously substituting a for c and b for d in c 's loving d , then you cannot get b 's loving a by that very operation. The fact b 's loving a can nevertheless be obtained from c 's loving d , i.e. by simultaneously substituting a for d and b for c in c 's loving d .

Lastly O3's test case: a 's standing next to b and b 's standing next to a (which is to be one fact). By all three theories, they are the same just in case they contain the same constituents. For the Standard View this also means that *standing next to* does not relate a and b in a specific order. For Positionalism this also means that in both facts a and b occupy exactly similar positions. For Anti-Positionalism this also means that they are completed in the same manners as some third standing next to fact, e.g. c 's standing next to d . More specifically, a 's standing next to b can be obtained both from simultaneously substituting a for c and b for d in c 's standing next to d and from simultaneously substituting a for d and b for c in c 's standing next to d .

So far so good.

4. Anti-Positionalism's Regress

MacBride (2007: 48-9) argues that Anti-Positionalism falls prey to a regress argument which is to establish that this theory ultimately fails to account for O2. In this section we submit this argument to closer inspection. To recap, O2 is the problem how to account for the distinctness of non-symmetric facts with the same constituents. So how does Anti-Positionalism distinguish between a 's loving b and b 's loving a ? As said, in contrast to the Standard View and Positionalism, Anti-Positionalism does not locate this difference inside the facts (not in the direction, nor in the positions of the relation), but outside them. More specifically, by Anti-Positionalism a 's loving b and b 's loving a are *equally* composed of a , b and the neutral amatory relation, but differ regarding their relations to other facts. How is this supposed to work? Consider Fine's example:

“Suppose, for example, that s_0' is the state of Cleopatra's loving Anthony [and $s_0 =$ Anthony's loving Cleopatra]. Then we may distinguish between s_0 and s_0' on the grounds that s_0 is the completion by Anthony and Cleopatra in the same manner in

which t_0 is the completion by Abelard and Eloise, while s_0' is not.”
(2000: 21)

Let me reformulate Fine’s two points ($a = \text{Anthony}$; $b = \text{Cleopatra}$; $c = \text{Abelard}$; $d = \text{Eloise}$; $R = \text{loving}$; $s_1 = aRb$; $s_2 = bRa$; $s_3 = cRd$):

- (1) s_1 is a completion of R by a, b in the same manner that s_3 is a completion of R by c, d .
- (1*) s_2 is not a completion of R by a, b in the same manner that s_3 is a completion of R by c, d .

We may nevertheless add that:

- (2) s_2 is a completion of R by a, b in the same manner that s_3 is a completion of R by d, c .
- (2*) s_1 is not a completion of R by a, b in the same manner that s_3 is a completion of R by d, c .

Hence, the very difference between s_1 and s_2 is quite subtle (notice the order of the last two objects). There is a certain co-mannered completion relation between s_1 and s_3 (1), and there is a certain other co-mannered completion relation between s_2 and s_3 (2). Put in terms of substitution, s_1 and s_2 are to be different because they can never be obtained by the same substitution operation on a third fact. Assuming that s_3 is given as the third fact, if s_1 can be obtained by simultaneously substituting a for c and b for d in s_3 (call this operation δ_1), then s_2 can only be obtained by simultaneously substituting a for d and b for c in s_3 (operation δ_2). Or the other way around: if s_1 can be obtained by simultaneously substituting a for d and b for c in s_3 , then s_2 can only be obtained by simultaneously substituting a for c and b for d in s_3 .

There is one problem, however. In this section we started with the problem how to account for the difference between s_1 and s_2 . But now Anti-Positionalism meets a problem for its solution which is similar to the initial problem. This new problem runs: how to account for the difference between the co-mannered completion facts expressed in (1) and (2)? Put in terms of substitution: how to account for the difference between δ_1 and δ_2 on s_3 ? So, first we had the problem of the differential application of ordinary relations, e.g. how the neutral amatory relation can relate the very same relata in two different ways, and now we have the problem of the differential application of the co-mannered completion relation or the substitution operation, i.e. how it can relate its relata or operate upon its operands in a variety of ways, *if not in a specific order*. As MacBride says: “However, substitution is itself a relation (or function) that admits of differential application. [...] But how is

the Anti-Positionalist to account for the differential application of substitution?” (2007: 49; cf. Fine 2000: 28, n. 17)

If Anti-Positionalism is to pursue a uniform project, the co-mannered completion relation and substitution operation are neutral and their differential application is to be accounted for in terms of further co-mannered completion and substitution facts respectively. MacBride points out that this is the beginning of a regress. He provides the basis for a regress in terms of substitution, but I prefer to reconstruct the regress in terms of co-mannered completion (but I shall shortly point out why, presumably, both regresses are essentially the same):

Co-Mannered Completion Regress

- (P1) Why are s_1 and s_2 distinct?
 - (S1) They are distinct because s_1 is co-mannered completed₁ with e.g. s_3 ($c_{1,1}$) and s_2 is co-mannered completed₂ with s_3 ($c_{1,2}$).
 - (P2) Why are $c_{1,1}$ and $c_{1,2}$ distinct?
 - (S2) They are distinct because $c_{1,1}$ is co-mannered completed₁ with e.g. $c_{1,3}$ ($c_{2,1}$) and $c_{1,2}$ is co-mannered completed₂ with $c_{1,3}$ ($c_{2,2}$).
 - (P3) Why are $c_{2,1}$ and $c_{2,2}$ distinct?
- etc.

In this reconstruction I simply take co-mannered completion as a relation between facts simpliciter. If we adopt Fine’s suggestion that co-mannered completion is “a relation that holds between a state s and its m constituents a_1, a_2, \dots, a_m , on the one side, and a state t and its m constituents b_1, b_2, \dots, b_m , on the other” (2000: 20), then the co-mannered completion facts in the regress above can be spelled out as follows:

- $c_{1,1} =$ s_1 is a completion of R by a, b in the same manner that s_3 is a completion of R by c, d ;
 - $c_{1,2} =$ s_2 is a completion of R by a, b in the same manner that s_3 is a completion of R by d, c ;
 - $c_{1,3} =$ s_4 is a completion of R by e, f in the same manner that s_5 is a completion of R by g, h ;
 - $c_{2,1} =$ $c_{1,1}$ is a completion of *co-mannered completion*₁ by s_1, a, b, s_3, c, d in the same manner that $c_{1,3}$ is a completion of *co-mannered completion*₁ by s_4, e, f, s_5, g, h ;
 - $c_{2,2} =$ $c_{1,2}$ is a completion of *co-mannered completion*₁ by s_1, a, b, s_3, d, c in the same manner that $c_{1,3}$ is a completion of *co-mannered completion*₁ by s_4, e, f, s_5, g, h .
- etc.

The Co-Mannered Completion Regress, just like many other infinite regresses, exhibits two features: it is problem shifting, and this shifting does not terminate. By problem shifting I mean that the solution (S1) to the first problem (P1) generates a problem (P2) which is similar to (P1). Hence, problem shifting is the relation from P1 (via S1) to P2, from P2 (via S2) to P3, etc. Put in terms of co-mannered completion: first we are concerned why s_1 and s_2 are distinct given the fact that they are composed of the same constituents (i.e. $a, b, loving$), then we are concerned why $c_{1.1}$ and $c_{1.2}$ are distinct given the fact that they are composed of the same constituents (i.e. $a, b, c, d, loving, co-mannered\ completion_1$), then we are concerned why $c_{2.1}$ and $c_{2.2}$ are distinct given the fact that they are composed of the same constituents (i.e. $a, b, \dots, h, loving, co-mannered\ completion_1, co-mannered\ completion_2$), etc. That the problem shifting does not terminate simply means that for *every* problem there is a solution, and *every* solution generates a new problem.

Clearly, the regress is generated because the co-mannered completion relation itself admits of differential application, i.e. it can relate the very same relata in different ways. Interestingly, co-mannered completion is a polyadic *symmetric* relation which has this capacity. The situation seems not essentially different for substitution. Both the operation of single object substitution and the operation of multiple (or simultaneous) object substitution have the capacity of differential application, i.e. they can operate upon given operands in more than one way. For instance, if just the two objects a and b are given, then a can be substituted for b , or the other way around. Hence, the differential application of this single object substitution is to be accounted for by further substitution operations, and the regress is off. This is how MacBride (2007: 49) explains the first step of the regress. The important and open question for future research is how the further steps are to be spelled out (i.e. in terms of substitution).

5. Four strategies

In this section we present an overview of four strategies available to Anti-Positionalism to deal with the Co-Mannered Completion Regress (and similar strategies can be set out for the regress in terms of substitution):

- (A) Block the regress by appealing to directional co-mannered completion.
- (B) Block the regress by leaving co-mannered completion unexplained.

- (C) Accept the regress and appeal to co-mannered completion all the way down.
- (D) Block the regress by replacing co-mannered completion by compositionality.

The first two strategies (A and B) are suggested in the literature, and I will supply the latter two (C and D). It is worth noting that these four options are instances of *general* strategies to deal with any regress:

- (A*) Block the regress by providing a solution S2 which is dissimilar to the first solution S1 and which does not generate a new problem P3 which is similar to the first two problems P1 and P2.
- (B*) Block the regress by not providing a solution to P2.
- (C*) Accept the regress to infinity and deny its unacceptability.
- (D*) Block the regress by providing a solution S1 which does not generate a new problem P2 similar to the first problem P1.

Before I turn to the four strategies, let me briefly recap what is required from all of them. Their task is to account for the capacity of differential application of non-symmetric relations (both ordinary relations and co-mannered completion). In particular, they should say something about the difference between the follow two facts:

- (1) s_1 is a completion of R by a, b in the same manner that s_3 is a completion of R by c, d .
- (2) s_2 is a completion of R by a, b in the same manner that s_3 is a completion of R by d, c .

Strategy A: Ordinary relations have the capacity of differential application in virtue of co-mannered completion, and co-mannered completion has the capacity of differential application in virtue of being directional.

By this strategy, the difference between (1) and (2) is that in (1) the co-mannered completion relation relates its relata in one way, and in (2) it relates them in another way. This option is suggested by MacBride (2007: 49): “he can admit that there is at least one inherently directional relation.” Consequently, no higher-orders of co-mannered completion are needed, and the regress is blocked.

Strategy B: Ordinary relations have the capacity of differential application in virtue of co-mannered completion, and co-mannered completion has the capacity of differential application in virtue of nothing.

By this strategy, the difference between (1) and (2) is a brute difference, one without explanation. This is Fine's choice: "What is true is that there is a sense in which the explanans presupposes the differential application of the relation of substitution. For the explanation could not do the work it is meant to do unless the relation did have differential application. The question therefore arises as to whether a presupposition of differential application also leads to a legitimate demand for further explanation. I do not think it does." (Fine 2007: 60) Consequently, no higher-orders of co-mannered completion are introduced, and the regress is blocked.

Strategy C: Ordinary relations have the capacity of differential application in virtue of first-order co-mannered completion, first-order co-mannered completion has the capacity of differential application in virtue of second-order co-mannered completion, second-order co-mannered completion has the capacity of differential application in virtue of third-order co-mannered completion, etc. to infinity.

By this strategy, we do not block the regress and appeal to co-mannered completion all the way down. One might think it is bad to be committed to a regress, and that the theory which generates one is to be rejected. As said in §4, the regress exhibits two features: it is problem shifting, and this shifting does not terminate. In the literature it has never been shown, however, why these features are bad for a theoretical enterprise like Anti-Positionalism (cf. Wieland 2010: §4). In any case this strategy seems to be a coherent one, and ready for the 'end game' (i.e. the third round of theory choice, preceded by the round of formulating the problem, and the one of collecting all possible solutions) as one strategy among the others.

Strategy D: Ordinary relations have the capacity of differential application in virtue of co-positionality, and co-positionality does not have the capacity of differential application.

By this strategy, we appeal to a fundamental relation that takes care of the difference between (1) and (2), but which does *not* have the capacity of differential application. In fact, such a relation can already be found in Fine (2000). He writes: "A similar treatment may be given of position. For we may define a in s is co-positional with b in t by: s results from t by a substitution in which b goes into a (and vice versa). Positions can then be taken to be the abstracts of constituents in relational facts with respect to the relation co-positionality." (2000: 19) The problem, here, is that co-positionality is cashed out in terms of substitution. If Anti-Positionalism is to block the regress, however, it should take the relation of co-positionality as irreducible to other entities that admit of differential application.

The idea is the following. For two objects to occupy the same position (e.g. they are both lovers) is for them to stand in the co-positionality relation. This *being co-positional with* relation is symmetric and lacks the capacity of differential application, i.e. it can apply to given relata in one way only. More precisely, given any object x in a certain fact s and y in a certain fact t , if the relation of co-positionality holds between them, then x in s and y in t are co-positional full-stop. Consider once more the three facts a 's loving b (s_1), b 's loving a (s_2), and c 's loving d (s_3). In terms of co-positionality this strategy says that:

- (3) a in s_1 is co-positional with c in s_3 , and b in s_1 is co-positional with d in s_3 .
- (4) a in s_2 is co-positional with d in s_3 , and b in s_2 is co-positional with c in s_3 .

The situation is depicted in Fig. 2 (where the line is co-positionality, and the objects do not occupy particular positions of the relation).

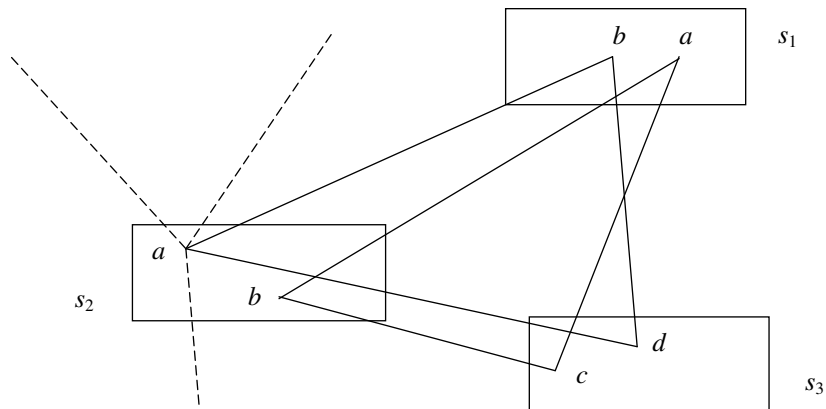


Fig. 2

By this strategy, the difference between s_1 and s_2 lies in the difference between (3) and (4). In other words, a 's loving b and b 's loving a are different because their objects stand in different relations of co-positionality to the objects of c 's loving d . Furthermore, the structural identity criteria of facts would be the following. For any facts s and t of the form xRy and with the same constituents: (ad O1) if R is non-symmetric, then $s = t$ iff the relata stand in the same relations of co-positionality to the relata of a third fact u ; (ad O2) if R is non-symmetric, then $s \neq t$ iff the relata stand in different

relations of co-positionality to the relata of a third fact u ; (ad O3) if R is symmetric, then $s = t$, and its relata stand in the relation of co-positionality to one another (and to all other relata related by R).

All four strategies deserve further explication, but it seems that along the lines of each of them Anti-Positionalism may take care of O2.

6. Conclusion

Recall the following part from Russell's pioneering work:

“In other words, given a certain complex whose terms are A and B , and to which we give the name ‘ A -before- B ’, the complex ‘ C -before- D ’ will be defined as ‘the complex of which C and D are the terms, and which has relation-similarity to A -before- B ’. This definition, however, is illusionary. To begin with, it will not distinguish between C -before- D and D -before- C . This might perhaps be got over, though I doubt it; but even if it could, there is a second objection which could not be got over, and that is, that ‘relation-similarity’ enters into the above definition, and is plainly a relation. Hence it would be a vicious circle to define relations in general by means of it.” (1913: 84)

Russell, here, is appealing to a predecessor of Anti-Positionalism where co-mannered completion is just taken as the similarity relation. As we have seen, Russell's worry is serious: how does the similarity relation help in distinguishing facts (or complexes, as Russell says) like a 's preceding b and b 's succeeding a ? Nonetheless, in this paper I presented an overview of four possible strategies available for Anti-Positionalism to deal with the worry.

How, finally, to choose among the four strategies? For myself, I prefer the strategies C and D over A and B, because A and B seem ad hoc. The point is: given that there are alternatives available, why should we be prepared to accept direction (A) or brute facts (B) for co-mannered completion, whereas we are *not* prepared to accept direction or brute facts for ordinary relations? However, maybe other principles of theory choice lead to a different balance, so I leave the question of theory choice unsettled. The only aim of this paper was to open up the possibilities for Anti-Positionalism to establish order when the situation is regressing.

References

- Fine, K. 1982. First-Order Modal Theories III: Facts. *Synthese* 53: 43-122.
- Fine, K. 2000. Neutral Relations. *The Philosophical Review* 109: 1-33.
- Fine, K. 2007. Reply to Fraser MacBride. *Dialectica* 61: 57-62.
- Leo, J. 2008. Modeling Relations. *Journal of Philosophical Logic* 37: 353-85.
- MacBride, F. 2007. Neutral Relations Revisited. *Dialectica* 61: 25-56.
- Orilia, F. 2009. The Problem of Order in Relational States of Affairs: A Leibnizian View. In G. Bonino & R. Egidi (Eds.), *Fostering the Ontological Turn. Gustav Bergmann* (pp. 161-85). Frankfurt: Ontos.
- Russell, B. 1903. *The Principles of Mathematics* (2nd ed. 1937). London: Allen & Unwin.
- Russell, B. 1913. On the Acquaintance Involved in Our Knowledge of Relations. In E. R. Eames (Ed.), *Theory of Knowledge. The 1913 Manuscript* (1989, pp. 79-89). London: Allen & Unwin.
- Wieland, J. W. 2011. Filling a Typical Gap in a Regress Argument. *Logique & Analyse* 216.

* Many thanks to: Joop Leo for explaining Anti-Positionalism to me (see his 2008), two anonymous referees and my MA examiners Dennis Schulting, Arianna Betti and Paul Dekker for helpful feedback, and to Fraser MacBride for attracting my attention to Russell's text cited in §6. The author is PhD fellow of the Research Foundation Flanders at Ghent University. Email: Jan.Wieland@UGent.be.

¹ Throughout the paper I speak of converses as regards relations and also as regards facts. E.g. *loving* and *being loved by* are converse relations, and *a's loving b* and *b's being loved by a* converse facts (note that this, crucially, does not make *a's loving b* and *b's loving a* converse facts).

² Also: I am omitting the 'Uniqueness' assumption, i.e. that no two distinct relations can give rise to a single fact (Fine 2000: 5). For our purposes, we need not go into this.

³ Specifically, in that case the problem needs refinement on at least two points: concerning O2, we then also want to have the *identity* of certain facts of objects related by a polyadic *non-symmetric* relation; concerning O3, we then also want to have the *non-identity* of certain facts of objects related by a polyadic *symmetric* relation.