WITTGENSTEIN AND PHYSICALISM

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Taken in isolation the question 'Was Wittgenstein a physicalist?' is another strange question concerning Wittgenstein. Why should it be raised at all? Why associate Wittgenstein with a thesis that limits significant scientific discourse to propositions containing essentially physical terms and those propositions which can be either translated into a physicalistic language or can be reduced to it? Was Wittgenstein a physicalist? Yes or no? And if 'yes', in what light should such an answer be viewed? Would it help us to understand Wittgenstein's work somewhat better, when we find a reasonable answer to these questions?

Perhaps it might be convenient to start with some kind of explanation why the question of physicalism arose and why it was connected with Wittgenstein's turning point at the beginning of the thirties. I am alluding to the period in which Wittgenstein—after having returned to philosophy proper— was in close contact with the philosophers of the Vienna Circle, especially with Schlick and Waismann.

In the very same year when Wittgenstein resumed his philosophical work, the famous pamphlet "Wissenschaftliche Weltauffassung: Der Wiener Kreis" was published and made it known to the republic of philosophers that the reign of metaphysics had ended and that the new philosophy would use logical analysis as a means to clarify philosophical questions and

their proposed answers in such a way as to leave no room for the seemingly everlasting metaphysical problems. Philosophy —according to this new point of view— had lost its unique position. For them there exists only one science —unified science— and nothing which is above or under this. This, by the way was a view which was not in accordance with what Wittgenstein himself had said in the *Tractatus*.

Carnap's Logical Structure of the World (1928) set a model for a theory of (world)-constitution in the form of a "rational reconstruction of the concepts of all fields of knowledge on the basis of concepts that refer to the immediately given" that is the world of immediate experience. And reconstruction was meant as a rebuilding of old concepts from out of newly constructed ones, newly constructed to be as clear and exact as possible in such a way as to fit into the general pattern of the system of unified science.

As is well known, Carnap in this, his major work of the Viennese period, chose elementary experiences as basic elements and under those he selected the 'recollection of similarity' (Ähnlichkeitserinnerung) as the element used to start the gigantic task of rebuilding —at least in principle— all concepts necessary to describe the world. The Frege-Russell logic contained the apparatus to picture their relations and their structural properties.

The solipsistic point of view which determined the epistemic perspective as well as the base of this structural system was, however, not taken to be the only possible one. For —as Carnap stated, it is a matter of decision whether the system—form "requires a construction of the psychological objects from the physical objects or vice versa". Since they are held by Carnap to be mutually reducible, both ways seemed open. Actually, in § 62 of the Logical Structure of the World, Carnap considers

 $^{^1\,}$ R. Camap, The Logical Structure of the World, transl. by R. A. George, Berkeley, 1969, preface to the second edition (1961).

² R. Camap, The Logical Structure of the World, § 62, § 58.

even three forms in which the constructional system aimed at could be built upon a physical basis: firstly, on electrons and their spatial and temporal relations; secondly, on the spacetime points of the four dimensional space-time continuum and their relative location in the continuum as relations; thirdly, on world points as elements of "world lines" of physical points with the relations of coincidence and local time-order. Since Wittgenstein in the Tractatus has left open the question of the status of simple objects, a straightforward physicalistic interpretation of them would certainly start out from one of the three options Carnap has listed in the Aufbau as possible candidates for the physical basis of the constructural system. But these were only options as to the narrow form of physics taken alone. Further sub-options arise when Carnap mentions also two ways in which psychological objects might be reduced to physical objects as basis.

First, Carnap states that since there exists a strong correlation between psychical and physical processes, so that to every property of a psychical process there corresponds some property of a brain process, one can infer "that it is in principle possible to reduce all psychological objects to physical objects".

The second way leads via a combination of what Carnap called the 'expression' relation (Ausdrucksbeziehung) and the 'reporting relation' (Angabebeziehung) to certain special objects of physical sort. These relations hold "between a bodily motion and a psychological process, provided that this motion indicates through speech, writing, or other sign-giving the existence and the property of the psychic process". Since expressive motions — "Ausdrucksbewegungen" as he calls them—are the only indicators we have for recognizing inner states of other persons, every statement about a psychological object can be transformed into statements about such motion as their outer criteria. This Carnap takes to be the reason why all psycho-

³ R. Camap, The Logical Structure of the World, § 57.

logical objects can be reduced to physical expressive motions ("Ausdrucksbewegungen").

Carnap, as we know, preferred methodological solipsism, which is to say he preferred to take autopsychological objects as the basis for his constructional system. His argument here consisted in pointing out that in order to follow an epistemic order, the firmest ground is that which is given in experience, even if there is given no identifiable subject to whom, what is given, is given. As he remarked: "Egocentricity (*Ich-Bezogenheit*) is not an original property of the basic elements".⁴

In 1961 Carnap confessed that he would no longer choose as basic elementary experiences, "but something similar to Mach's elements". Probably he realized the enormous advantage of the Machian elements as being interpretable equally as psychic or as physical objects. However, this later stage of Carnap's development does not concern here.

I need only point to the period when the idea of a unified science was put forward most energetically by Neurath, which is to say already in the manifesto of 1929 and earlier. From 1931 on Neurath called his basic view "physicalism". In the preface to his Empirical Sociology (by the way not included in the 1973 English translation of this work) he characterizes physicalism also as unified science on a materialistic basis, pointing to the fact, if it is a fact, that physicalism is concerned only with material objects, objects which are in principle observable. But Neurath stresses that to subscribe to the thesis of physicalism does not commit one to a special view as to how physics itself is actually done. It only commits one to the view that there exists only one kind of object ("daß es nur eine Art von Objekten gibt"), whatever their description at a certain stage of the sciences might be.6

⁴ R. Carnap, The Logical Structure of the World, § 65.

⁵ R. Carnap, The Logical Structure of the World, p. VII.

⁶ O. Neurath, Empirische Soziologie. Der wissenschaftliche Gehalt der Geschich-

Now, Werner Sauer, to whom we owe already some valuable studies in Austrian philosophy, has recently pointed to the strange fact that Carnap in the Aufbau relies a great deal on Dilthey's conception of the 'Geisteswissenschaften' in his differentiation of different sorts of objects. Thus he takes even the objects of the "moral sciences"—to use Mills's terminology as autonomous object. This acceptance of the dualism of two different kinds of sciences based on a dualism of two different kinds of objects was however in clear contrast to the declared aim of the scientific world view that there should be only one science. Either it is true that there is only one domain of objects, then dualism is wrong, or, it is not true that there are only objects of one kind to which all other objects or pseudo-objects are reducible. If however the problem is stated not on an ontological level but on a semantical one, the question will be: how language does connect words and objects.

The argument for the advantage of a physicalistic language over a language based on the autopsychological (eigenpsychologisch) domain could not have been grounded on the norm of intersubjectivity, since the construction of science in the Aufbau too was based on the autopsychological domain. However, Carnap was eager to make clear that the quasi-analytic procedure ("on the basis of the intersubjectively corresponding objects of the individual systems") was "not based upon a fiction". The terms used in description were thought to refer to real persons and their reports and not to fictitious postulations of something

te un Nationalökonomie, Vienna, 1931. Reproduced in: O. Neurath, Gesammelte philosophische und methodologische Schriften, Edited by R. Haller & H. Rutte, Vienna: Hölder-Pichler-Tempsky, 1981, Vol. 1, p. 424 f.

W. Sauer, "Carnaps Konstitutionstheorie und das Programm der Einheitswissenschaft des Wiener Kreises", Conceptus XXI, No. 53/54 (1987), pp. 233–245, see especially p. 240. Cf. on the following also the important essay of M. Heidelberger, "Zerspaltung und Einheit: vom logischen Aufbau der Welt zum Physikalismus", edited by H. J. Dahms, Philosophie, Wissenschaft, Aufklärung. Beiträge zur Geschichte und Wirkung des Wiener Kreises, Berlin: De Gruyter 1985, p. 144–189.

⁸ R. Carnap, The Logical Structure of the World, § 148.

that is not given since the whole program was directed towards the aim of achieving intersubjectively valid knowledge. Yet, the very center of this construction remained the ego-less subject to whose intersubjectivity and communicable statements all others should correspond or into which they should in principle be transformable.

I think we are well advised to take this clue seriously and try to bring into the open the very reason behind the turn from phenomenalism to physicalism first in the case of Carnap. Carnap was after all, accused by Wittgenstein of having borrowed the main ideas of his article "The Physicalistic Language as the Universal Language of Science" 10 from Wittgenstein but as having failed to mention his main source. And of these main ideas the first and most important was the program of physicalism itself. That he did not enter into the question of physicalism in the Tractatus is not true, Wittgenstein says —but not under this "horrible name". 11 Now this is puzzling. And I think, the puzzle has not thus far been solved. For how should we verify Wittgenstein's claim that he has dealt with the question of physicalism—even if only cursorily—already in the Tractatus? Did he possibly (and against the most convincing analysis of objects) accept Russell's view "that the actual data in sensation, the immediate objects of sight or touch or hearing, are extra-mental, purely physical, and among the ultimate constituents of matter". 12 This view of Russell's, who judged it as compatible with ideas of Mach and James might be a view with

⁹ R. Carnap, "Wissenschaftliche Weltauffassung: Der Wiener Kreis", in O. Neurath, Gesammelte philosophische und methodologische Schriften, Vol. I, p. 317 f.

¹⁰ R. Carnap, "Die physikalistische Sprache als Universalsprache der Wissenschaft", in: Erkenntnis (1931), pp. 432–465. Cf. R. Haller, "New Light on the Vienna Circle", in: The Monist 65 (1982), pp. 25–37, repr. in R. Haller, Questions on Wittgenstein, 1988, p. 36; M. & J. Hintikka, Investigating Wittgenstein, p. 145 ff.

¹¹ Cf. Letter from Wittgenstein to Schlick from August 20th, 1932.

¹² B. Russell, "The Ultimate Constituents of Matter", first published as "Philosophical Essays" (1910), repr. in: Logic and Mystic (1917), London: Unwin Books,

which Wittgenstein was concerned in the Tractatus, even if he did not say so. I think that David Pears has convincingly shown that Wittgenstein's later criticism of sense-data and the phenomenological language has at this stage not as yet been raised, and therefore not, either, have the problem of their privacy nor the question of their identity. Whether from this it follows that the objects named should be as Pears thinks, those we find as non-scientists in the world, I do not believe but I shall not discuss this problem here. However we may take it as certain that under the very earliest items of Wittgenstein's gradual selfcriticism we find the idea of a phenomenological language, possibly as a language which at some stage was thought as describing immediate experience in an immediate way. This he thinks in 1929 can be done also by our language, that is the language we have learned to talk as children and which we use in everyday life, that is by the physicalistic language which is the public language. What Wittgenstein was eager to avoid was to accept the picture of a hidden or occult process which accompanies or even directs our ordinary processes of expressing ourselves. So it may seem, that for instance "believing" would describe something which occurs with a sentence —when we are believing something— as "digesting" something occurs with the meal. It is in this connection that Wittgenstein says: "A certain 'behaviorism' is thus invaluable, since it instructs (us) to think about what we know, that with which we are familiar". 13 So a certain behaviorism is invaluable in attacking and refuting the pneumatic view or the view of "the obscure atmosphere of the meant word" Wittgenstein nevertheless does not accept it: "The antithesis of the pneumatic view is the behavioristic one, and they are both schlecht (bad)".14

1963, p. 96; and see especially the excellent study D. Pears, *The False Prison*, Oxford: Clarendon Press, 1987, p. 88 ff.

¹³ L. Wittgenstein, Ms. 119/79; cf. 117/94; Hilary (?): GPS 33/34.

¹⁴ L. Wittgenstein, Ms. 130/3.

Keeping in mind that the change in Wittgenstein's thinking about language accured at the period of his closest contact with the ideas of the Viennese philosophers, I think it is important and useful to look at the turn from phenomenalism towards physicalism from inside the Circle in order to get a better understanding of the changing ideas within the Circle and also in Wittgenstein's philosophy.

As already said, Neurath was the first to propose "physicalism" as the correct point of view and physicalization as the correct method for getting rid of those things which cannot be brought down to earth, that is by replacing talk about such things by talk about spatio-temporal objects. "Physicalism —he says in his Empirical Sociology— encompasses psychology as much as history and economics; for —... there are only gestures, words, behavior (Handlungsweisen), but no 'motives', no 'ego', no 'personality' beyond what can be put into spatiotemporal terms ... physicalism does not hold the thesis that 'mind' is a product of matter, but that everything we can meaningfully talk about is spatially and temporally ordered... Physicalism knows no 'depth', everything is on the 'surface'." ¹⁵ Neurath's optimistic epistemology consisted at this stage in a view according to which the acceptance of propositions about facts is conditional on their predictive-power, on their coherence with the accepted totality of laws and on their reference to the 'data' of experience. Especially the first condition was already the mark of 'hypotheses' in the epistemology of Mach. The second however the legacy of Duhem, where holism was as much a methodological devise as part of the general theory. Only within the total system and therefore within the total language does a sentence have the meaning which it actually has.

But Neurath also stressed the fact that science like language

¹⁵ O. Neurath, "Empirical Sociology", in: M. Neurath & R. S. Cohen, (eds.) Empiricism and Sociology (Vienna Circle Collection, Vol. 1), Dordrecht: Reidel, 1973, p. 325 (translation slightly altered). Philosophische und methodologische Schriften I, p. 431 f.

is part of the social system of actions. After all, it is the republic of scientists who decides which of the propositions offered are to be accepted. As the basis and universal medium of all 'social communications' (to use a term of Hintikka) Neurath pointed to the language children use, a language which is essentially physicalistic. Since we apply outer criteria in order to describe the psychological states of the members of societies (e.g. their opinions, emotions etc.), Neurath named his theory of science also Behavioristic of Scientists ("Gelehrtenbehavioristik"). In this sense he defended equally rigorously the idea that any theory of meaning would have to use our social behavior of using signs (pictures, gestures, words or whatever signs) as its base. Actually Neurath insists that it is already a false step to pose the semantical problem of how language fits the facts and to conceive matters in terms of an opposition of proposition and facts, of language and reality. We cannot step behind language is a credo not only of Wittgenstein but of Neurath, too.

Suffice it to say that the physicalism that Neurath, as the first within the Circle, proposed, made a decisive step towards an understanding of language that would go deeper than the Tractarian or a phenomenalistic conceptions permitted. Moreover, it freed the epistemological perspective of the new empiricism of its strongest fetter: the idea of the private ownership of all our inner states or of the world of consciousness.

If we look from this angle to Wittgenstein's turn, from 1929 onward, we surely cannot deny the similarity of the general approach even if the way philosophy is actually done by Wittgenstein could hardly diverge more from the style of Carnap or Neurath. Very early after his return to philosophical work Wittgenstein, made some important discoveries, one of which was the insight into the need to replace what he called "the phenomenological language" by the everday physicalistic language.

Now, let us assume that Wittgenstein really was a physicalist—only one who did not want to be called with this "horrible name". Would he really have ascribed to the thesis Carnap had advanced in the very article (=?) that was found so offensive by its addressee? I am not quite sure about the right answer, because Wittgenstein did not go along with the rather pedantic way in which Carnap had chosen to explain his thesis that the physicalistic language is, firstly, intersubjective and, secondly, the 'universal medium' (die universale Systemsprache). The important part of Carnap's version of physicalism however was the thesis that every proposition can be translated in the physicalistic language and that therefore every possible state of affairs (whether it obtains or not) can be expressed in the language of physics.

I doubt that we find in Wittgenstein's writings of the first two years after his return to Cambridge any formulation compatible with the latter thesis. Only in the *Tractatus* he was referring to the propositions of the natural sciences as the only meaningful propositions. Later, that is after 1929 we do not find a similar statement. But such a reason would be too weak to refute the claim that Wittgenstein was a physicalist in Neurath's sense. I rather doubt that he really was a physicalist in this sense. Surely he agreed that some features of his point of view are behavioristic: especially the fact that he does not make a difference between "inner" and "outer" [daß ich /wir/ keinen Unterschied zwischen 'außen' und 'innen' mache /machen/ weil mich die Psychologie nichts angeht. 310, 7]. But the argument that Wittgenstein used was different from the Neurathian argument used by Carnap. Carnap offered two reasons for the advantage of the physicalistic language over a phenomenalistic one. The first (and this was clearly Neurath's contribution) concerns the unity of the sciences and therefore of the ontology of their objects: all concepts relevant in science either refer to physical objects or they can be transformed into concepts which do refer to such objects. Therefore "inner" and "outer" does not make a difference from the ontological point of view. The second reason concerned the postulate of the intersubjectivity of language. If our protocol-language would be based solely on subjective sensations or inner states, then a proposition about an experience of being thirsty, for example, could not be subject to the process of control. If, however, a proposition cannot be controlled, that is cannot be verified in principle, for instance via the behavior of the subject, then the proposition remains void of sense. Thus the reductio ad absurdum Carnap is using as his main argument, goes like this: Assume that every proposition of the protocol-language of a subject has meaning only for the subject. Then no other subject can understand it even in principle. Even if other persons would use the same words, they could not be understood. No language about experiences, no intersubjective protocol-language would then be possible. Since, however, the language refering to physical objects can be understood as well as controlled, that is, their propositions verified, the objects of the two languages cannot be subjective ones.

If we now substitute private for subjective and public or 'common' for intersubjective, then we are back to Wittgenstein and see *in nuce* one of the first versions of the argument for the primacy of a public language against a private language. It is only the public language which is available *and* needed to talk about our experiences and 'inner' and 'outer' does not play the role philosophers thought it did, when they were fascinated by the idea that the true essence of the world of our consciousness is its privacy.

One cannot deny that the two conceptions of physicalism are based on arguments which look very similar if not to say almost the same. No wonder that —as we have seen— Wittgenstein had to ask himself if he too —like Neurath— has turned into behaviorist, because the suspension of the difference between 'inner' and 'outer' must mean that part of what is left as objects for intersubjective language is behavioristic. And as we know at least from the *Philosophical Investigations* (PU 307), Wittgenstein did not like to see himself in the behavioristic role. This was because he had deeper arguments, not based on the

appeals to the nature of objects dictated by unified science or on the necessity for intersubjective admissible ones in order to fulfil the norms of objectivity. As almost always in his philosophical work, his arguments were linked to the claim that "in der Sprache wird alles ausgetragen", i. e. that only a deep understanding of the workings of language can clear up philosophical puzzles.

Let us look at an earlier version of Wittgenstein's remark in the investigations: (Ms. 124, p. 5 f., Ms. 161, p. 79 f. Cf. S. Stephen Hilmy, "Wittgenstein and Behaviorism", in: *GPS* 33/34). There Wittgenstein writes:

But aren't you really only a behaviorist in disguise? For you say that nothing stands behind the expression [Ausserung] of experience. Aren't you at bottom really saying that everything except behavior is a fiction? So do I therefore believe that we don't really feel pain, but rather only make faces?! But the fiction is the object behind the Ausserung (expression). It is a fiction (emphasis R. H.) that our words in order to be meaningful must refer to a something that I nevertheless can exhibit to myself even if not to someone else (Grammatical fiction).

The statement 'Nothing stands behind the Äusserung (the expression) of experience' is a grammatical one —it doesn't therefore claim that we experience nothing...

Thus Wittgenstein is neither denying the intentional stance of our experience nor the very facts of the human character, for instance, that we do feel pains etc. If the behaviorist denies what gives rise to the expressions which can be observed then we should not follow his devise. But if we take his turn to what is public bona fide then —Wittgenstein's remarks emphasize that his critique consists in making clear that the view of the function of words in the language-game "is too narrow".

If the behaviorist is a physicalist in the wider sense of the term —Wittgenstein was and remained a physicalist in a sense which I shall not try to explain further here but which certainly was different from the sense Neurath had in mind introducing this notion to avoid the term "materialism". Thus Wittgenstein would never have dreamed of the idea of 'changing the lan-

guage' our ordinary language because it did not conform to the norms of scientific discourse while Neurath thought that even children could learn a language which conforms to the latest results of the science of physics. Wittgenstein's physicalism was only similar to that of Neurath and Carnap. Because Wittgenstein, as far as I understand him, never believed that all objects are 'of one and the same kind', namely physical, whatever that might mean in one or other of Carnap's explications. In this sense —I strongly maintain— he never was a physicalist.

If we would accept this conclusion as the only remaining alternative, we could not understand why Wittgenstein did claim the views Neurath was propounding in 1930/31 and Carnap published in 1932 in the article "Die physikalische Sprache als Universalsprache der Wissenschaften". When in 1982 I first pointed to Wittgenstein's accusation that Carnap would have taken from him the idea of "physicalism" I only had in mind the interpretation of the Tractatus. ¹⁶ But then I realized that it did not concern the work of his past but the work Wittgenstein was eager to explain to Waismann and Schlick: the new ideas of his philosophy. So we have to take Wittgenstein's writings of this period equally as propounding a physicalistic interpretation of language. The big step —the critique in the so-called private language argument — may such be seen as a successor of the physicalistic interpretation of language.

And indeed, reading the lecture notes of John King and Desmond Lee¹⁷ we soon discover, what problem Wittgenstein wanted to solve: It is the problem stemming from the fact, that in our experiences we seem to be confined to the world of sense-data. Therefore he can say: "Idealists were right in that we never trascend experience... Realists were right in protesting that chairs do exist". ¹⁸ So the question was, that "the world we talk

¹⁶ R. Haller, "New Light on the Vienna Circle", in: *Monist* 65 (1982).

¹⁷ D. Lee (ed.), Wittgenstein's Lectures, Cambridge, 1930-32.

¹⁸ *Ibid.*, p. 80.

about is the world of physical objects" while the world we live in is the world of sense-data". 19 These are Wittgenstein's words in 1931/32, as reported by King and Lee: And they make more clear the difference between the view of Wittgenstein and Carnap. For Wittgenstein there is now seen a gulf between the description of an experience of a sense datum and the description of a physical object, because the statements need different verifications (like "This is a brown patch" and "This is a table").20 But Wittgenstein is not going so far as to maintain that because they are different statements there exist two kinds of things: sense-data and physical objects: To the contrary he states: "The world is not composed of sense-data and physical objects" as if there existed a causal relation between them such that the one —the sense— experience is caused by the object. It is quite interesting to see what reason he offers for this view: Since all propositions about causal relations are as he says "learned from sense-data" no proposition could be about the cause of sense-data. And the deeper reason is that the relation between physical objects and sense-data is an internal relation, a necessary relation within language. "In der Sprache wird alles ausgetragen" we read in the Philosophical Grammar as well as in the so-called big typescript.

The big step formed then was the discovery that our talk about the world of our experience is not a talk refering to private objects, or better, that the *meaning* of our expressions cannot be private even if we think to refer to private objects, because all our talk gets its meaning from the so-called physical language, that is the language we learned as children. So the defense of the public language against a private language is not in the least a defense of the trust in our abilities to understand the language we have learned. This is the public language used in

¹⁹ *Ibid.*, p. 82.

²⁰ *Ibid.*, p. 110.

a community and misused when it should be restricted to the purpose of the justification of idealist's prejudice.

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RESUMEN

El presente trabajo trata de esclarecer el sentido en que puede considerarse que Wittgenstein es un fisicalista, es decir, un creyente en la tesis de que el discurso científico con significado cognitivo consiste, en última instancia, en proposiciones que contienen esencialmente términos físicos.

El autor empieza formulando una explicación de cómo surgió la cuestión del fisicalismo y por qué está conectada con el cambio de perspectiva filosófica de Wittgenstein a principios de los años treinta. Teniendo en cuenta que el cambio de Wittgenstein en lo que respecta al lenguaje ocurrió en el periódo de mayor contacto de éste con los filósofos del Círculo de Viena, el autor examina el cambio del fenomenalismo al fisicalismo dentro de esa corriente. Se hace resaltar la importancia del fisicalismo de Neurath al liberar a la perspectiva epistemológica del nuevo empirismo de su lastre más pesado: la idea de que todos nuestros estados internos son propiedad privada.

En Neurath como en Wittgenstein el fisicalismo está asociado a la creencia de que no podemos "salimos del lenguaje". A pesar de una similitud aparente, sin embargo, el fisicalismo de Neurath y Carnap difieren esencialmente del fisicalismo de Wittgenstein. Este último nunca creyó que todos los objetos son "del mismo tipo". No obstante, Wittgenstein es un fisicalista en la interpretación del lenguaje y en particular en la formulación de la crítica al lenguaje privado.

El paso de un lenguaje fenomenalista a un lenguaje fisicalista en Wittgenstein está íntimamente ligado al descubrimiento que hizo de que nuestro discurso acerca del mundo no es un discurso acerca de objetos privados.

[Sergio Martinez]