ZASADY ZALICZANIA. Na zaliczenie Translatorium zarabiamy znajomością angielskiego słownictwa filozoficznego w zakresie omawianego tekstu Quine'a *Two Dogmas of Empiricism.*

Odpowiednio do skali ocen 3–4–5, odróżniamy trzy szczeble wrajemniczenia, czyli poziomy zaawansowania. Poziom najniższy (na „3") definiujemy jako będący poniżej średniego, nie wchodząc tu w szczegóły.

Na poziom średni (w okolicach „4") awansujemy dzięki wykazaniu się znajomością wybranych słów z odcinka V (tekst poniżej) – wyróżnionych drukiem pogrubionym. W rozmowie zaliczeniowej ułatwieniem będzie obecność kontekstu, w którym słowa te występują.

Na szczebel najwyższy można się wspiąć, sięgając dodatkowo po inny materiał, którym jest lista ok. 140 słów wybranych z całego artykułu zestawionych alfabetycznie, bez ułatwienia w postaci kontekstu. Kto wykaże znajomość przynajmniej 3/4 słów z tego zbioru, uprzednio zaś przejdzie pomyślnie przez szczebel średni, ten otrzyma w indeksie certyfikat w postaci liczby „5". Ważniejsza jednak od tego jest nauczenie się wiązki ważnych dla akademickiej angielszczyzny terminów, do czego sposobością jest obecne zadanie.

V. THE VERIFICATION THEORY AND REDUCTIONISM

1. In the course of these somber reflections we have taken a dim view first of the **notion** of meaning, then of the notion of **cognitive synonymy**: and finally of the notion of **analyticity.** But what, it may be asked, of the **verification theory of meaning**? This phrase has established itself so firmly as a catchword of empiricism that we should be very unscientific indeed not to look beneath it for a possible key to the problem of meaning and the associated problems.

2. The verification theory of meaning, which has been conspicuous in the literature from Peirce onward, is that the meaning of a **statement** is the method of empirically confirming or infirming it. An analytic statement is that limiting case which is confirmed no matter what.

3. As urged in Section I, we can as well pass over the question of meanings as **entities** and move straight to **sameness of meaning**, or **synonymy**. Then what the verification theory says is that statements are synonymous if and only if they are alike in point of method of **empirical confirmation** or **infirmation**.

4. This is an **account** of cognitive synonymy not of **linguistic forms** generally, but of statements. However, from the concept of synonymy of statements we could derive the concept of synonymy for other linguistic forms, by considerations somewhat similar to those at the end of Section III. Assuming the notion of "word," indeed, we could explain any two forms as synonymous when the putting of the one form for an **occurrence** of the other in any statement (apart from occurrences within "words") yields a synonymous statement. Finally, given the concept of synonymy thus for linguistic forms generally, we could define analyticity in terms of synonymy and **logical truth** as in Section I. For that matter, we could define analyticity more simply **in terms of** just synonymy of statements together with logical truth; it is not necessary **to appeal** to synonymy of linguistic forms other than statements. For a statement may be described as analytic simply when it is synonymous with a logically true statement.

5. So, if the verification theory can be **accepted** as an **adequate account** of statement synonymy, the notion of analyticity is **saved** after all. However, let us reflect. Statement synonymy is said to be likeness of method of empirical confirmation or infirmation. Just what are these methods which are to

be compared for likeness? What, in other words, is the nature of the **relationship** between a statement and the **experiences** which **contribute** to or detract from its confirmation?

6. The most naive view of the relationship is that it is one of direct report. This is radical reductionism. Every meaningful statement **is held to be translatable** into a statement (true or false) about **immediate** experience. Radical reductionism, in one form or another, well antedates the verification theory of meaning **explicitly** so called. Thus Locke and Hume **held** that every **idea** must either originate **directly** in **sense experience** or else be **compounded** of ideas **thus originating**; and taking a **hint** from Tooke we might rephrase this **doctrine** in semantical jargon by saying that a term, to be **significant** at all, must be either a name of a **sense datum** or a **compound** of such names or an **abbreviation** of such a compound. So stated, the doctrine remains **ambiguous** as between sense data as **sensory events** and sense data as **sensory qualities**; and it remains **vague** as to the **admissible ways** of compounding. Moreover, the doctrine is unnecessarily and intolerably **restrictive** in the **term-by-term** critique which it **imposes**. More **reasonably**, and **without yet exceeding the limits** of what I have called radical reductionism, we may take full statements as our significant **units** – thus demanding that our statements as wholes be **translatable** into **sense-datum language**, but not that they be translatable term by term.

7. This **emendation** would unquestionably have been welcome to Locke and Hume and Tooke, but historically it had to await an important reorientation in **semantics** – the reorientation whereby the primary **vehicle** of meaning came to be seen no longer in the term but in the statement. This reorientation, **explicit** in Frege, underlies Russell'a concept of incomplete symbols defined in use; also it is **implicit** in the verification theory of meaning, since the objects of verification are statements.

8. Radical reductionism, conceived now with statements as units, sets itself the task of specifying a sense-datum language and showing how to translate the rest of significant discourse, statement by statement, into it. Carnap embarked on this project in the *Aufbau*.

9. The language which Carnap **adopted** as his starting point was not a sense-datum language in the narrowest **conceivable** sense, for it **included** also the notations of logic, up through higher **set theory**. In effect it included the whole language of pure mathematics. The ontology implicit in it (i.e., the range of values of its variables) embraced not only sensory events but classes, classes of classes, and so on. Empiricists there are who would boggle at such prodigality. Carnap's starting point is very parsimonious, however, in its extralogical or sensory part. In a series of constructions in which he exploits the resources of modern logic with much ingenuity, Carnap succeeds in defining a wide array of important additional sensory concepts which, but for his constructions, one would not have dreamed were definable on so slender a basis. Carnap was the first empiricist who, not content with asserting the reducibility of science to terms of immediate experience, took serious steps toward carrying out the reduction.

10. Even supposing Carnap's starting point satisfactory, his constructions were, as he himself stressed, only a fragment of the full program. The construction of even the simplest statements about the physical world was left in a sketchy state. Carnap's suggestions on this subject were, despite their sketchiness, very suggestive. He explained spatio-temporal point-instants as quadruples of real numbers and envisaged assignment of sense qualities to point-instants according to certain canons. Roughly summarized, the plan was that qualities should be assigned to point-instants in such a way as to achieve the laziest world compatible with our experience. The principle of least action was to be our guide in constructing a world from experience.

11. Carnap did not seem to recognize, however, that his treatment of physical objects fell short of reduction not merely through sketchiness, but in principle. Statements of the form 'Quality q is at point-instant x; y; z; t' were, according to his canons, to be apportioned truth values in such a way as to maximize and minimize certain over-all features, and with growth of experience the truth values

were to be progressively revised in the same spirit. I think this is a good schematization (deliberately oversimplified, to be sure) of what science really does; but it provides no indication, not even the sketchiest, of how a statement of the form 'Quality q is at x; y; z; t' could ever be translated into Carnap's initial language of sense data and logic. The connective 'is at' remains an added undefined connective; the canons counsel us in its use but not in its elimination.

12. Carnap seems to have appreciated this point afterward; for in his later writings he abandoned all notion of the translatability of statements about the physical world into statements about immediate experience. Reductionism in its radical form has long since ceased to figure in Carnap's philosophy.

13. But the dogma of reductionism has, in a subtler and more tenuous form, **continued** to **influence** the thought of empiricists. The notion lingers that to each statement, or each synthetic statement, there is **associated** a **unique** range of possible sensory events such that the occurrence of any of them would add to the **likelihood** of truth of the statement, and that there is associated also another unique range of possible sensory events whose occurrence would **detract** from that likelihood. This notion is of course implicit in the verification theory of meaning.

14. The dogma of reductionism **survives** in the **supposition** that each statement, taken in isolation from its **fellows**, can **admit of** confirmation or infirmation at all. My countersuggestion, issuing essentially from Carnap's doctrine of the physical world in the *Aufbau*, is that our statements about the external world **face** the tribunal of sense experience not individually but only as a corporate body.

15. The dogma of reductionism, even in its attenuated form, is intimately connected with the other dogma: that there is a cleavage between the analytic and the synthetic. We have found ourselves **led**, indeed, from **the latter** problem to **the former** through the verification theory of meaning. More directly, the one dogma clearly **supports** the other in this way: as long as it is taken to be significant in general to speak of the confirmation and infirmation of a statement, it seems significant to speak also of a limiting kind of statement which is **vacuously** confirmed, *ipso facto*, come what may; and such a statement is analytic.

16. The two dogmas are, indeed, **at root** identical. We lately reflected that in general the truth of statements does obviously **depend** both upon language and upon extra-linguistic fact; and we noted that this obvious **circumstance** carries in its train, not logically but all too naturally, a feeling that the truth of a statement is somehow analyzable into a linguistic **component** and a factual component. The factual component must, if we are empiricists, boil down to a range of confirmatory experiences. In **the extreme case** where the linguistic component is all that **matters**, a true statement is analytic. But I hope we are now **impressed with** how stubbornly the distinction between analytic and synthetic has **resisted** any straightforward drawing. I am impressed also, apart from prefabricated examples of black and white balls in an urn, with how baffling the problem has always been of **arriving at** any explicit theory of the empirical confirmation of a synthetic statement. My present **suggestion** is that it is nonsense, and the root of much nonsense, to speak of a linguistic component and a factual component in the truth of any individual statement. Taken collectively, science has its double **dependence upon** language and experience; but this duality is not significantly traceable into the statements of science taken one by one.

17. The idea of defining a symbol in use was, as remarked, an **advance over** the impossible term-by-term empiricism of Locke and Hume. The statement, rather than the term, came with Frege to be **recognized as** the unit accountable to an empiricist critique. But what I am now **urging** is that even in taking the statement as unit we have drawn our grid too finely. The unit of empirical significance is the whole of science.