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XI.—WORDS

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To the question "What is a word?" philosophers usually give, in succession (as the discussion proceeds) three replies:—

1. "Everybody knows what a word is."
2. "Nobody knows what a word is."
3. "From the point of view of logic and philosophy, it doesn't matter anyway what a word is, since the statement is what matters, not the word."

In this paper I shall discuss these three reactions in turn, and dispute the last. Since it is part of my argument that the ways of thinking of several different disciplines must be correlated if we are to progress in our thinking as to what a word is, I shall try to exemplify as many differing contentions as possible by the use of the word *WARD*, since this word is a word which can be used in all senses of "word", which many words cannot.

Two preliminary points about terminology need to be made clear. I am using the word "word" here in the type-sense as used by logicians, rather than in the token sense, as synonymous with "record of single occurrence of pattern of sound-waves issuing from the mouth". Thus, when I write here "mouth", "mouth", "mouth", I write only one word.

The second point is that I use in this paper, in different senses, the terms "Use", "usage" and "use". The question as to how the words "usage" and "use" should be used is, as philosophers know, a very thorny one. Here I am using "use" in two senses, and "usage" in one. Thus, in this paper, the *Use* of a word is its whole field of meaning, its total "spread"¹. Its *usages*, or main meanings

¹ "Spread" is here used linguistically, not mathematically.

in its most frequently found contexts, together make up its Use; but each of these usages must be conceived of as itself occurring in various temporary contexts, or *uses*, in each of which it will have a slightly different shade of meaning from what it will have when occurring in any other context or use.

1. "*Everybody knows what a word is.*"

The naïve idea of "word" is "dictionary-word"; as the Oxford Dictionary puts it, "(a word is) . . . an element of speech; a combination of vocal sounds, or one such sound, used in a language to express an idea (*e.g.*, to denote a thing, attribute or relation) and constituting an ultimate element of speech having a meaning as such".

The philosopher's invariable reaction to this definition is that of Humpty Dumpty in *Through the Looking Glass*: *i.e.*, that it *sounds* all right (said rather doubtfully) but that, of course, there is no time to go into it just now. One thing we could all agree on, philosophers and plain men in the street alike; that for practical purposes this definition is all right, provided that it is used ostensively, with the Oxford Dictionary as reference. It is all right (that is) provided that, to distinguish word from word, we pin our faith blindly to the Oxford Dictionary by saying "Words distinguished from one another in the Oxford Dictionary are different words, and only words so distinguished from one another are different words". Thus (according to this Oxford Dictionary criterion) *ward* the noun is to be distinguished from *ward* the verb; each of these is to be distinguished from *ward* ("award"), from *ward* ("wartlike callosity"), from *ward* (-ward) and from *ward* meaning "might" or "would"; but no other forms of *ward* are to be distinguished from one another, however great their apparent divergence of meaning from one of these.

But for the professional purposes of the philosopher, this won't quite do. For him, as also for the structural linguist, a word is a usage; it is what the Oxford Dictionary-maker would call "a sense of a word". Thus, for the philosopher, in addition to the distinctions made above, *ward* meaning "ward in chancery" would be a

different word from *ward* meaning "garrison"; just as *ward* meaning "to parry" (in fencing) would be a different word from *ward* meaning "to put in a hospital ward"; and *ward* meaning "to put into a hospital ward" would be a different word from *ward* meaning "ward of a key". These sorts of differences in meaning are not, actually, the differences which the philosopher most desires to examine. But there are differences of usage which can be exemplified in the case of the word *ward* which it is the philosopher's primary business to examine. Thus we get "Ward!" meaning "Hey, Mr. Ward!" and "Ward!" meaning "Parry (you fool)!" Of each of these usages we can significantly ask "Is this usage a word merely, or is it also a statement?" as well as asking "Are these two different usages usages of the same word, or are these different words, both pronounced *ward*?" We can further ask "Are these two statementlike usages of *ward* different in kind from other, non-statementlike, usages of the word *ward*, or are there intermediate cases, which we might call 'quasi-statementlike' usages of the word *ward*?" And is *ward* the logical parent of the proper name "*Ward*"?

Then there is another set of philosophic questions which arise from consideration of the metaphoric uses of usages of *ward*. Consider the following examples:—

- (a) "Your wits must *ward* your head"
- (b) "True confession is *warded* on every side with many dangers."
- (c) "Every hand Of accident doth with a Picker stand To scale the *wards* of life."
- (d) "As thou hast five watergates in the outer-*ward* of they body, so hast thou five watergates in the inner-*ward* of thy soul."

In this series not only does the meaning of *ward* in the pair (a) and (b) differ greatly in use from the meaning of *ward* in the pair (c) and (d), but also *ward* as used in (a) differs definitely and significantly from *ward* as used in (b), and *ward* as used in (c) differs more subtly, but definitely and demonstrably from *ward* as used in (d). For it makes

no sense to say, in (c), of the wards of life, that they have watergates; neither would it make sense to say that they are part of a metaphysical castle, that they have, for instance, an outer and inner structure. In so far as can be seen, the wards of (c) are extremely indeterminate non-spatial hills, of which it may still make sense to say that they are defensive (whether it makes sense or not depends on the sense in which "picker" is here being used), but it may not make sense even to say that. On the other hand, if *ward* in (c) is being used indeterminately, *ward* in (d) is being used abstractly, for, as well as being used as a technical sort of noun, it is also being used as a preposition of direction; and, as we shall see at a later stage, it is logically no accident that this is so.

So we get, philosophically, into the position of saying that, in examining uses of usages of the word *ward*, firstly, we do not feel quite sure how many words of the form *ward* we have to deal with, even in the crude dictionary-maker's sense of "word"; and secondly, the more we think of it the less clear we feel as to how finely and on what grounds we should sub-divide these. Is "Ward!" for instance (Mr. Ward) cognate to *ward* as used in "the *Ward* of London", or "London-Ward"? We can say, of course, "Oh well, in fact it's all quite easy as long as we go by common-sense and don't start trying to be philosophers, because we can all, in ordinary life, agree quite easily to call certain usages of the word *ward* different usages of the same word and other usages, different words". But is it so easy, even in ordinary life? Is *ward* in "to *ward* a patient" the same *ward* as in "maternity *ward*"? The Oxford Dictionary says that it is not, on the assumption, apparently, that a noun can never be used as a verb or a verb as a noun. But should the philosopher acquiesce in this?

Difficulties multiply. And even now we have not begun to be really subtle and philosophic—though we shall have to take another example than *ward* to show this. Is *sun* in "The sun rises in the East and sets in the West" really, philosophically, the same word as *sun* in "The sun is the gravitational centre of the planetary system"?

And what about *matter* in Wisdom's famous series in *Moore's Technique**:—

(a) "Matter exists"; ("I put up my hand, and my hand is solid and material enough, isn't it?")

(b) "Matter doesn't exist." (Analogue: "Fairies, unicorns, dinosaurs don't exist.")

(c) "Matter doesn't really exist." (Analogue: "There's no such thing as Beauty; Beauty doesn't really exist.")

(d) "Material things are nothing over and above sensations." (Logical equivalent: "Statements about material things can be analysed into statements about sensations.")

(e) "Matter is just sensations," said with a desire to shock. (Analogue: "There's no such thing as thought or feeling, only patterns of behaviour.")

(f) "I don't believe in Matter." (Analogue: "The ship is bearing down on us, but I don't believe there's anyone aboard.")

(g) "Matter is a fiction." (Certain indirect empirical expectations and non-expectations could genuinely be held to follow from this.)

(h) "Matter is a logical fiction." (Logical equivalent: "Matter is a construction out of sensations.")

The customary thing to say about this series is: "Oh yes, in this series of statements, *matter* and *material* are the same words throughout. It's just that, when you put them back in their contexts, all of these can be shown to be different statements." But suppose I tried to be awkward, and to contest this. Suppose I said, "I don't see what you mean. You would have it, earlier, that *ward* meaning 'prison cell' was a different word from *ward* meaning 'section of a lock, or of a key', and that *ward* meaning 'prison cell' was a different word from *ward* meaning 'section of a hospital'; and that *ward*, meaning 'prison or ward-room'

* John Wisdom, *Moore's Technique*, Library of Living Philosophers, volume on G. E. Moore; also reprinted in *Philosophy and Psychoanalysis* (Blackwell, 1953).

was also a different word, and not merely a different usage of the same word, from *ward* meaning 'guard' or 'prison-guard', or as used in the compound phrase 'watch and ward.' And you were at least doubtful as to whether *ward* meaning 'section of a hospital' wasn't a different word from *ward* meaning 'the patients living in a section of a hospital'. You didn't say, then, that *ward* in the statement 'Prisoner and in disgrace he might be, but, fretting like a caged lion, he paced the *ward*' was the same word as 'When she was wheeled out on the operation-trolley, shrieking, fretting like a caged lion, he paced the *ward*' but it was just that, when each of these was put back in its context, the meanings of the statements were different. Why then, when comparing "It is only lunatics who say 'Matter doesn't exist. Why, I put up my hand, and that's solid and material enough, isn't it?'" with 'Matter doesn't exist; fairies, unicorns and dinosaurs don't exist' shouldn't I say similarly that the question at issue is not primarily whether 'Matter doesn't exist' in context (a) and 'Matter doesn't exist' in context (b) are different statements, but whether *matter* as used in (a) and *matter* as used in (b) are different words?"

It seems to me that if I insisted on being awkward on these lines, I should be hard to answer. The truth about this matter seems to be that while "statement" and "sentence" are used by logicians and philosophers both as sophisticated logical concepts and also as much less sophisticated grammatical concepts, "word" is still regarded by philosophers as being purely a grammatical concept; and therefore as still being a concept which it is quite easy to understand.

No opinion could be more ill-based. In this matter of defining "word" in an intellectually adult manner, philosophers are leaning upon what they believe to be the knowledge of grammarians, while grammarians are leaning upon what they believe to be the insights of philosophers. For there is at the present time no question being more hotly and constantly disputed by grammarians than that of what a grammatical word is, or is not. It is no good whatever the philosopher saying, "I am simple-minded.

I use 'word' as grammarians use 'word'," because there is no simple-minded manner in which grammarians use "word".

It is at this point that we pass to the second stage of the discussion; that in which the philosopher, still suspecting that it will be all quite easy when he really looks into it, turns to the grammarian to be refreshed on what a word is; and returns shortly afterwards, rather quiet, saying:—"I don't suppose it matters philosophically, but actually, you know, nobody knows what a word is at all."

2. "*Nobody knows what a word is.*"

As a preliminary to seeing how the various grammatical conceptions of a "word" differ from the philosophic conceptions of a word, it is both helpful and relevant to become a little more precise as to how the analytic philosopher differs from the modern grammarian.

The usual answer to this is, "Instead of talking about 'language' the grammarian talks about 'languages'". But this is not true. The chief modern grammatical periodical is called "Language", not "Languages"; there is a grammatical subject called "theory of language" (or sometimes, in American, the combined study of "general linguistics" and of "metalinguistics") just as there is a philosophic subject called "the philosophy of language" (or sometimes, when we feel rather more American, "linguistic philosophy"). What then, is the difference between the two?

The answer to this second query is that, whereas the philosophical grammarian talks about "language" in such a way as to take account of the facts of which he has been made aware by learning languages, the philosopher of language talks about "language" in such a way as to take account only of the facts of which he has been made aware by learning his own language—but he makes an attempt to take account of all of these. Now, if it were the case that an actually spoken language—say, the English language—were, logically speaking, a homogeneous entity, then the philosophers of language would show up as very naïve in comparison with the philosophical grammarians.

For in that case they would be making the naïve assumption that, logically speaking, "ordinary language" is the same in all languages; that all structural grammar, whatever its origin, will "mirror" that of our own version of our own spoken tongue. Actually, however, the assumption which the philosopher of language makes is a different one, and very much more sophisticated. He assumes that, natural language not being logically homogeneous, any logical language-game which can be devised to throw light on, say, a certain kind of logical form in language *A*, can also, with a little ingenuity, be applied to throw light on some extant logical form in language *B*, though the logical form which the game is meant to illustrate may not be so prominent, may not even be noticeable, in language *B*.

It seems to me that this assumption is well-based. It seems to me, too, though, that for the philosopher it's not enough; that he needs, just as the philosophic grammarian needs, to examine basic logical forms as these occur in different languages, as well as to examine his own language's myriad different kinds of logical form. "No matter what way of carrying on in Chinese you bring forward, I guarantee to produce the logical equivalent of it in English." So runs the challenge to the linguist from the logical poet; and certainly I, in my capacity as linguist, would not like to take on myself, in my capacity as logical poet, in a contest consisting of this novel kind of language game, since I can quite well see that I, as logical poet, would keep up with myself as linguist very well. But that's just the point. All I would do is "keep up". I would not—as I should do, being a philosopher—go on ahead. The utmost of my ambition, in my capacity as logical poet, would be ingeniously to reproduce—perhaps even to exaggerate—the constructions which I, in my capacity as linguist, had thought of first. Thus, by the nature of the case, while this relationship continues in this form, the linguist leads the philosopher of language all the way.

There is no controversy, moreover, which brings this fact out more clearly than that as to the logical nature of a word. For whereas the naïve reaction of the philosopher, as we have seen, is: "What's the trouble? Everybody

knows what a word is", the far more sophisticated reaction of the linguist is, "When you think it over, nobody knows what a word is". And yet there is a sense in which they can both agree; for there is a sense in which all languages have words.

To exemplify in more detail the difficulty which the linguist feels, I shall bring forward considerations from a philosophical paper by the linguist Chao, entitled, *The Logical Structure of Chinese Words*.² And, playing the role of philosopher of language, I shall "keep up with" Chao's argument, at every stage, by imagining what it would feel like for the English language to have the logical complications which are presented by Chinese. I shall not have to imagine very hard to do this.

Let us therefore take once more the word *ward*--a monosyllable. We have already seen this word used as a collective noun (e.g., in "to set the *ward*"). Let us now imagine it used distributively (i.e., as equivalent to "*warder*"), as a technical term (e.g., in "the *wards* of a key"), as a medical term (as a variant of *wart*, perhaps, to mean a hard round callosity on the skin) and as an armourer's technical term ("ward of a rapier"). We have already seen it, also, used as a verb: in swordsmanship ("to ward", meaning "to parry"); as a psychological term, meaning "to threaten, to press"; as a medical verb (as in the phrase "to ward a patient"). These few usages, of course, by no means constitute the total Use; we have not even entered into the great variety of usages and of use which occur as soon as *ward* is used as a legal technical term. But now let us examine *ward* in another kind of usage, by considering the following two series of examples:—

- (a) "To Acres *ward*."
 "To heaven *ward*."
 "To us *ward*."
 "Northward."

² Yuen-Ren Chao, *The Logical Structure of Chinese Words* (Presidential Address read at the regional meeting of the Linguistic Society of America in New York, December 31st, 1945). Printed in *Language* XXII (1946), p. 4.

- (b) "The fore-ward foremost, the battell in the midst, the rere-ward hindemost."
 "Forward be our watchword."
 "First cast the beam out of thine own eye, and afterward. . ."

Now imagine English to be a language in which the notion of suffix does not exist; in which, firstly, "foreward" is thought of as "fore-ward", and secondly, in which words such as "warden", "warder", "warding" and "wardage" are all pronounced "ward". Introduce now one or two instances of *ward* in usages which overlap those of other words (*e.g.*, "I have done my dewte in every ponte according to your *warde*", "well *ward* thou weep"). Ignore now the possibility of there being differences between archaisms, colloquialisms, different forms in different dialects, proper names and ordinary descriptive words, different pronunciations and different spellings; and you have the ordinary naïve Chinese conception of a *tzü*⁴, or word.³ *Tzü*⁴ are "what is talked about", "the (only) linguistic small change of everyday life", "the term of prestige" (when people want to talk about words). And it is that great "spread" of the *tzü*⁴, interlingual both in space and time, which is denoted by a single ideographic "character", that is, by a visual shape, or graph. There is, as well as this, in Chinese, what Chao calls the "'free form of word', consisting of one or more syllables, which may enter into what we should call syntactical relations with other similar units. Linguistically, this would be much more like what we call 'a word' in other languages than the monosyllable is. *But it has no everyday name in Chinese.*" (italics mine).

Thus, with regard to this conception of a word, and as between "word" in English and "word" in Chinese, we actually have, in a language-situation, that state of

³ It has been represented to me, in discussion, that none of the words which I have so far used to mean "total Use" are sufficiently logical in tone to enable them easily to be used to denote a logical concept. I therefore propose *fan*, which has been suggested to me by E. W. Bastin. By adopting *fan*, instead of *tzü*⁴, to mean "total Use", I can now restate the argument of this paper by saying that it draws attention to the possible far-reaching results of building logic on *fan*, instead of on usages, or words.

affairs which philosophers so often wrongly apply to scientific situations, which consists of there being considerable agreement about the nature of the facts, but no agreement about which way of describing them should be stressed. As regards the facts, we ourselves have *tzy*⁴, or general root words, in English; *ward* is one. With a little trouble, we could compile a glossary of the most fundamental English *tzy*⁴, and we could then invent ideographic signs for them. But we have no need for this conception of a "word". Similarly, the Chinese have our Oxford Dictionary "words"; but they envisage these as compounds—what we think of as phrases. They have no distinctive concept in common use by means of which to describe them, and when they occur in a statement there is no ideographic way of indicating the fact.

After this beginning, it is no wonder that Chao, with Chinese in mind, finds himself obliged to disentangle seven or eight logical conceptions of a word. All of these, except the European word, the Chinese phrase or "free word" are variations of, or subdivisions of, *tzy*⁴. Thus, Chao first distinguishes the *tzy*⁴ as given by sound from the *tzy*⁴ as given by sight; a very necessary task when dealing with an *interlingua*. He then points out that, while a gramophone recording of a Chinese *tzy*⁴ produces what is in some sense a real replica of the sound (what Peirce calls an *icon*), the visual graph of a *tzy*⁴ bears no such close resemblance to it. "Characters", or written *tzy*⁴, are symbols; they are not icons. On the other hand, they are not wholly arbitrary symbols, as are words written in an alphabetic script. The visual "character" for *ward*, for instance, would be a stylised picture of something like a Martello tower: a picture of a round cairn of stones, used for purposes of defence; and this ideograph would tell you something about the "spread" of *ward*. Here, again, we have a situation in which, as between English and Chinese, the facts are not as different as they might be, and where the main difference lies in what is logically stressed. In English, we have quite a few ideographic signs, especially the punctuational signs. In Chinese, there are quite a few arbitrary graphs—graphs, that is, in which no connection

can be discerned between sign and sense. Nevertheless, the logical idea of what the relationship between sound and symbol ought to be, in Chinese, is quite different from that arbitrary relation which we think is all that ought to hold, in English, between the spoken and the written word. In Chinese, the analogy between a spoken language and an ideographic symbolism, that is, a logical symbolism, is built into the very form of the script.

Chao, then, distinguishes initially between three things: (i) the spoken tzy^4 (ii) the transcribed tzy^{4a} and (iii) the portrayed tzy^4 , the "character" or graph. But these distinctions turn out not to be enough in Chinese, as, indeed, they would not be enough in English. For, in the series (a) *bear* (to support), (b) *bare* (gave birth to), (c) *bear* (the animal, *ursus*) and (d) *bare* (unclothed), we want to distinguish the third and fourth not only from the first two, but also from each other. And to do this we need yet another conception of the tzy^4 , the *etymon*. Here, immediately, we get two interrelated senses of "etymon"; for we can have a wider sense in which many cognate tzy^4 (taking tzy^4 indeterminately, in senses (i), (ii) or (iii)) can be said or shown to come from the same etymon; and a narrower sense in which the notion of etymon only applies to one general tzy^4 . In the wider sense—reverting to our original example—we can say that *ward* and *award* come from the same etymon; in the narrow sense, we can say that *ward* meaning "prison" and *ward* meaning "person in chancery" come from the same etymon, and, in both senses, we can say that *warred*, though pronounced the same way as *ward*, comes from a different tzy^4 because it comes from a different etymon.

So we have already five senses of tzy^4 ; (i) the spoken tzy^4 ; (ii) the transcribed tzy^4 ; (iii) the portrayed tzy^4 ; (iv) the etymon and (v) the root etymon, consisting of a "family" of (iv). A moment's further reflection will suffice to show, however, that we need many more kinds of tzy^4 even than these. For, under (ii) we have (vi), the transcribed tzy^4 analysed into phonemes, which must be distinguished from the unanalysed transcribed word. And under (i) we must distinguish between the "simple"

spoken tzy^4 , the synchronic linguistic unit, the tzy^4 (sense (i)) of one dialect, and both the diachronic and the interlingual tzy^4 (classes of these). Moreover, under tzy^4 (sense (iii)) the written "character", we must distinguish, in Chinese, as in English, usage from Use. Take the Chinese *jen*², in English *humanity*. We distinguish in English, by sound, *human* from *humane*. Chinese does not; the Chinese speaker must distinguish the two by context. But the modern Chinese writer can write two different characters for the two. On the other hand, the ancient Chinese writer, by writing them the same, could put himself in a position to produce a very elegant (and algebraic) script form when writing the paradox *humanity is humanity* (i.e., "to be fully human is to be humane"). But the logical question which here arises is: in the case of words which are two usages of the same tzy^4 (sense (i)) and which are different derivations from the same etymon (tzy^4 , sense (iv)), if these are written with different characters and thus are different tzy^4 in sense (iii), do we call them, logically, different tzy^4 or not?

Let us now tabulate Chao's main senses of "word". (He has other refinements but we can leave those to the linguists):—

I. "Free" forms or phrases (roughly, Oxford Dictionary "words").

II. tzy^4 :—

1. spoken tzy^4 :—

(a) the synchronic "simple" word (i.e., the spoken tzy^4 used at one time in one homogeneous speech unit);

(b) the interlingual and/or diachronic simple word (i.e., the spoken tzy^4 consisting of a class of 1(a));

2. transcribed tzy^4 :—

(a) the phonemically transcribed tzy^4 (which may refer to 1(a) or 1(b), as desired);

(b) the phonetically transcribed tzy^4 (e.g., the tzy^4 as recorded on a gramophone record or tape-machine);

3. portrayed $tz\ddot{y}^4$:—

(a) the logically ideal ideographic symbol, in which the “spread” of the character is to all usages of $tz\ddot{y}^4$, and to only those usages which give extensions of the original ideographic idea;

(b) the actual ideographic symbol, which tends to have a much narrower “spread” and to stand for only one group of usages of 3(a), thus appallingly multiplying the number of Chinese characters listed in dictionaries;

(c) logically aberrational ideographs, including mistakenly copied characters, phonetically borrowed characters, and any other logically aberrational characters.

(These, as might be expected, form an enormous class in Chinese.)

4. The etymon, or etymological $tz\ddot{y}^4$:—

(a) as used to distinguish homonyms which would be identified with one another under classifications 1 and 2.

(b) as used to group cognate $tz\ddot{y}^4$ as defined in 4(a) into classes which have the same ultimate etymological root.

(*N.B.*—These are what should be, but often are not, portrayed by 3(a).)

Thus we have nine primary conceptions of a $tz\ddot{y}^4$ and ten of a “word”; and, of course, in practice, new conceptions of a word are continually being framed and used which are ambiguous as between some combination of these nine. And this list is moderate, the moderation being due to the fact that Chao is an exceptionally philosophic and self-conscious grammarian.

Thus, speaking grammatically, it is an understatement to say that it is not clear what a grammatical word is. What is clear is that Chao’s distinction between a “free form” and a $tz\ddot{y}^4$ is logically fundamental.

In the next section we shall consider what this means.

3. "*From the point of view of logic and philosophy, it doesn't matter anyway what a word is, since the statement is what matters, not the word.*"

It was contended, at the beginning of the last section, that it was not enough for the philosopher of language just to "keep up with" the logical revelations made by the philosophic linguist. The reason for this contention must be now made clearer. It is, that logical revelations are interconnected. We cannot, for instance, allow ourselves to be logically impressed by forming a new conception of what a word is, without finding that our new conception of what a word is will affect our conception of what a statement is. For the logical ferment caused within us by reimagining words will not bound its action so as only to apply to our thinking about words. In order, however, strongly to initiate this logical revolution within ourselves we must be really impressed by the potentialities of a new language's basic logical forms. We must not just say, as the philosopher of language, in contrast with the grammarian, tends to say, "Yes, I quite see. The Chinese grammarian means by 'word' what we mean by 'general root word'. How interesting", and then go on talking about statements and entailments between statements, just as before. And why is it that we must not go on doing this? For two reasons, which are themselves interconnected:—

1. It can be shown that if we once adopt as our logical unit the logical conception of a tzy^4 , for instance, rather than that of a word, we take a step which has fundamental logical effects.

2. In so far as we have adopted as logically fundamental that analytic technique which consists in comparing, in context, slightly differing usages and uses of the same word, just so far we have already committed ourselves, though we may not know it, to a technique which works in terms of tzy^4 , not in terms of words.

Let us take the first point first, and go back to Chao; let us continue, that is, the train of thought of the last section, where we left it off. Chao ends his analysis of

different conceptions of a Chinese word by pleading for the creation of a general Chinese language, based on a general Chinese syntax and made of "general words". He proposes this as though it were the most ordinary thing in the world to propose, for reasons which he thinks will appeal to the practical linguist. Does he realise, though, what havoc he is making in the foundations of logic? Does he realise how far he is driving us back towards the later Whitehead's conception of a Word? Does he realise that he is pressing us, in all seriousness to adopt as logical unit the Platonic idea?

" . . . The possibility of having a partially workable idea of a general word," says Chao, "is, of course, to be explained by the fact that (Chinese) dialects are historically interrelated. . . . While (from the point of view of linguistics) this is only a partially workable idea (of a word), it is a question of more practical concern to the user of a language than a (more 'simple' or) strictly synchronic idea (of a word). A person who asks about the pronunciation of a word not only assumes that there is a corresponding 'same' and 'correct' pronunciation in other dialects, he also assumes, rightly or wrongly, that the 'correct' pronunciation is the same as that of some standard (Chinese) dictionary.

"The degree to which the boundaries of a general word are definable depends upon the unity of culture of the speakers . . . and the extent to which the body of the literature is still living (though pronounced by modern speakers in modern forms). From the point of view of producing clear and neat descriptions of linguistic phenomena in China, it is neither necessary nor possible to set up the idea of the general word. . . . But for the compilation of practical dictionaries and for language-education in China . . . and for discussions of such problems as Chinese syntax . . . the idea of the general word is often unconsciously assumed. We have here tried to make this idea explicit, with a warning that it is not an idea of clearly defined scope unless and until it is artificially frozen into a system

of general Chinese. (The creation of) this, though theoretically illogical and impossible, is yet practically necessary and highly desirable.”

Two considerations immediately obtrude themselves for discussion, from the despairing *cri-de-coeur* which Chao's last sentence contains. The first is that, in language, what is “practically necessary and highly desirable” cannot be “theoretically illogical and impossible”. In such a case, “theory” and “logic” must yield. The second is that formal examination of an ideographic written script—of a script, that is, based on the $tz\ddot{y}^4$, not on the Western word,—should yield first clues to the kind of concepts which will be required to “model” logical forms in a language made of “general words”. I have endeavoured to state elsewhere what these clues are, and to hazard a first guess on the way in which they should be used⁴. But rather than enter further now on so large a question, I wish to pass to the second point made earlier, to the effect that, in spite of appearances, “ordinary language philosophers” are actually working with $tz\ddot{y}^4$, not with words.

Consider the following philosophic argument:—

S. : It does not seem to be invariably the case that from *I know that p* there follows *p*.

T. : *What ? ? ?*

S. : Consider the sort of statement which might be made, on occasion, by an absent-minded man. “*I know I left it in my waistcoat pocket last night*”, he says, speaking of his watch. But it is evident, from

⁴ *Analysis of a Religious Paradox* (Epiphany Philosophers' Conference Report); *The Pictorial Principle in Language* (Proceedings of XIth International Congress of Philosophy, 1953, vol. XIV); *Metaphysical and Ideographic language* (to be published).

The inaccessibility of reference of the only detailed paper in all these, *i.e.*, the analysis of the religious paradox, is due to the desirability of using photostatic methods of reproduction for logical analysis of sequences of $tz\ddot{y}^4$. For, in order logically to relate $tz\ddot{y}^4$ to $tz\ddot{y}^4$ or to distinguish $tz\ddot{y}^4$ from $tz\ddot{y}^4$, without making the wrong kind of logical assumptions, either the philosopher must make use of ideographic script, or, if he works formally, must give a separate rule of performance for each $tz\ddot{y}^4$.

examination of the waistcoat pocket made early this morning that he couldn't have left his watch in his waistcoat pocket last night; he knew wrong.

Or consider this statement, made by a mediaeval Flat-Earther: "We all of us know that the sun goes round the earth". In this case, it would follow from the statement "we all of us know that the sun goes round the earth" that "I (the same speaker) know that the sun goes round the earth". But it would not follow from this that the sun does go round the earth because, in fact, the earth goes round the sun.

T.: What you are saying here seems to me completely fantastic. For in each of the two cases which, it seems, you quite seriously put forward in support of your claim that from "I know that *p*" there does not always follow "*p*", you are producing the statement of a man who *thinks he knows* that *p*, but in fact does not know that *p*; and who therefore inaccurately says that he knows that *p*, when the fact of the matter is that he does not know that *p*. But in every case in which I correctly say "I know that *p*", there will invariably follow *p*. But, of course, in cases in which someone incorrectly says that he knows that *p*, well, I cannot see what can be said about such cases at all.

S.: And yet it is precisely in such cases that, in ordinary life, I feel most inclined to say "I *know* that *p*". In the majority of the cases in which, in your sense of "know", I know that *p*, it would never occur to me to say, "I know that *p*". In such cases I should never dream of say more than just "*p*".

T.: You might not dream of saying "I know that *p*". Nevertheless, those are just the cases in which it would be *correct* for you to say, "I know that *p*".

Etc., etc., etc.

Now all of us are familiar with examples of such arguments. What we do not sufficiently face is how serious they are. That two logicians should argue against one another from such different presuppositions without either

of them being able to bring forward any of Mill's "considerations capable of influencing the intellect" in order to help the other to understand what he's trying to say and do, this is, logically speaking, a very serious matter indeed.

Consider firstly what a disadvantage S is at, compared with T. T has clear-cut logical generalisations to put forward; he knows (on his logical and linguistic presuppositions) what the "correct" (*i.e.*, logically fundamental) sense of "know" is. He knows, too, what are and are not the effects of adopting as fundamental this logically fundamental sense of "know"; how, once you adopt it, from "I know that p " it follows that p , in a well-established sense of "follows from". T can reason; T can make logical connections; to T, S must look nothing but a sort of logical spoil-sport. For S has no reasons to put forward for *his* attitude; in a perfectly good sense of "connection" and of "think" S can make no connections: S cannot think at all. All S can do is to keep on saying, feebly, "But we don't say this sort of thing, in ordinary language"; and to this T can always reply, "Then you should say this sort of thing in ordinary language, for my sense of 'know' is the logically correct sense of 'know'."

If, in such an argument, any rational considerations are advanced, the persuasive power of T's arguments will be overwhelming. In fact, S has already given his whole case away by conceding that sometimes, from "I know that p " there can follow " p " in T's sense of "follow" and T's use of " p ". S must on no account concede this. He must not concede this because, in the face of T, there is only one thing which S, if he is to remain rational, can do. The one rational step which he can take is that he can become self-conscious about the kind of logical unit which he himself is using. For, having done this, he can then firmly allege, with formal demonstration, that the adoption of this new form of logical unit, in preference to the old form of logical unit, fundamentally affects the form of all logical connections which are made by using it; so that (if you once use the new form of logical unit) "follows from" is no longer the ordinary kind of "follows from"

and "the statement p " is no longer what used to be thought of as the statement p . To hold his own against T, S must maintain, in fact, that new logical units require new logics. Far from disdaining the help of formal methods of analysis on the ground that, in the analysis of anything as flexible as natural language, no one calculating procedure can throw more than a limited light, S must, on the contrary, develop new formal methods of analysis, on the ground that no one calculating procedure (*i.e.*, T's calculating procedure), language being what it is, can throw more than a limited light. If S did this, T would be at a disadvantage, for T would have to say things like, "Your new logic may be more powerful, but I find the old logic much easier", which would be an admission that S is now setting the logical pace for T. As it is, T (let's face it) is defending rationality, for there is nothing rational, in reply to him, that S can say.

But is S adopting a new logical unit, as contrasted with that of T? Clearly. The logical unit which S is feeling for is that of the total spread, or Use, of the concept "know". T is adopting, as *his* logical unit, one, not very common, usage of the Use ("know" as contrasted with "think", or with "should be inclined to judge", or with "guess"); and T is assuming that only this usage of the total Use of "know" is such that it can be logically used. But T's selection of this usage as the only possible one is based upon coherence-principles, not correspondence ones; for, as S keeps saying, "know" is not used mainly or exclusively in this usage in ordinary language.

What S is feeling for is not the usage, or meaning of the "word", "know", but the "spread" of the *tzj*⁴ "know". That concept, the general idea of which can be expressed by the phrase, "I've got it!": that concept the spread of which includes phrases such as "know-how" and "know-all" and "in the know": that wide and indeterminate concept in terms of which knowledge is primarily something you've got, not something which "is" (for the Flat-Earthers had "got" something, that can't be denied, when they said that they knew that the sun went round the earth, whereas we, having also "got" something, say

that the earth goes round the sun); that *tzŭ⁴* the “character” for which is an archer hitting a mark,

知

What prevents S seeing that this is what he is looking for is the fact that he has been inspired to look for it by adopting an apparently a-logical analytic technique,—one which is very much more successful at drawing attention to new forms of difference of usage and of use than at drawing attention to new forms of connection between them. It has not occurred to S, then, to make a symbol to represent “‘know’ : total Use”: a symbol whose direct field of reference is to the total indeterminate spread of a *tzŭ⁴*, or Word.

But once it does occur to S to do this, it may well occur to him, too, that the potential advantages of doing something like this are immense. For the fact that formal logical games are played with indeterminate units does not prevent specific rules from being devised to govern the methods of combination of such units. Moreover, the games can be so played that, as the sequence of units extends, the spread of the sequence becomes more and more determinate; as complication increases, indeterminacy grows less.

It is extremely difficult to exemplify this process in English, since we have become accustomed to think of English as built up out of words, not of *tzŭ⁴*. But let us see what we can do with our original example. If I say or write just

1. ward

it is impossible to tell what I mean. The total spread of the *tzŭ⁴* “ward”, as we have seen is very highly indeterminate. But suppose I say

2. “I ward thee a *ward*, Ward. *WARD!* *Ward* *WARDward*, Ward! Ward not to be warded, Acreward, in *ward*, I ward thee, *WARD!* *WARD!* *WARD!* I *ward* thee, *WA-ARD!*”

it is a great deal more evident what I mean. Moreover, the constructions which I am using are the kind of instructions which are used every day in ordinary colloquial language, though no one could say that I am using ordinary language. I am warning somebody called Ward to defend himself in a certain way, *i.e.*, by parrying the other man's blow with the "ward" of his sword. I am further warning him that if he doesn't do this, with some agility, he (Ward) will find himself carried off to Acre and there cast into a "ward", or prison cell. So I am warding him a ward, or word, that he had better look slippy, or dreadful things will befall him. I am clearly a coward and a prig, or I would myself come in and help. But possibly I can't because I have myself already been captured, or because I am looking down from the top of a high wall.

Now, in example 2, I have not merely strung together eighteen different occurrences and uses of the $tz\ddot{y}^4$ "ward". I have, in addition, punctuated my string. I have put in stress-marks, capital letters, a suffix ("-ed"), a few connecting phrases and another $tz\ddot{y}^4$, "Acre", here shown in its usage as a proper name. But what formal device have I used to do all this? Bracketing, nearly always. Sometimes I bracket words together by actually joining them, as in "wardward". Sometimes I bracket together several *wards*, lightly with a comma, or more fundamentally, with an exclamation-mark or full-stop. Once I "bind" three *wards* together by increasing the stress. And the small words, or other devices that I use, are used only as operators to define the interrelations of these brackets.

Suppose, now, that I write out my example again, using the following conventions—that is, using a more $tz\ddot{y}^4$ -like notation:—

(i) conventions for $tz\ddot{y}^4$

for the $tz\ddot{y}^4$ Ward	we shall use the abbreviation	W
„ Acre	„ „	A
„ Finality (assertion)	„ „	F
„ Exclamation	„ „	E
„ Inclusion	„ „	I
„ Passivity	„ „	P
„ Nonning (cancellation)		N

(ii) conventions for the phrases and phrasings

for " I thee " we shall use the abbreviation { }
 „ " a " „ „ (. . .)
 „ " punctuation-sign " „ „ (.) .
 „ " , " „ „ (.)
 „ " — , = , ≡ " „ „ / / / |||
 „ " and " „ „ [[]]

when two $tz\eta^4$ are immediately juxtaposed, they shall be interpreted as bracketed thus: ((.).)

I can now write

3. [[[/ ((({W}{W})W)F) / ((W)E) / (((W(WW))W)E) |||]
 (((W((NW)P)) ((AW)IW)) ((({W})W)E)) |||]
 / ((W)E) / ((W)E) / ((({W})W)E) |||]

It seems at first as if it would be quite impossible, on positional data such as is given here, to distinguish different usages of the $tz\eta^4$ *ward* from one another. Experience shows, however, that given a sufficiently long unit of discourse, this is not so, and that some rules at least for distinguishing usages from one another can be devised.‡ And, even now,

‡ It has, however, been made clear to me, in discussion, both that this formalisation is not self-explanatory, and also that to elucidate the reasons for producing it in this way would require a second paper on "Words" of equal length with the first. In entering this new universe of discourse, the logician has to prepare himself for two successive and contrary shocks. The first is that of finding, as one logician said, that there is such a very great deal of indeterminacy everywhere. The second is that of finding—once one has faced the first shock—what unforeseen new vistas open out, and what a lot can be done. The "philosophers of ordinary language," in so far as they have interested themselves in formal logic at all, have made the mistake of putting their positive and negative results much too much at the service of the old logical approach, in order, apparently, to try and sophisticate it. Considerations drawn from the study of languages show, however, that this attempt is hopeless, that this sophistication never can be achieved by proceeding by steps, and on such lines. What is needed if the philosopher of the new sensitivity to ordinary language is to be put in a form which consists of considerations capable of influencing the intellect, is a fundamentally new approach to the problem of what logic is; a change of approach not less new and fundamental than—and indeed analogous to—that made by Brouwer to the foundations of mathematics when he first developed Intuitionism.

Only by initiating such a radically new departure can the activity of ordinary language analysis, made by taking cases, be defended against attacks such as that recently published by Russell in *The British Journal for the Philosophy of Science* (Vol. III, No. 12, February, 1953); and this attack is typical of others attacks against it which are constantly being made.

this is only the beginning of what I could do. For I have devised no rule as yet to "reduce" my formula, though this is clearly a formula which could be reduced. Neither have I devised any rule for interrelating my bracketing conventions, although, clearly (to take only one example), the bracketing convention for . . . "and" . . . *i.e.*, for indicating that I am saying both this "and" that is logically not independent of the bracketing convention for building up progressive stress, *i.e.*, for underlining a $tz\bar{y}^4$ with more and more lines. On all sides, fascinating logical vistas open out before me. I stand, like Alice, above a chess-board which covers the whole world.

One thing, however, among many uncertainties, is already clear. Out of a sequence of indeterminate $tz\bar{y}^4$, however long, I can never build a completely determinate "statement". For even if it be granted that each extension of sequence lessens the sequence's total indeterminacy of spread, only in the case of an infinitely long sequence would zero indeterminateness be attained. So, if we base our logic on $tz\bar{y}^4$, not on words, only in the infinite case shall we get the (usually assumed to be) completely determinate "statement" of propositional logic—and this even if there were no other formal differences between a sequence of $tz\bar{y}^4$ and a "statement" in propositional logic, which there are.

Thus the logical importance of finding out what we think about words—and the logical importance of examining and distinguishing usages in context—turns out to lie in the fact that our conception of a "statement" (and, *a fortiori*, of logically possible forms of connection between "statements") is fundamentally affected by our logical conception of a "word".

We do wrong, then, to underestimate the logical value of making these many and detailed examinations of usages and uses of words in ordinary language. For this discovery, that "word"-conception fundamentally affects "statement"-conception, is a very important discovery indeed.