DEPTH STRUCTURES IN RECENT PHILOSOPHIES OF LANGUAGE

I

The distinction between appearance and reality is as old and as abused as philosophy itself. Attempts to uncover an underlying reality beyond appearances may easily lead one astray to indulge in idle speculations and bogus conceptions about what that reality could be like, resulting in all sorts of esoteric counterfeit philosophies. There might also be a sober investigation into the deceptive character of certain appearances, pointing not merely to certain depth structures, but illumining at the same time the surface features of our everyday experiences. Language analysis is vitiated by the same ambivalence of the appearance-reality model : Does language constitute a phenomenon demanding penetration beyond surface appearance to a deeper and more profound reality underlying it ? Is the underlying reality, if any, accessible only to a mystic insight, or could it be substantiated by a logical analysis of linguistic phenomena ?

We can do no better than take Wittgenstein as our point of departure in clarifying the thesis that the way language appears to our untutored consciousness is far from reflecting its true nature. In the Tractatus, Wittgenstein is profoundly concerned with the problem of logical form, i.e., the structure of a sentence that determines the logical relations it enters into, the possible consequences deducible from it. Wittgenstein discerns, however that the overt grammatical form is not a safe guide to its logical form. From the two sentences, ' There is a fire in my kitchen ' and ' My kitchen is in my house ' we can conclude, ' There is a fire in my house'. But from the overtly similar sentences, ' There is a pain in my foot ' and ' My foot is in my shoe ', we cannot infer ' There is a pain in my shoe '. The sentence ' There is a fire in my kitchen ' might be equivalently rephrased as ' I have a kitchen which has a fire in it ', but it would be distinctly odd to say, ' I have a foot which has a pain in it '. Wittgenstein, like Frege before him, sought some framework within which the logical form of sentences might be represented in a less misleading way than it is in grammatical form.

But the later Wittgenstein abandoned this enterprise entirely and erected another framework for dealing with the question of logical form. In the Tractatus Wittgenstein had assumed that the precise depiction of logical form is achieved by reducing a sentence to a set of logical simples and their relations. The later Wittgenstein declares that clarity about form comes, not from penetrating the logical depths of sentential structure to reveal logical simples, but rather from comparing and contrasting the ways in which sentences are used in different spheres of life. "It may come to look.... as if our usual forms of expression were essentially unanalysed; as if there were something hidden that had to be brought to light.... Questions as to the essence of language see in the essence, not something that already lies open to view, but something that lies beneath the surface. Something that lies within.... which analysis digs out.... Our forms of expression prevent us in all sorts of ways from seeing that nothing out of the ordinary is involved, by sending us in pursuit of chimeras". The pursuit of essence is thus a chimerical venture now. In the Blue Book too he had observed : "What must be added to the dead signs in order to make a live proposition is something immaterial.... But if we had to name anything which is the life of the sign, we should have to say that it was its *use*". The contrast between the two Wittgensteins essentially centres round the Tractatus slogan that language disguises thought. From the outward form of the clothing it is impossible to infer the form of the thought beneath it because, as he says, "The outward form of the clothing is not designed to reveal the form of the body, but for entirely different purposes". Hence if one seriously believes that the thought expressed by the sentence is irretrievably concealed behind a phonetic or orthographic disguise then one cannot continue to study the logic of sentences by trying to translate their overt grammatical form into a suitable representation of their logical form. This however, leads to the justifiable fear that such inscrutable thoughts become suspicious, taking on the air of queer or occult entities. Philosophy could be saved from occultism by replacing the Fregean notion of logical form or meaning, which Wittgenstein himself had adopted in the Tractatus, with a new one according to which meaning lies in the public use of linguistic forms, public features of the

ways speakers actually use sentences to conduct their social intercourse. This replacement of the traditional notion of logical form must have seemed to Wittgenstein the only way out of a Platonic Whirpool.

The distinction between logical and grammatical form is an appearance-reality distinction which, some recent approaches have sought to show, is as central to the understanding of language as the distinction between surface continuity and underlying discreteness is to the understanding of matter. A Democritean theory of language contrasts with that of the Tractatus in its assumption that logical form is inaccessible. It is possible to accept an underlying conceptual reality in language and yet an admittedly unacceptable dualism. It could be argued however that logical form is accessible if one employs the proper approach to the exploration of the logical substructure. While it is true that language disguises thought, the disguise fits in such a manner as to enable us to frame for ourselves a facsimile of the form of the body hidden underneath—in the way Democritus penetrated the disguise in which nature presents matter to us in sense-experience.

The latter Wittgenstein equates an understanding of the logical features of language with the elimination of conceptual misunderstanding engendered by distorted analogies. When, for example, we try to understand mental privacy in terms of physical privacy, the elimination of the misunderstanding, i.e. the solipsistic interpretation of the concept of mental privacy, is to be achieved by the philosophical activity of exhibiting the inadequacy of the analogy, revealing how language is being misused. As he says : " It is clear that every sentence in our language is in order as it is. That is to say, we are not striving after an ideal, as if our ordinary sentences had not yet got a quite unexceptionable sense, and a perfect language awaited construction by us ". This cuts deeply into the rationale of Frege's Begriffschrift, and of the Tractatus itself.

II

Several attempts have been made in recent philosophy to restore to linguistic philosophy the appearance-reality distinction, but before we consider them it would be in order to meet

some possible objections. A basic objection is that preoccupation with an underlying reality takes up away from what is actually given and imposes on it a theoretic construction which opens the floodgates of speculation and controversy. We should substitute description for interpretation, describing the structures of linguistic phenomena as we actually find them, and leave the problems of logical form severely alone. In order to clarify the situation we have to disengage several important questions that are assumed in the objection. I call them the what-question, the how-question and the why-question. It is all very well that one should describe and not interpret, but *what* is it that is to be described ? Things as given in our experience are infinitely complex, and all the features are not described unless they are in some sense *relevant*. Even a master of description like Flaubert has to single out some aspects of a sittuation at the cost of many others. One has to select, and selection already implies a criterion, a valuational frame work which enables one to decide what is essential and what is not. But the distinction between the essential and the inessential is itself not *given*, but emerges out of the scheme of values within which one is operating, and is thus a theoretic construct. An allied question is : how does one describe ? Does one assume at the very outset that there is a unique way of describing a given structure, or does one also allow for the possibility of alternative descriptions ? No single description would seem to command universal assent, so that what we describe and how we describe would seem to depend as much on ourselves, our preferences and our scheme of values as on the given datum. To hold the given in mystic awe, to make a fetish of descriptivism and to denigrate the valuational and subjective context within which alone the given acquires all its significance, would seem to be philosophically naive. A third question is why should we describe at all ? Even supposing that one succeeds in achieving a satisfactory and complete description which is also generally acceptable, the nagging question still persists : " so what ? " This again implies a theoretic assumption to the effect that such a description is somehow worthwhile, but one might accept the validity of the description while questioning its worthwhileness. An Austin might describe with meticulous care the " Three Ways of Spilling Ink "

but one may still be in doubt as to what all that amounts to. The answers to all these three questions are extremely unclear. Any answer offered would seem to be theory-laden so that the objection itself is of dubious merit.

Another objection comes from Wittgenstein himself. Though he had, in the Tractatus, accepted the reality of an underlying form, he thought that logical form is inaccessible or unspeakable. Form is not something that can be said, but shows itself in whatever we say, so that there is no language, and consequently no theory, about the form. An understanding of the logical features of language is not to be obtained from theories. If by a theory Wittgenstein understands the construction of 'logically perfect artificial languages, he is certainly right inasmuch as such constructions do not illumine the structures inherent in our ordinary natural languages. But a theory can also be understood in another sense, i.e., a system of descriptive and explanatory principles like those found in the natural sciences. We might try to show that logical form is neigther mysterious nor inaccessible but is revealed in the way the hearer penetrates the phonetic disguise of the thought of the speaker. To discover the principles by which users of language perform the encoding and decoding operations of thoughts in linguistic communication is to do precisely what Wittgenstein said could not be done.

Another possible objection is that even if there is an underlying reality in language, it cannot be uniquely determined. But this contention prejudges the issue and is a priori, and cannot be decided prior to the actual investigation.

III

Many thinkers have probed the depth-structures of language, of course from quite different philosophical perspectives. Of these, three outstanding efforts may be singled out, viz., the semantic approach led by Frege and Carnap, the linguistic approach ushered in by the Chomskian revolution and the ontic-ontological method of Heidegger. I do not propose discussing Heidegger in the present context because, apart from the extremely difficult task of disentangling Heidegger's thought, his entire endeavour is to situate language in the total context of Dasein-Analytik. Language is not to be treated as a phenomenon in

isolation, but as a pointer to its own transcendence. Language is one of the 'Boundary-situations' (Grenzsituationnen) which opens up the way to the beyond, which is at the same time a sort of 'home-coming' (heimkahren), and in this adventurous joruney logic is of no avail. Language is not a mere tool or an inert instrument, to be employed and made use of as we choose, but is rather intimately linked up with ontological thinking, and with Being itself. Heidegger's main task is not to narrate accounts of *events* but rather to comprehend the essent in its Being, and for the latter task we not only lack words, but even grammar. Grammar which, since the Greeks, has determined the basic structure and form of discourse, as also the classification of its constituent elements is itself rooted in the essentialist ontology of the 'mere presence-at-hand' (Vorhanden) and the logic in which it has unfolded itself. The attempt to go beyond it necessarily involves circumventing these grammatical limitations, liberating grammar from its subservience to logic. Language, says Heidegger, is the 'house of Being' and, as such, is something more than an activity of man, more than mere expression. Primarily it is language itself which 'speaks', not man; his speaking is only an echo of and response to that, depending upon how he hears what language itself says. Language is the 'chime of stillness' (Geläut der Stelle), itself nothing human in its essence. This method of sounding the depths of language need not be pursued further since, profound though this analysis might be, it does not appear to pertain to language as we understand it in everyday life, and it might seem difficult to call such a rarefied abstraction language at all in any recognizable sense of the term. This is not to decry the ontological method, but merely to confess that this analysis has a different dimension altogether.

IV

When we turn to semantics we are relieved to find ourselves again treading on the familiar solid earth. Frege is the founder of this relatively new discipline, and inspite of substantial original contributions made by many other philosophers Carnap may be taken as representing the faithful continuation of the Fregean tradition. Frege regards it as a defect in the logical

structure of natural languages that in some contexts a descriptive expression does describe something while in other contexts it remains vacuous. He suggests that rules of language should be so contructed as to secure a descriptum for every description. Certain conventions which are more or less arbitrary in that they deviate from ordinary grammar have to be introduced, with the consequent illumination of the deeper logical structure of language rules. Excepting with the help of these conventions certain logical rules would not be universally valid, e.g., existential generalization : an empty description could not be existentially generalized. Russell had avoided the difficulty of empty description by stipulating that only names, i.e., proper names as understood by him, could refer to the things; descriptions could acquire reference only via names, i.e., only when the description is replaceable by a name. The whole question whether descriptions could be construed as referring expressions centres round the notion of substitutability or interchangeability. If a description and a name are mutually interchangeable, then the two expressions are logically equivalent, and since a name has, by definition, a reference, the description too becomes referring. This method of substitution of equivalents works beautifully in all extensional contexts. Two expressions are then held to be synonymous when their mutual substitution does not affect the truth-value of the whole senctence in which such substitutions are made. But then what about those descriptions for which names are not available for substitution ? In Frege's terminology such expressions lack ordinary reference, and yet they must have some sense if they could at all be meaningfully employed. Frege thus maintains that an expression has a sense and a reference (Sinn and Bedeutung). Vacuous descriptions, while differing in having different senses, have the same reference, viz., the null-set. Frege moreover construes all linguistic expressions as names, so that in his theory even propositions become names, a doctrine which Wittgenstein discarded in the Tractatus. If propositions are a sort of names, they too must then have a sense and a reference. The sense of a proposition is what it says, i.e., the content or thought (Gedanke) of the sentence expressing it. But what does a proposition refer to ? Taking interchangeability as the criterion of the sameness of reference, sheer logic compels him

to adopt the curious doctrine that the reference of a proposition is its truth-value. All true propositions thus have the same reference, viz., truth. In any extensional compound one true proposition could be substituted for another, leaving the value of the compound unaltered. Any proposition thus is a name either of truth or of falsity.

This smooth theory collapses, however, when non-extensional compounds are considered. Take the intensional function 'A thinks that p'. The truth-value of the compound is not a function of the truth-value of p so that in this context, the reference of p could not be a truth-value. Substitution of another equivalent proposition q for p might alter the value of the compound, so that the criterion of interchangeability of equivalents does not work here. Faced with this predicament Frege comes out with the solution that in all non-extensional contexts, which he calls oblique contexts, where a proposition could not have its ordinary reference, its oblique reference is the same as its ordinary or non-oblique sense, that is to say, the proposition itself. Quine describes such contexts as referentially opaque; he however, believes that in such contexts a proposition has niether its ordinary reference, nor again an oblique reference; it has simply no reference at all. This merely shows up how strongly allergic Quine is to modal logic. I shall not here pursue further the subtle intricacies of intensional functions but enough has been said, I hope, to show how grossly ill-equipped ordinary grammar is in dealing with them. It is not even aware of the problem of a proposition having two kinds of reference, or even any reference at all. The distinction between extensional and non-extensional functions does not belong to ordinary grammar, but pertains to the depth-structure of language.

V

The third approach I propose considering is that of linguistic theory. Chomsky suggests that though an underlying system of language strains our credulity, yet the acceptance of such a system may be necessitated by empirical evidence, and also by the fact that an alternative theory, seeking to eschew all esoterism, does not account for the linguistic facts of ordinary communication. If the appearance of language be the last word on its reality, then

natural languages should have no structure other than what is observationally manifest in the utterances of sentences. A depth theory on the contrary claims that features of the physical content of the utterances that constitute the tokens of a sentence type are not sufficient to predict and explain its grammatical properties and relations. The rules that speakers use to encode their thoughts and decode the utterances of others are not part of the physical content of utterances. Chomsky contrasts two models of grammar, viz., the taxonomic and the transformational. In taxonomic theory the grammar of a natural language is conceived as an elaborate data-cataloguing system, similar to book classification schemes in library science. In transformational theory on the other hand a grammar is conceived as a theory that explains how speakers can associate acoustic signals with the meaning those signals have in the language. It does not thus stop merely with the facts but seeks to provide the reason why the facts are as they are. A grammar is a theory about the system of linguistic rules that speakers have internalized in the process of acquiring a language. The structure represented in such a system of internalized linguistic rules is a depth-structure, for which there is no room in the taxonomic theory. We have to distinguish linguistic performance (what the speaker actually and overtly does) and linguistic competence (the rules that have been internalized). A grammar as a theory of universals in language is a statement of what speakers know about the inherent structure of their language, and thus is a theory of linguistic competence rather than linguistic performance, though it is the latter that provides all the empirical data for the investigation of competence. The competence is an a priori aspect of linguistic behaviour, revealed only in performance.

The most remarkable fact about human speech is that, except for clichés like " How do you do ? ", " Comment ça va ? ", we speak and hear daily new sentences that bear little resemblance to familiar ones. Yet we understand almost every new sentence we encounter, and our understanding is immediate. This is in striking contrast to our attempts at understanding new gadgets which often take considerable time and effort, if at all we succeed in it. Wittgenstein too was, in the Tractatus, exercised about this capacity to grasp the meaning of a sentence we have never heard before.

Linguistic competence is the source of the creativity that makes such understanding possible. The speaker's internalized rules must be able to generate recursively (a technical term borrowed from 'decision theory', an important part of logic) each of the infinitely many sentences of his language, so that a sentence, new in the sense that no occurrence of it has previously been uttered, is not new in the sense of being outside the set of sentences defined by these rules. A transformational grammar is an explication of linguistic competence within the framework of these generative principles. The assignment of the same underlying phrase marker to two sentences shows that their depth structure is the same while the assignment of different superficial phrase markers shows that their surface structures differ. Superficially, the two expressions 'the doctor's arrival' and 'the doctor's house' seem to be built on the same model. But, as Jesperson pointed out long back, in 'the doctor's arrival' 'doctor' is the subject of the verb 'arrive' while there is no corresponding verb form of the noun 'house', of which 'doctor' could be the subject. The depth structures of the two expressions are thus not the same, a distinction slurred over by the taxonomic grammarians. The underlying phrase markers in one case would generate such forms as 'doctor's sudden arrival', 'quick arrival', but not his 'sudden house' or 'quick house'. We could speak of his large house, heavy house, but not of his large arrival, heavy arrival. The nominalizing transformation rules are essentially different. Another case of the same type is provided by the sentences : "John is easy to leave" and "John is eager to leave". Both would receive essentially the same taxonomic description, viz. a single labelled bracketing that segments a sentence into continuous substrings, marked as constituents, and their classification into one or another syntactic category. It is obvious however to any fluent speaker of the language that there is an important syntactic difference between the two sentences which the superficial analysis does not reflect. In one case 'John' is the object, in the other, the subject, of the verb 'leave'. The superficial phrase markers offer no clue to the difference in the underlying grammatical form.

Note again how a sentence is paraphrased into a logically equivalent sentence by changing the verb into passive voice : "The doctor examines John"; "John is examined by the doctor".

Does this equivalence carry over in complex contexts ? In some cases it does, in others, not. Compare the pair " I expected the doctor to examine John " and " I expected John to be examined by the doctor " with the pair " I persuaded the doctor to examine John " and " I persuaded John to be examined by the doctor ". In the latter pair the two sentences are not equivalent and one cannot be taken as the paraphrase of the other. What then has gone wrong ? Ordinary grammar provides no answer, unless our analysis penetrates to the level of depth structure and seeks out the underlying phrase markers, which are quite different in the two cases. Similarly, the ambiguity of the sentence " John knows a wiser person than Tom " (is/does) is not reflected in its surface structure. This is a case where two different depth structures have collapsed into one surface structure. More elaborate segmentation and classification cannot overcome the inherent inability of taxonomic description to deal with syntactical relations.

VI

This is not a plea for giving up ordinary language and construct formalized artificial languages, as the logical empiricist mistakenly believed. The constructionist thinks that natural languages are the amorphous products of rationally uncontrolled cultural evolution, and an artificial language, built after the model of a logico-mathematical system, would be a more suitable vehicle for philosophical reasoning. The defect however lies, not in language as such, but in the way linguistic structure has been traditionally represented. It is not language but linguistic theory that needs being reformed. Ordinary language philosophers, led by Ryle, Austin and Strawson, make the same presupposition about the amorphousness of language, but react in an opposite way. They believe that any attempt to theorize about the structure of natural language is futile, and they therefore concentrate their efforts to describe the details of linguistic use. This has resulted in the

accumulation of an enormous number of particular facts about usage, but no principles that give insight into the nature of linguistic structure. What is really required is not merely a piecemeal analysis, as the Oxford school advocates, but a method of systematizing and codifying all the empirical data available. Transformational-generative grammar offers the most promising prospect in this regard.

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