In his article “The ‘Direction’ of Non-Symmetrical Relations” and his book *Subject and Predicate in Logic and Grammar* P. F. Strawson has made some interesting remarks concerning what he calls the term-ordering function.

The sentences “John loves Mary” and “Mary loves John” differ in sense. Syntactically they differ only in the positioning of their singular terms. According to Strawson, the difference in sense is to be explained by the fact that positioning is a syntactic device which performs a certain semantic function, the term-ordering function. Strawson thinks there is a problem in explaining exactly what the term-ordering function is. As Strawson says:

It is easy to illustrate and name this function, and clear that it is necessary. What is not quite so clear, I think, is what this function is. Perhaps it is something we think we understand because it is so familiar. We talk happily about the *direction* (or *sense*) of a non-symmetrical relation; and we can give formal definitions of the notion of an ordered pair. It does not follow that we really have a clear grasp of the semantic (or semantico-syntactic) feature or features that are in question, and it seems to me possible that we do not clearly distinguish a familiar mode of representation of those features from what is represented. In what follows I try to make those features clear. But it may be that there is no such problem as I seem to

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1 *Crítica*, vol. 6, 1972, pp. 3-11.
feel; and it may be that, if there is, what I have to say is too close to the problem to count as a solution.³

I think Strawson's problem is a real one and is solvable, but I do not agree with the way he solves it.

I will paraphrase Strawson's solution. Then, I will make some general remarks about relations and criticize Strawson's treatment of term-ordering.

Strawson starts by trying an account of the term-ordering function which he later rejects on the grounds that it is not general enough. Some relations are what Strawson calls essentially directed relations.

Let a relation of type 1 be a relation such that for that relation to hold between two things one thing must perform some action or hold some attitude or be in some state of mind which is "directed at" the other thing or has the other thing as its "intentional" object. Examples of type 1 relations are loving, seeking, avoiding, and detesting.

Let a relation of type 2 be a relation such that for that relation to relate two things one thing must affect the other thing or be responsible for a change in state, or deviation or interruption of the course of the other thing. Examples of type 2 relations are hitting, obstructing, liberating, and wounding. Murdering is both a type 1 relation and a type 2 relation.

A relation is a clear case of an essentially directed relation if and only if it is a type 1 or type 2 relation.

Given a state of affairs in which two things are related by a relation of type 1, the thing which performs the action or has the attitude or is in the state is called the origin of the relation, and the thing which the action or attitude or state is directed at is called the object of the relation. With respect to the state of affairs that John seeks Mary, John is the origin and Mary is the object of the relation of seeking.

Given a state of affairs in which two things are related

³ "The 'Direction' of Non-Symmetrical Relations", p. 4.
by a relation of type 2, the thing which does the affecting is the origin and the thing affected is the object. Relative to the state of affairs that Mary hits John, Mary is the origin and John is the object of the relation of hitting.

Suppose we are given a sentence which consists of two occurrences of particular-specifying expressions and an occurrence of an expression specifying an essentially directed relation. Such a sentence specifies a state of affairs in which the specified particulars are related by the specified relation. A characterization of the term-ordering function can be given as follows: The term-ordering function is the function of indicating which of the specified particulars is to be taken as origin and which is to be taken as object of the specified relation.

Suppose we have a sentence consisting of expressions which specify John, Mary, and the relation of loving. If it is indicated by some syntactic device that John is to be taken as origin and Mary is to be taken as object, then the sentence specifies the state of affairs that John loves Mary. If on the other hand it is indicated in the sentence that Mary is to be taken as origin and John is to be taken as object, then the sentence specifies the state of affairs that Mary loves John.

Strawson believes that this account suffers from lack of generality; not all relations are essentially directed relations, not even all non-symmetrical relations are essentially directed. One thing can be to the left of another, or be older than another without the one thing affecting the other or the other being an object of a state, attitude, or action of the one.

Strawson then tries another tack for solving the problem of what the term-ordering function is. I do not find Strawson's presentation clear enough, so I may be misunderstanding what he is saying. With that caveat, I will attempt to describe his solution.

Consider a pair of relation-expressions which specify converse relations which are non-symmetrical, like "is younger
than” and “is older than”, or “hits” and “is hit by”. Straw-
son says that in a sentence consisting of two expressions
which specify different particulars and a non-symmetrical
dyadic relation-expression, the relation-expression selects one
of the specified particulars in a way it does not select the
other. He says, “... the general character of the difference
in sense between any such expression and its converse is
reflected in the fact that if both were to be used to report
correctly the same two-itemed fact, then east must select in
this special way the item the other does not...”4 In English
we can write the following two sentences to say the same
thing:

(1) John is older than Mary.
(2) Mary is younger than John.

In (1) the person referred to by the word “John” is the item
selected by “is older than” in “the special way”. In (2) the
person referred to by the word “Mary” is the item selected
by “is younger than” in “the special way”.

Suppose we have a sentence containing two particular-
specifying expressions; say $e_1$ and $e_2$, and an expression,
say $r$, specifying a non-symmetrical relation. Suppose that
the thing specified by $e_1$ is selected in “the special way”
by $r$ in the sentence. Then, relative to the state of affairs
specified by the sentence, the thing specified by $e_1$ is called
the primary term and the thing specified by $e_2$ is called the
secondary term of the relation specified by $r$.

Relative to the state of affairs that John is older than
Mary, John is the primary term and Mary is the secondary
term of the relation of being older than. Relative to the state
of affairs that Mary is younger than John (the same state of
affairs as the state of affairs that John is older than Mary),
Mary is the primary term and John is the secondary term
of the relation of being younger than.

4 Ibid., p. 8.
The primary-secondary distinction does not agree with the origin-object distinction in the case of essentially directed relations. Consider the following sentences:

(3) John is loved by Mary.
(4) Mary loves John.

The same state of affairs is specified in (3) and (4). Relative to this state of affairs, John is the primary term and object of the relation of being loved by, and John is also the secondary term and object of the relation of loving. Relative to this state of affairs, Mary is the secondary term and origin of the relation of being loved by, and she is also the primary term and origin of the relation of loving. An object of a relation can be a primary term or secondary term; the same is true of an origin.

Strawson gives a characterization of the term-ordering function in terms of the primary-secondary distinction. "Now we can give a general characterization of the term-ordering function. It is the function of indicating which is the primary and which is the secondary term of a non-symmetrical relation."

Before I criticize Strawson, I will make some general remarks concerning relations.

"Relations have a direction." This sentence is sometimes said by logicians. Strawson and I both agree this sentence is a metaphor. I will try to put the point made by the sentence in non-metaphorical terms.

(The relations I will be talking about are relations in intension, not relations in extension. As a property is to the class of things which have it, so is an n-ary relation in intension to a certain class of ordered n-tuples, a certain relation in extension.)

For a to write is for a to write something.

5 Ibid., p. 10.
6 Ibid., p. 11.
For a to eat is for a to eat something.
For persons a and b to agree is for a and b to agree on something.
For a binary relation R to relate a and b is for R to relate a and b under some way of ordering a and b. This is the literal sense of "A binary relation R has a direction". Binary relations only relate things relative to some way of ordering those things.

Assuming a ≠ b, there are two ways of ordering a and b. One way is the ordering of a first and b second; the other way is the ordering of b first and a second. If a = b, there is only one way of ordering a and b; the ordering of a first and b second is the same as the ordering of b first and a second. Since a binary relation only relates things under some way of ordering those things, he who countenances relations in his ontology must countenance ways of ordering as well (or some substitute for ways of ordering, e.g., set-theoretical ordered n-tuples).

One can specify a binary relation R by stating what it is for R to relate a thing taken as first thing with a thing taken as second thing: Let RM be the binary relation such that for that relation to relate a first thing to a second thing is for the first thing to be married to the second thing. Let RL be the binary relation such that for that relation to relate a first thing to a second thing is for the first thing to love the second thing. A binary relation R is symmetrical if for every x and y, if R relates x and y under the ordering of x first and y second, then R relates x and y under the ordering of y first and x second. A binary relation R is non-symmetrical if it is not symmetrical. RM is symmetrical and RL is non-symmetrical.

Let RY be the binary relation such that for that relation to relate a first thing and a second thing is for the first thing to be younger than the second thing. Let RO be the binary relation such that for that relation to relate a first thing and a second thing is for the first thing to be older
than the second thing. For binary relations $R_1$ and $R_2$, $R_1$ is a converse of $R_2$ if for every $x$ and $y$, what it is for $R_1$ to relate $x$ and $y$ under the ordering of $x$ first and $y$ second is the same thing as what it is for $R_2$ to relate $x$ and $y$ under the ordering of $y$ first and $x$ second. $R_3$ is a converse of $R_0$, and $R_0$ is a converse of $R_3$.

What I have said extends to $n$-ary relations for $n > 2$. For a ternary relation $R$ to relate $a$, $b$, and $c$ is for $R$ to relate $a$, $b$, and $c$ under some way of ordering $a$, $b$, and $c$ as first thing, second thing, and third thing. This is the literal sense of "A ternary relation $R$ has a direction".

Given what I have said about binary relations, how can the extension of a binary relation be understood? Let $R$ be a binary relation. The extension of $R$ can be identified with the following class:

$$\{w : (\exists x) (\exists y) \ (w \text{ is a way of ordering } x \text{ and } y \text{ as first thing and second thing } \& \ R \text{ relates } x \text{ and } y \text{ under } w)\}$$

If one likes ordered pairs, one may prefer to identify the extension of $R$ with the class of all ordered pairs $<x,y>$ such that $R$ relates $x$ and $y$ under the ordering of $x$ first and $y$ second. Again, extending these remarks to $n$-ary relations for $n > 2$ is easy.

Suppose we are given a sentence that consists of two occurrences of particular-specifying expressions and a relation-specifying expression. What does such a sentence state? The answer can be given in a simple way. Suppose $p_1$ and $p_2$ are the particulars specified by the occurrences of particular-specifying expressions and $R$ is the binary relation specified by the relation-specifying expression. The sentence will state that $p_1$ and $p_2$ are related by $R$ under some indicated way of ordering $p_1$ and $p_2$ as first thing and second thing. My characterization of what a sentence containing a relation-specifying expression states leads directly to an answer to the question of what the term-ordering function is: The term-
ordering function is precisely the function of indicating which of \( p_1, p_2 \) is to be taken as first thing and which of \( p_1, p_2 \) is to be taken as second thing. In English, the ordering of the specified particulars is sometimes given by the order of the occurrences of particular-specifying expressions. Suppose we take “loves” to specify \( R_L \). Then, “John loves Mary” states that John and Mary are related by \( R_L \) under the ordering of John first and Mary second.

Strawson’s concern in his paper is to give an answer to the question of what the term-ordering function is. His answer is that the term-ordering function is the function of specifying the primary term and the secondary term. He explains the primary term as the term that is selected in “the special way” by the relation-expression. How does my answer to the question of what the term-ordering function is differ from Strawson’s? Consider again the sentence “John loves Mary”. If Strawson takes it that the term-ordering function is performed in this sentence by the ordering of the particular-specifying expressions, he will take it that John is the primary term. So, he will take it that John is selected in “the special way” by “loves”. Can I say that with respect to the sentence “John loves Mary” that John is selected in some special way? Under my account of the term-ordering function, John is selected as first thing. But the person Mary is also selected in some way; Mary is selected as second thing. So, on my account, it is not true that John is selected in some way and Mary is selected in no way at all. Both John and Mary are selected as occupying positions in a certain order. I cannot accept Strawson’s explanation of what the primary term is; although he is not too far off in his simple use of the words “primary term” and “secondary term”.

Another difference between my account of the term-ordering function and Strawson’s becomes clear when one considers symmetrical relations. Strawson restricts the performance of the semantic term-ordering function to cases in which non-symmetrical relations are specified. On my view, sym-
metrical relations are just like non-symmetrical relations in only relating things under some way of ordering those things. So, the term-ordering function is not a function that is only performed when non-symmetrical relations are in question. Consider the sentences “John is married to Mary” and “Mary is married to John”. If “is married to” is taken as specifying $R_M$, the first sentence states that $R_M$ relates John and Mary under the ordering of John as first thing and Mary as second thing; and the second sentence states that $R_M$ relates John and Mary under the ordering of Mary as first thing and John as second thing. Since $R_M$ is symmetrical, the first sentence is true if the second sentence is.

Strawson went wrong because he did not realize that relations only relate things under ways of ordering those things. It is my belief that his failure to recognize this fact explains his mistake about selection in his explanation of what primary terms are and his undue restriction of the performance of the term-ordering function to cases in which the relation word specifies a non-symmetrical relation.

Someone might object that Strawson is interested in his book in defending the tradition subject-predicate distinction; so, in considering sentences which contain two particular-specifying expressions and an expression specifying a non-symmetrical relation, he is especially interested in singling out one of the particulars referred to as the subject term. Since my account of the term-ordering function does not make the particular selected as first thing any more special than the particular selected as second thing, it might be objected that my account misses Strawson’s point.

In response to this objection, it must be remembered that Strawson is careful not to presuppose the subject-predicate distinction in his discussion of what the term-ordering function is. The discussion is presented independently of the distinction (Strawson would not have extracted this discussion as a separate paper otherwise). If Strawson had presupposed the subject-predicate distinction in his discussion of
what the term-ordering function is, he could not have used in his book the results of that discussion in defense of the distinction without begging the question. If my account of the term-ordering function is correct and Strawson's is wrong, then so much the worse for part of Strawson's defense of the traditional subject-predicate distinction. I believe that such distinction founders when one considers relational sentences, but I will not pursue this matter here.
El tema de este artículo es la función ordenadora de términos. Las oraciones "Sancho ama a Dulcinea" y "Dulcinea ama a Sancho" difieren en sentido. Sintácticamente la diferencia depende exclusivamente de la posición de cada término singular. Strawson explica esta diferencia de sentido por el hecho de que la posición es un instrumento sintáctico que lleva a cabo una función semántica: la función ordenadora de términos.

Una caracterización de la función ordenadora de términos puede ser como sigue: la función ordenadora de términos es la función de indicar cuál de los particulares específicos debe tomarse como origen y cuál como objeto en la relación específica.

Strawson cree que no todas las relaciones son relaciones esencialmente dirigidas, ni siquiera que todas las relaciones asimétricas son esencialmente dirigidas. Por esta razón Strawson caracteriza a la función ordenadora de términos como la función que especifica el término primario y el término secundario en una expresión relacional. El término primario es aquel que es seleccionado "de manera especial" por la expresión relacional, por ejemplo: en la oración "Sancho ama a Dulcinea", Strawson acepta que la función ordenadora de términos está determinada por el orden de las expresiones que especifican un particular: Sancho es el término primario. Por tanto, él propone que Sancho es seleccionado "de manera especial" por "ama a".

Para Stanley Martens, la función ordenadora de términos es la función que indica cuál de los P1, P2 (particulares especificados), se toma como el primer elemento y cuál como el segundo. De acuerdo con la explicación de Martens, Sancho es seleccionado como el primer elemento. Pero (y aquí la diferencia con Strawson), Dulcinea es seleccionada como segundo elemento. En suma, Sancho no es seleccionado de ninguna manera especial y no es verdad que Dulcinea no sea seleccionada de ninguna manera. Ambos, Sancho y Dulcinea, son seleccionados, al ocupar ciertas posiciones, en cierto orden.

La otra diferencia notable entre el punto de vista de Strawson y el de Martens consiste en que el primero restringe la función ordenadora de términos a casos en los que las relaciones asimétricas están especificadas, mientras que, para el segundo, las relaciones simétricas son justamente como las asimétricas, pues relacionan las cosas bajo alguna manera de ordenar esas cosas.

En síntesis, señala Martens, Strawson erró al no darse cuenta de
que las relaciones sólo relacionan cosas bajo alguna manera de ordenar esas cosas. Esta falla de Strawson explica por qué se equivocó acerca de la especificación de qué eran los términos primarios; además, esto explica su restricción indebida de la función ordenadora de términos a casos en los que el término relacional especifica una relación asimétrica.

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