Russell's Second Philosophy of Time (1899–1913)

Nikolay Milkov, Bielefeld, Germany

1. Introduction

Russell's second philosophy of time (1899–1913), which will be the subject of this paper, is of special interest for two reasons. (1) It was basic to his New Philosophy, later called the "philosophy of logical atomism". In fact, this philosophy didn't initially emerge in the period of 1914–1919, as many interpreters (e.g. A. J. Ayer) suggest, but with the introduction of Russell's second philosophy of time (and space). The importance of Russell's second philosophy of time for his early and middle philosophy can be seen from the fact that it survived the dramatic changes in his philosophy of August–December 1900, and of July 1905. There is of course no surprise about this point: it served as their fundament. (2) Russell's second philosophy of time is a *locus classicus* of all so called B-theories of time which define it in terms of the relations of before, after and simultaneous between events or moments.

2. Russell's Second Philosophy of Time in Its Relation to His Other Philosophies of Time

In different periods of his philosophical development, Russell adopted two opposite positions in the philosophy of time: relative and absolute. Roughly speaking, the relational theory was held by Leibniz and Lotze, while the absolute theory by Newton. The relational theory claims that there is no time as such (or absolute time) but rather a succession of interrelated events (or *contents* of time). The absolute theory holds that events occur at moments, or absolute times, and that it is these moments that occur one after another. Two events are simultaneous if they occur at the same moment, and successive when they occur at two successive moments.

Of course, it does not take much effort to notice that the two theories are built on similar principles: They both are B-theories of time. Russell's B-theory can also be characterized as defending four-dimensionalism: a doctrine which holds that objects have temporal as well as spatial parts. In metaphysics he denied the presentism of McTaggart, or the view that everything which exists is present, and defended the position that time is real.

In his philosophical development Russell proposed at least three philosophies of time. (i) In 1897 he advocated a relational theory of time. (ii) From 1899 till 1913 he held an absolute theory of time—it is this theory that will interest us here. (iii) A major revolution occurred in Russell's thinking about time (and space) in 1914 when he stopped accepting matter as it appears in physics and tried to see it through the private world of sense-data. He found that physical objects are not to be inferred from sense data but must rather be constructed from them. In philosophy of time this led to his refusal to accept moments, or instants, and his defining them in terms of classes of "overlapping" events instead (cf. Russell 1914, 122 ff.). Now he claimed that time is a relation of events; there are no moments. In this way Russell returned—but on a different level—to the old relational theory of time.

3. The History of Russell's Seconds Philosophy of Time

Though idealistic, Russell's philosophy was pluralistic from the very beginning. His motivation for accepting pluralism were two early beliefs of his: First, in order for thinking to be possible at all, its object must be complex. Indeed, a simple thing "is unthinkable, since every object of thought can only be thought by means of some complexity". (1896, 564) Secondly, this complexity can be achieved only when referring to unique individuals (terms), which are different from any other individual. This was the kernel of Russell's atomism.[1]

Thus Russell's *The Foundations of Geometry* (finished in October 1896) claimed that the objects of cognition have to be complex: in order to know them, we must be able to differentiate between them; and in order to differentiate between them, they must be external to (divergent from) one another. This is the Principle of Differentiation, which is based on the Form of Externality of individuals (terms). There are two forms of externality, space and time, which are most important for us humans. In this connection, Russell accepted that two time-points (moments) can be different only when mutually external (in contrast, two events can happen together in time). This is the first a priori knowledge about time and is so the first axiom of metaphysics.

Russell's first philosophy of time was advanced in his paper "Why Do We Regard Time, But Not Space, as Necessarily a Plenum", which was written towards the end of May 1897 (but published first in 1990). In the paper Russell criticized the widely-held belief that time is an adjective (predicate), "while space is regarded as possibly a relation" (Russell 1897, 92). He, in contrast, insisted that space and time have the same logical structure: they are both based on relations.

This stance was to characterize Russell's position on time in all his periods. His different philosophies of time were the effect of different conceptions of the type of relations which lay at the bottom of time. Although still an idealist, in 1897 Russell insisted that relations cannot be reduced to properties: relations exist and are real. He claimed further that the position on this problem is of utmost importance since the solution of the controversy monism / pluralism depends on it and this is "the most fundamental question of metaphysics" (p. 97). And from Russell's claim that relations cannot be reduced to predicates, it followed that monism is untenable. He further made the distinction between absolute and relational theory of time. At this point, however, he cannot decide whether space and time are relational or absolute.

Russell accepted the absolute theory of time, first, in the paper "Is Position in Time Absolute or Relative?", read on 9 May 1900 to the Oxford Philosophical Society. The paper was first published in 1993, in the 3rd vol. of Russell's *Collected Papers*, and this explains why it was not discussed in the press so far. Another paper of his from this period is "The Notion of Order and Absolute Position in Space and Time", which was read at the

---

[1] Its alternative is the metaphysics of "atomless gunk" which was explored only recently (cf. Zimmerman 1996).

historical (for him!) International Congress of Philosophy in August 1900 in Paris; it was published the next year in French (see Russell 1901a). On the basis of this paper Russell prepared a third one, "Is Position in Time and Space Absolute or Relative?", which he published the next year in *Mind* (see Russell 1901b). The two papers overlap on many points. A substantial part of the third paper was reprinted in the *Principles*, Ch. LI, (§§ 424–31). I must note here, however, that his theory was best articulated in the first paper, "Is Position in Time Absolute or Relative?". This explains why in what follows we shall concentrate on it.

4. Russell's Absolute Philosophy of Time of 1900

Russell's first claim is that his problem is that of logic, not of metaphysics: "The problem concerning temporal position is one which takes us to the foundations of logic." (Russell 1900, 225) Further, he insists that his philosophy (logic) of time is a concretization of his:

(i) theory of series (to be discussed in § 5);
(ii) which, in turn, depends of the theory of relations (first developed in the paper "The Classification of Relations", given in January 1899 to the Cambridge Moral Sciences Club);
(iii) which, finally, depends upon his theory of judgment. In the latter, Russell followed the ideas developed in Moore's paper "The Nature of Judgment" (1899).2

In order to elucidate the absolute theory of time, in its divergence from the relational theory, Russell first points out the ambiguity of the word "event". On the one hand, an event can be taken to mean simply something which exists at a time; on the other hand, it can be taken to mean something together with the time at which it exists; i.e. an event may be defined either simply by its content, or by the *complex* consisting of its content together with its (absolute) temporal position.3,4 In the former sense, toothache is an event; in the latter sense, a particular bout of toothache is an event. In the first, more abstract sense Russell speaks of *qualities*, and only in the second sense of *events* proper. Now, the relational theory is interested in qualities, or in the content of events; events obtain by mutual relations of qualities. In contrast, the absolute theory accepts that there are different (absolute) moments, which, in combination with these qualities, form events.

Russell rejects the relational theory, since he believes that it destroys the construction of the time-series, which depends, as do all series, upon the mutual incompatibility of the constitutive elements. He insists that the elements of the time-series must not only be related to one another; they must also differ from one another—and this in such a way that even indiscernibles should not be treated as identical. In order to achieve this, Russell accepts that all simultaneous events have a certain common quality of transitiveness, and this quality is their temporal position, which makes even events of the same quality (i.e. indiscernibles) different one from another.

Russell claims further that the simultaneity implies identity of content, whereas the succession implies diversity of content. This means that qualities cannot be the atom of time, for the simple reason that these can be both simultaneous and successive. "The definiteness of the time-series requires that we should be able to distinguish between A *now* and A *then*. That is, in all cases of repetition, there [. . . must be] some difference of content, not contained in the quality A itself, which enables us to distinguish the first occurrence from the second." (228)

To meet this requirement, Russell accepts that relations of time hold between events. There is, in particular, a collection of contents (or moments) α, β and a collection of qualities A, B. The quality A becomes an event A_α by possession of the content (or when it is at a certain moment) α. The quality A possessing the content (or being at a certain moment) α is the event A_α. In accordance with this definition, we can call *simultaneous* two qualities which have one and the same content (or are at the same moment) (A_α and B_α). What are referred to as *successive* are different qualities at the same moment, or at different moments (B_α and A_α, or A_α and B_β). *Now* is an identity of content (moment) among events which are now.

Russell expresses the absolute theory of time also this way. "We have on the one hand a series of moments, each of which is before or after every other moment; moments form a series in virtue of these transitive asymmetrical relations of before and after. On the other hand, we have a collection of qualities, not forming a series, but capable of the relation expressed by *at* to one or many moments of time. Repetition occurs where one quality is *at* several moments. Simultaneity occurs where several qualities are *at* one moment. The complex formed by a quality at a moment is an event; thus every event has a position in the time-series expressed by the moment at which it is, and indeed the moments *are* the position of the events." (p. 230)

The moments of time are atoms in the sense that they are unanalyzable and indefinable, in the same way in which red and blue are indefinables. They are different from one another, and this difference is prior to any other difference of relation. The relations themselves "are rather like Platonic ideas, real entities, which, even if they do not live and move, yet have their being among the constituents of the universe." (p. 229)

5. Other Types of Series

Russell claims further that the absolute theory is correct in all cases of series. There are different types of series: integers, colors, space, time. In all of them, so Russell, if a number of terms occupies the same position, the position is really a new term, distinct from all of them. By some cases the logical status of the series can be decided by inspection. "For example, the integers form a series, and by relation to these, collections to various numbers of terms also form a series." (225) The same with the colors; indeed, there is clearly such a thing as a color. A "relational theory of color", however, would claim that there are no colors at all but just colored objects—which is perceptibly absurd. By other types of series, though, the logical status cannot be decided by inspection alone. Russell's guess (or hypothesis) is that "in cases where, as with numbers and colors, these positions have names, the absolute theory is plainly correct. But where they have no names, language does not help our philosophizing, and we are apt to suppose that what is unnamed is nothing." (226) Here are three examples of this:

---

2 Both Moore and Russell, however, were conscious that the theory of judgment is not sufficiently elaborated in it .
3 Obviously, Russell's second philosophy of time was based on the logic (and ontology) of simples and complexes.
4 Apparently, to Russell an event has content, in the same way in which a judgment has content. This point shows the connection between his theory of time and his logic, in particular, to his (Moore's) theory of judgment.

(i) In time, dates do, to some extent, afford names for periods.

(ii) A slightly more difficult case is presented by quantities. Quantity is one thing, but the size, or the magnitude that it has, is something quite different from it. Relational theory, though, denies the magnitudes and accepts only quantities.

(iii) "In the case of space, this difficulty becomes still greater; for places are named by the objects in them, and all known objects are perpetually moving. Events have at least the advantage of a fixed position in time, but material objects have no fixed position in space." (226)

Literature

Russell, Bertrand 1896 "On Some Difficulties of Continuous Quantity", in: *Collected Papers*, vol. 2 (1990), 44–58 (textual notes 563–6).

Russell, Bertrand 1897 "Why Do We Regard Time, But Not Space, as Necessarily a Plenum?" in: *Collected Papers*, vol. 2 (1990), 91–7.

Russell, Bertrand 1900 "Is Position in Time Absolute or Relative?" in: *Collected Papers*, vol. 3 (1993), pp. 219–33.

Russell, Bertrand 1901a "The Notion of Order and Absolute Position in Space and Time", in: *Collected Papers*, vol. 3 (1993), 234–58.

Russell, Bertrand 1901b "Is Position in Time and Space Absolute or Relative?", in: *Collected Papers*, vol. 3 (1993), 259–82.

Russell, Bertrand 1914 *Our Knowledge of the External World* London: Routledge.

Zimmerman, Dean 1996 "Could Extended Objects Be Made Out of Simple Parts? An Argument for 'Atomless Gunk' " *Philosophy and Phenomenological Research* 56, 1–29.

Nikolay Milkov <nikolay.milkov@uni-bielefeld.de>