WORDS AND THE WORLD

A Study in Seventeenth-Century Theories of Meaning

by

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CHAPTER SIX

METHODS OF DISCOURSE AND THE MOVEMENT FOR REFORM

Section 1 The Divisions of Language

While the spirit of utility demanded a plain style in scientific prose it nevertheless left the way open for the use of metaphor, and rhetorical devices generally, in other spheres. If language were to be a means to an end it would follow that different types of language were more suitable than others for different tasks. Parallel then to the tendency to do away with figurative speech in scientific prose was the attempt to distinguish between different types of subject matter and between different audiences. Robert Boyle, a foundation member of the Royal Society who had, about 1653, shown his dislike of the figurative style,¹ was nevertheless prepared to allow a place to more ornate methods of speaking and writing. He suggests that style should be accommodated both to the subject-matter with which the discourse is concerned and to the audience addressed.

¹ R. Boyle, Some Considerations Touching the Style of the Holy Scriptures, (written circa 1653, published 1661).
Although he emphasized that figures of speech are out of place in a scientific account of the world, on the other hand he favoured a 'due decorum' in all writing. Bacon had also allowed a place for figures of speech, rhetoric could be used for persuasive purposes; it was only in the language of science that it was not to appear. The general admission, however, that figurative speech could sometimes be appropriate amounted to an admission that there were different, equally legitimate, types of discourse - types of discourse definable in terms of the ends they were designed to achieve.

An insistence upon what Boyle called 'decorum' in speech and writing is apparent in most writers of the century in one form or another. With Bacon this took the form of a very complex and detailed analysis of different methods of discourse classified largely according to the ends they are designed to achieve, and connected ultimately with the different types of audience involved in the communicating activity. These 'Methods of Discourse' are worked out in too much detail to be entered into here; however, Bacon's realization that different aims and different audiences demanded different methods of 'Transmission' may well be illustrated by referring to two of his different methods - the 'Magistral' and the
'Initiative'.

The magistral method teaches: the initiative intimates ... The one transmits knowledge to the crowd of learners; the other to the sons, as it were, of science. The end of the one is the use of knowledges, as they now are; of the other the continuation and further progression of them. (2)

Here, as in other methods of discourse, Bacon has in mind a difference between audiences based upon whether or not they possess specialized knowledge of a subject - his methods of transmission, broadly speaking, are so divided as to be applicable to two main classes of people, the specialist and the layman. Bacon also permits, in fact encourages, the 'Illustration of Discourse', or rhetoric, a type of speech directed towards the influencing of right action. 3

Boyle's contention that a due decorum should be preserved in speech and writing, is linked in his work with the Baconian notions that language should be designed to achieve the end for which it is a means, and that it


3. Wallace, Francis Bacon on Communication and Rhetoric, p. 34.
should be altered where necessary to suit the aims of the speaker and the class of audience addressed. In *The Sceptical Chymist*, published during the foundation year of the Royal Society, Boyle was to reiterate his earlier demand for an accommodation of style to the different purposes it was meant to achieve, and to the different hearers to whom it was addressed. To 'keep a due decorum' in speech and writing, to write to 'gentlemen' as a gentleman, to be civil rather than brusque even in learned disputes, is much better than to sacrifice all stylistic devices upon the altar of plainness and clarity.¹

In effect the Baconian spirit of utility permitted the development of a multitude of languages: on this view, no one language-use could be considered the correct use to the detriment of other possible uses. Scientific explanation to the initiated was one thing, to the layman another, and the verbal forms of explanation were permissibly different in each case provided that they achieved the end for which they were used. The ends thus aimed at might differ in the various disciplines, or in relation to the different audiences, but ultimately the

¹ R. Boyle, *The Sceptical Chymist* (1661); Introductory Preface, p. 7 (Everyman edition).
concept of utility was to be seen as the final end of all language. On this view a place could be reserved even for language which was sheer rhetoric. Even Sprat, the official spokesman of the Royal Society, was prepared to allow a place to rhetorical speech and when he did condemn it he did so, not because of anything inherently evil about it, but simply because it had been put to a wrong use by those that employed it.

Ornaments of speaking ... were at first, no doubt, an admirable instrument in the hands of Wise Men: when they were only employ'd to describe Goodness, Honesty, Obedience; in larger, fairer, and more moving Images ... But now they are generally chang'd to worse uses. (1)

John Wilkins, who made one of the most outspoken requests for simplicity in language - even to the extent of eschewing altogether any reference to imaginative constructions - nevertheless was still able to say in Ecclesiastes that, at least in preaching, attention was to be paid to the persuasive powers of language:² a sermon should teach,


convince, and persuade. If human utility is best served by rhetoric then rhetoric is not only to be admitted but is also to be encouraged. Although philosophers were mainly concerned with what we would call scientific or descriptive prose that conception of language as instrumental which dominated the thought of the period allowed them to support any type of discourse so far as it achieved the end for which it was designed. Any form of language could be defended on these grounds although, in practice, - in philosophical and scientific circles at least - the distinctions among language-uses fell into two main divisions. These were, respectively, the 'philosophical' and 'civil' uses of language.

This distinction, the roots of which may be found in Bacon's 'Acroamatic' method of discourse as opposed to the 'Exoteric' method, as well as in the distinction between the 'Magistral' and 'Initiative' methods, was widespread in seventeenth-century England, not only in relation to language but also as a fundamental distinction between different kinds of life and outlook. The life of cool-headed observation and experiment was opposed to that of emotion and superstition, the life of reason to that of mere faith,
the outlook of the philosopher to that of the ordinary man. 1 'Philosophical reasoning' was praised throughout the period as a different kind of reasoning from that indulged in by the ordinary man; 2 no denigration of 'civil' life or reasoning was intended by the use of this distinction - it was simply recognized that there were these two main ways of approaching the problems of life and knowledge, one at present reserved for the few, the other the practice of the many. Of course, there was no doubt in their minds as to which way was better, as to which life was the more satisfying or more fruitful to lead; however, there was no hesitation on their part in saying that the 'civil' life had its uses, its place in the general scheme of things. In this sense it is correct to say that they did not wish to speak ill of 'civil' life or reasoning. Our normal wants and needs may be satisfied without any special knowledge or ability, but if we wish to master the world - a very real hope in the seventeenth century - we need to approach our problems with much more circumspection than we require for mere living. An


2. E.g., by John Hall, The Advancement of Learning, p. 42.
approach through the pathways of careful observation and experiment, a 'philosophical' approach, is needed for this latter purpose.

A necessary condition for the achievement of philosophical knowledge is a more self-conscious approach to the use of language. The language of the ordinary man is all right so far as it goes but it does not go far enough to achieve the philosophical knowledge demanded by the 'new' scientists. It is in fact an obstruction in the way of knowledge. Thus, corresponding to the distinctions between philosophical and ordinary life, between philosophical reasoning and knowledge on the one hand and the prudential conclusions of the ordinary man on the other, there was drawn a very clear division between two main types of language-use - between 'philosophical' and 'civil' or 'common' language.

Throughout the century one of the chief causes of the lack of advancement in knowledge was taken to be the 'lax' and 'indefinite' use of words in ordinary language. It was not suggested that ordinary language was useless in society but merely that its use as a language of science and philosophy was illegitimate; if advances were to be made in knowledge a specialist
language, a 'philosophical' language was needed. The specialist language of the philosopher and scientist was not necessarily a completely new language for it was believed, with some justification, that scholars had always used a special language in developing their disciplines. Whereas in medieval times, however, scholars had not been very conscious of the need to strip their language of the disadvantages and pitfalls of ordinary usage, with the growth of science in the seventeenth century the necessity for extra care in choosing the language of learned discourse became more prominent. It would be true to say that there was no member of the Royal Society, or 'fellow-traveller', who did not see some sort of reform as necessary in the language of philosophy and science. This, as we have seen, was linked with the belief that an improvement in the methods followed in the search for knowledge, and a like improvement in the instruments used, would itself be sufficient to promote the looked-for scientific millenium. Bacon found the 'only hope' for a sure body of knowledge to lie in his method; linguistically, this method consisted in the right application of words to clear notions of things. ¹ It was even hoped, later in

the century, that a thorough understanding of the things in the world, a clarity of thought, would itself lead to the application of the correct word for the occasion; this amounted, of course, to saying that a 'thorough understanding' of the things in the world was an Adam-like understanding and grasp of the essential structure of things whereby we, too, would 'name things for their essences'.

The two main uses of language, 'civil' and 'philosophical', corresponded to the two possible ways in which we could gain knowledge about the world: we gain this information, either 'unmethodically and confusedly' from our everyday experience, or more cautiously and carefully in the manner of the Baconian 'philosopher'. The former method satisfied the demands of everyday life and issued in the 'ordinary use' of words while the latter method, which is 'truly the Business of a Philosopher', demanded a more rigid and exact use of language.

Section 2 Reform

The movement for a reform of language to bring it more into harmony with the demands of the scientific

movement began many years before the incorporation of the Royal Society. More than twenty years earlier John Wilkins had expressed the belief that a universal philosophical language would assist the growth of knowledge. In 1653 Urquhart put forward a suggested philosophical language based upon a classification of ideas, the words of which were not only to denote the ideas referred to but were also, in some obscure way, to describe the qualities of the thing in question.¹ This notion, carried forward from medieval philosophy, together with the current belief that Adam named things in some such way, was never far from the thoughts of many reformers of the seventeenth century and was looked on by them not only as a worthwhile ideal towards which to strive but also as a very real and practical possibility. Dalgarno, with whom Wilkins co-operated, put forward a similar scheme in 1661.² At the same time as these more radical suggestions were being made, and earlier, there was a general tendency to demand a close attention to the definition of existing words.

¹ Sir Thomas Urquhart, Logopandekteison (1653); see W.J. Clark, International Language, past, present, and future (1907).
² Dalgarno, Ars Signorum (1661); see W.J. Clark, International Language, past, present, and future.
in the language of science.¹

The seventeenth-century demands for reform, like so much else in this century became focussed in the work of the Royal Society. Sprat, as we have noted, had been outspoken concerning the need for reform of one sort or another. The Society, early in its career, appointed a committee to investigate the deficiencies of language and to suggest programmes for reform. 'I was of a committee selected out of our Assembly, for the Improvement of our English tongue' notes John Evelyn on 24 January 1665,² and in a letter to Wyche, the chairman of this committee, written in June 1665, Evelyn puts forward his own views of the lines which should be pursued in advocating a reform of language. Evelyn's suggestions are for the most part philosophically uninteresting although within them may be discerned some aspects of the two main divisions which appeared within the seventeenth-century movement for linguistic reform.³

1. E.g., by Bacon and Hobbes.

2. See, The Diary of John Evelyn (1955), ed. E.S. de Beer; Vol. III, p. 396, fn. 4. Evelyn's editor states that the committee was chosen on 7 December of the preceding year, and consisted of twenty-one members other than Evelyn.

No one doubted that philosophical language cried out for reform; there were differences of opinion, however, as to how this reform should be carried out. Even within the Royal Society there were at least two groups of reformers; those, on the one hand, - a more conservative group - who conceived of the task of reformation as a tidying up of the existing linguistic framework and, on the other hand, those who wished for a radical reform involving the invention of a completely new language based upon an exact classification of the things in the world. Those whose wish it was to construct a language of this type, saw it without exception, as a universal language, a language which would do away with the current difficulties associated with national boundaries. It would be wrong to regard these two tendencies as being embodied in two distinct and warring factions within the philosophical community; many theorists show elements of both programmes although we can discern the predominance of one tendency or the other in all the thinkers with whom we are concerned.

Again we may turn to Bacon for the origins of both these types of reform. Bacon was, however,
predominantly a conservative reformer and, like Hobbes after him, believed that the advancement of knowledge - so far as this was to be achieved by attending to our language - was to be obtained by a closer attention to experience and the stricter definition of the names which we applied to the objects thus experienced. It is nearly always wise 'in all controversies and disputations to imitate the wisdom of the Mathematicians, in setting down in the very beginning the definitions of our words and terms' for if we fail to do this we are sure to end up in merely verbal disputes; words 'as a Tartar's bow, do shoot back upon the understanding of the wisest' and we make no progress in the understanding of things which is, after all, our aim.¹ Words, as Glanvill was to say later, are made and applied in accordance with the wishes and capacities of ordinary people. This, as we have seen, is one of the proper functions of the 'vulgar' and is not to be interfered with except for special purposes. The philosopher, however, does have the special purpose of advancing our knowledge and to do

this he needs to resort to careful definitions which reflect the 'true divisions of nature'.\(^1\) Mere definition alone of course is not sufficient to do away with the Idols of the Market Place; we also need to form our 'notions' and our 'axioms' in a different way. Our different method must enable us to avoid the failures and deceptions of sense, the confused notions we obtain from these impressions, and the hasty movement from a few ill-considered axioms to the 'most general principles'.\(^2\)

For Hobbes also the only way to obtain knowledge is through the medium of definition.\(^3\) The first end of speech - in the sense of the most important end - is the acquisition of knowledge, which is only attainable by what Hobbes calls 'the right definitions of names'. If we have clear notions of things, apply names to them, and define our names at the outset of our discourse, then inevitably our demonstrations - if logically sound - will end in true knowledge about the world. The ideal we are to aim at in scientific talk is that suggested by Bacon; i.e., the practice of the mathematicians where 'men begin at settling the significations of

\(^2\) Ibid., p. 70.
their words'. ¹ For Hobbes of course, more than for Bacon, the analogy of reasoning and the use of speech with the work of mathematicians was not simply an analogy - the processes involved in reasoning with the aid of words were exactly parallel to the addition and subtraction of 'parcels' practised by the mathematician. R.F. Jones has held that Hobbes wished to reduce language to the level of algebraic symbols: we have seen that this is far from being Hobbes's whole attitude towards language although there is indeed this tendency in his work so far at least as 'philosophical' language is concerned.² The language of all science for Hobbes should certainly be as exact and impersonal as geometry, 'the only science that it hath pleased God hitherto to bestow on mankind'.³ Hobbes's tendency to reduce language to something akin to an algebraic notation, although not pursued far, is suggestive of the more radical movements for reform in the century. By and large, however, Hobbes is

² See e.g. above, Ch. 5, sect. 1; and see also R.F. Jones, The Seventeenth Century, p. 151.
nearer to Bacon than he is to Petty and Wilkins: his desires for reform are aimed simply at a tidying and tightening of the English language, which in a 'philosophical' use is directed in turn towards the one aim of increasing man's knowledge of the real world.

Hobbes makes it very clear that definitions of names do not lead us near to the *essences* of things, for the very word 'essence' is 'devised by philosophers out of the copulation of two names'.¹ When we define we do not state the essence of a thing; our definition is simply a set of words 'signifying what we conceive of the essence thereof', our definition simply notes those 'ideas' which we consider essential before we can apply the word 'x' to a particular x.² To deny, as Hobbes does, the Aristotelian doctrine of 'separated essences' is, nevertheless, not to deny that objects do in fact have an essence, or 'essential structure'; in fact Hobbes's very account of the world as corporeal demands that he regard objects as collocations of

particles arranged in certain patterns and liable to certain specific motions. Things have an essential structure, are made by the Creator of the universe in certain ways, although it is not in our power to know what this essential structure is: to say therefore, as the scholastics did, that we have a knowledge of the essence of this or that is to deceive ourselves. To insist upon clear and accurate definitions is, for Hobbes, not to ask for a knowledge of an unattainable essence; it is simply to 'convey accurately the local perception of the particular'.

This was the function of the language of science. We must follow Bacon in applying our understanding to particulars: any word introduced into a discussion is only a meaningless noise until it has been explained by a definition, which involves a close delineation of the particular experiences which have prompted the use of the word. In such definition lies our main hope of avoiding ambiguity and controversy. By this means, too, we may increase our knowledge of the world, even though we do not in this way gain a grasp of the essential nature of things.

- a knowledge which is beyond the human species.

It was this agnostic attitude towards the essential nature of the things in the world which lay behind much of the 'conservative' attitude towards a reform of language. For those who believed that God had arranged the world in an orderly fashion, which was nevertheless beyond our comprehension, no other course remained available to them if they wished at the same time to criticize the language of scholasticism. Convinced as they were that past errors in philosophy and science were the direct result of a misuse of language they demanded that language should correspond more closely with reality than in the past. They could not, as some were to do, demand that our language was to reflect the 'real nature' of things, for this real nature was both unknown and unknowable. They could only ask that our scientific language should be brought closer to what has been called 'the empiricists' ideal';¹ that is, language was accurately to represent experienced reality, words referring to non-entities and words used in a metaphorical sense were to be

eschewed. Thanks to Adam's Fall we no longer have his ability; we must now be satisfied with something less than his grasp of the essential nature of things. Nevertheless, the ideal the philosopher should bear in mind in constructing and using his language should be to achieve, as far as possible, this happy correspondence between words and things. The nearer he attains this ideal the more correct and proper his language will be, and the more it will lead to the growth of knowledge.

Glanvill - at least in *The Vanity of Dogmatizing* - suggested a reform of language upon Baconian and Hobbesian lines. The language of philosophy and science, if it were to achieve its purpose, needed to merge as closely as possible with the ideal use of language enjoyed by Adam: he asked for no more than that we should avoid being deceived by our senses and should be careful to ensure a correspondence between things and the names we apply to them. We should not lose sight of things in the 'crowd of Names and Intentional Nothings' wished upon us by the scholastic philosophers.¹ The essential structure of things will

still remain insoluble so far as human endeavour is concerned; we can only approach towards but not achieve an Adam-like acquaintance with the secrets of nature. We do not know 'How is a drop of Dew organiz'd into an Insect, or a lump of Clay into animal Perfections', and we who know nature only through her effects on us cannot hope for knowledge of the minute essential structure and initial causes of the things we experience. ¹

A healthy scepticism is the only possible way to achieve knowledge, and even this will not lead to a complete knowledge of natural laws: while it is theoretically possible to gain a full understanding of nature through science, in actual practice it proves to be impossible.

One of the ways to encourage this attitude of scepticism, and thus to increase our knowledge, is to develop a self-consciousness about the use of words, a linking of them with our experience.

Richard Burthogge also favoured a similar reform of language to help bring about the increase of human knowledge. Definitions of our words are devices we use to 'describe, ..., mark, and represent a thing in and by its Attributes' and 'The more particularly

¹. Ibid., pp. 44 and 210.
any thing is marked the more distinct is the knowledge we have of that thing'. Errors in philosophy Burthogge holds to reside ultimately in 'Ambiguity of words' with the consequent uncertainty we have regarding their meaning. To avoid the confusion of apprehension often foisted upon us by the ambiguity of words it is as well to look beyond words to the things in the world with which we become acquainted by means of sense-experience. The words we use must have a reference, a reference to something real; and we must represent these things 'unto the Minde in plain, apt, and significant Words, and' - following Bacon - 'in a plain and instructive order and method'. For Burthogge, as for the other theorists we have reviewed, definition does not reveal the essential structure of things.¹

The reform of language which I have called 'conservative' was simply a move for the reformation of language, a move for the removal of existing abuses. It might at first sight seem odd to say that this emphasis upon the need for definition was a reformatory movement because no one had been more concerned to define and distinguish than had the scholastic philosophers.

The seventeenth-century request for clear definition in speaking and writing, however, was quite different from the traditional habit. Certainly, the scholastics had defined and distinguished; that they had pursued this objective too avidly with little respect for experience was one of the complaints that the seventeenth-century philosophers made against them. The seventeenth century demanded that clarity of definition should never be attained at the expense of the individually-experienced elements of reality from which our knowledge arose. Their emphasis on definition was the natural outgrowth of the growing consciousness among learned men that advancement in human knowledge could only be achieved by emphasizing the value of the experience of the individual in the pursuit of 'science'. No longer was it possible to establish a doctrine, a philosophical outlook, or a generalization about the world, by appealing to the dictates of tradition or authority. In philosophy, if not in social life, Jack was seen to be as good as his master, and he was often found to be better.

The language of philosophy and science was seen to be a special language whose task it was to deal with the world and the things in the world. The seventeenth-century's attitude to scientific
language might be expressed by saying that if we are to derive all possible sounds from a piano we must be provided with a key or keys corresponding to each sound. It is superfluous to possess keys which produce no sound when struck, and to have insufficient keys to produce all possible sounds is to place a limitation upon our endeavour simply because of the imperfection of the instrument. It was thought that the scholastics, in using words which referred to 'occult' qualities, were in the position of those that have keys to strike which can produce no possible sound: the seventeenth-century critics of this practice wished, on the one hand, to do away with this superfluity and, on the other hand, to ensure that all possible sounds had their corresponding keys.

The notion that the accurate naming and description of reality would result in great advances in knowledge is strengthened by the belief current among the seventeenth-century Royal Society virtuosi that the drawing up of a catalogue of information concerning the natural world would itself result in the scientific millenium so confidently expected. If, at the same time as being self-conscious about our use of language, we also use our eyes and ears to the full, nothing but time stands between us and
a complete knowledge of the world.

We have seen that to follow such a method does not lead us necessarily to a knowledge of the essential innermost structure of things though we do find the suggestion in various places that even this knowledge might become available to us as our knowledge increases and as our scientific instruments improve.\(^1\) A careful attention to experience and a reformed scientific language will take us at least part of the way towards the ideal; it seems to be the hope of at least some of the seventeenth-century scientists and philosophers that time alone might take us to the stage of Milton's Adam. Even though this approach to knowledge might not reveal all the secrets of nature it was obvious, so they thought, that it would prove a more fruitful method than that of the 'dogmatists'.

That our present knowledge may not be certain in the way demanded by earlier philosophers does not in any way detract from its being counted as knowledge.

\(^1\) See, e.g., Glanvill, *The Vanity of Dogmatizing* pp. 178-9; cf. Locke, below, pp. 323-4.
We hold no **demonstration** in the notion of the Dogmatist, but where the contrary is **impossible**: For **necessary** is that, which cannot be otherwise. Now, whether the acquisitions of any on this side perfection, can make good the pretensions to so high strained **infallibility**, will be worth a reflexion. And, me thinks, did we but compare the miserable scantness of our capacities, with the vast profundity of things; both truth and modesty would teach us a dialect, more becoming short-sighted mortality.(1)

To the scholastic criticism that 'science is not uncertainty' Glanvill replied for the modern scientist that neither can the uncertainties of the traditional philosophy be regarded as science. Certainty of the sort considered by the scholastics as necessary for anything to count as knowledge is obtainable in the study of mathematics but here, according to Glanvill, we are not dealing with the world. A complete knowledge of mathematics is consistent with a total ignorance of the secrets of nature. 2

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hope that an infusion of the mathematical spirit into language would enable us to form a 'natural' language where every word would, in effect, be a definition in that it would show us the nature of the thing to which it referred; in learning the names of such a language we would at the same time 'be instructed likewise in their Natures'.¹ The facility with which mathematicians were able to advance in knowledge tempted many philosophers and scientists to think that the same sort of process could be introduced into the natural sciences through the medium of language, with the result that problems would then be solved 'without any more assistance than pen and inke'.²

The written form of this projected 'natural' language - the language of Urquhart, Dalgarno, and Wilkins - was itself to be a 'real character' which would be comprehensible to the men of all nations whether or not they still retained their own spoken languages. Two apparently unconnected sets of circumstances were of importance in directing men's minds towards the possibility of a 'real character'.

¹ Wilkins, Real Character, p. 21.
² J. Hall, The Advancement of Learning, p. 40. Cf. the later view of Leibniz; 'Let us calculate'. See below p. 349.
These were the growth of popular knowledge of the Chinese language in the sixteenth century, together with the invention of modern shorthand late in the same century, and the increase in the popularity of the latter as a means of keeping records both briefly and secretly. The Chinese characters were known to be largely 'pictures' of the objects they represented and were thus taken as revealing the nature of the thing referred to. The seventeenth-century linguists were also impressed by the fact that a single set of written characters was used by the Chinese for written communication between people who were unable to understand each other's spoken words.

Although shorthand scripts of one sort or another were known to the ancients and in the Middle Ages, the birth of modern shorthand occurred in England in 1588 with the publication of Timothy Bright's *Characterie: An Arte of Shorte, Swifte, and Secret Writing by Character*. A further development of shorthand, based upon the letters of the alphabet, may be traced to John Willis, who in 1602 published a work outlining a system of this sort.¹ Both these notions,

¹ John Willis, *The Art of Stenography: or, Short-writing, by Spelling Characteres* (1602).
namely, that shorthand may be derived either from a system of characters or from the alphabet were not without influence upon subsequent schemes for the development of a real character and a natural language.

This more radical movement for linguistic reform was represented mainly by the mathematicians of the time although the lines of division between 'radicals' and 'conservatives' were not clearly drawn; both Bacon and Hobbes, for example, show evidence in their work that they did at least consider the possibility of a 'philosophical' language.

In the sixth book of The Advancement of Learning Bacon deals with the 'art of Transmission', that is, 'the art of producing and expressing to others those things which have been invented, judged, and laid up in the memory'.¹ There he recognizes that although spoken and written words are the primary means normally employed to convey knowledge from one person to another the same end may be achieved by other means. He notes, for example, that deaf mutes are able to communicate by means of gestures and he goes on to say

that 'in China and the provinces of the furthest East there are in use at this day certain real characters, not nominal; characters, I mean, which represent neither letters nor words, but things and notions'.1 These characters are able to be 'read off by each nation in their own language'.

These marks are a sub-class of those that are able to signify things without the mediation of words: they signify by virtue of the fact that they are agreed upon, or instituted, for this purpose as opposed to hieroglyphics and gestures which signify directly by some 'congruity' they bear to the idea we have of a thing. That is to say, hieroglyphics and gestures picture that which they signify naturally, they bear 'some similitude to the thing signified, and are a kind of emblems'. Bacon's 'real characters', however, bear no resemblance to that which they signify: they are merely agreed upon by men to serve a particular purpose and are likened by Bacon to 'surds'.2 Bacon goes on to say that we would need many of these 'surds' if we were to engage in discourse in this way and he doubts the general usefulness of

1. Ibid., p. 439.
2. Ibid., p. 440.
such a system. ¹

He says, firstly, that "words and writing by letters are by far the most convenient organs of transmission" and secondly, that he merely mentions the possibility of a "philosophical" language in order to remind his readers "that as moneys may be made of other materials besides gold and silver, so other Notes of Things may be coined besides words and letters". ² Bacon wishes to be a "conservative" reformer of language and, as we saw, he finds relief from "the imposition of words and names" to lie in prudent definition. He cannot help but feel, however, that this is not enough. The present pitfalls of language stand "in need of a deeper remedy" than is provided by careful definition; this "deeper remedy", of course, was Bacon's "new" method. ³ It would, however, have been but a short step for one who constantly attacked the prevalent tendency of men to "study words and not matter", and who held that words are "images" of this same matter, to say that only a philosophical language could provide us with the knowledge we seek.

³ Bacon, Works, Vol. IV, p. 434; but, see the 'Tables' of our knowledge of facts required for this method; Works, Vol. IV, p. 127; and cf. Wilkins below.
We saw earlier that according to at least one commentator Hobbes wished to reduce language to the level of algebra which, if it were the case, would mean that Hobbes is to be more properly classified as a 'radical' reformer of language. Richard Peters also notes this tendency in Hobbes to demand a philosophical language:

Hobbes saw in definitions and in geometrical demonstrations the main hope for reasonable men to rid their country of those controversies which he thought to be the basis of civil disputes...Leibniz later had the same vision. Men might develop a universal language which would enable them, when confronted with a moral problem, to sit down with paper and pencil saying to each other "Let us calculate".  

Fortunately Peters does not press this comparison between Hobbes and Leibniz too far for it is, at best, misleading. While there are suggestions of a desire for a 'philosophical' language to be found in Hobbes it is a mistake to equate his insistence upon precise and accurate definition with the sort of universal 'philosophical' language suggested by Leibniz and put forward in detail by John Wilkins and others. As Peters himself notes, Hobbes 'thought that society could almost be saved by definitions';

2. Ibid., p. 17.
but this, however, is not to advocate an a priori language derived from a consideration of the very nature of things. That it is wrong to regard Hobbes as a 'radical' reformer in respect of language will become abundantly clear when we come to consider precisely the sort of demands made by people like Wilkins. Hobbes, of course, like Descartes before him, was convinced that nature was organized basically in a mathematical way; such a conviction would predispose him, as indeed it predisposed Descartes, to believe in the possibility of a 'philosophical' language.1 Nevertheless, philosophy, on his view, is still imperfect and there can be no 'true and exact ordination of names' as long as this state of affairs continues: only a more extensive knowledge of the world will assist us in the search for a more perfect philosophy - the mere 'disposing of words into classes' will not help us in this search.2 Such a disposal of words, however, lies at the base of the radical movement for linguistic reform in the seventeenth century.

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Although it is by no means the earliest attempt to provide a philosophical language, Wilkins's book *An Essay Towards a Real Character and a Philosophical Language*, first published in 1668, provides perhaps the best example of the more radical reform of language suggested in the seventeenth century. It may especially be regarded as both typical and important in that the research resulting in its publication was encouraged by the Royal Society. Further than this, however, the work was presented to, approved by, and published by order of the Society. Wilkins aimed at 'the distinct expression of all things and notions that fall under discourse' and was convinced that his work in this field provided the 'distinct expression', the exactness and comprehensiveness, demanded by the scientist. Not for a moment, however, did he imagine himself to be a mere compiler of dictionary definitions: he attempts to lay 'things' before us, to provide us with 'real knowledge' — ends which far exceed in value the dictionary-makers' concern with 'words' and 'elegancy of speech'.

Throughout the **Real Character** we find much that is reminiscent of Bacon's earlier thoughts upon language - the pre-occupation with shorthand-writing, the nature of the Chinese pictograms and Egyptian hieroglyphics, as well as the suggestion that real knowledge is to be attained most easily by the reduction of all 'things and notions' to 'Tables' according to their essential nature.¹

For Wilkins the end at which philosophy should aim is the classification of real things and ideas in such a way that 'their natural order, dependence, and relations' are made clear:² this is to be done in the first place by an *a priori* consideration of the simple elements of experience followed by the comparison with these elements of such 'words' as are either 'synonymous' with them or are defined by means of them. 'Vulgar' or ordinary languages, because they are continually changing, are quite unsuited to the task of conveying real knowledge of the 'true nature' of things.

He dismisses the claims of Latin and Chinese to possess the status of a universal language. Latin is

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1. *Ibid.*, Epistle Dedicatory; see also pp. 10 and 11.
adequate so far as it goes but the recent growth of knowledge, bringing as it has many new words into the language, destroys the claims of Latin to serve in this capacity. One of the reasons in fact for the growth of published works in English in the seventeenth century was this increase in the number of new words in the language, associated with quite new problems and new discoveries, for dealing with which the Latin language was not equipped. The breakdown of the 'universality' of Latin encouraged the study and use of national tongues; and this in turn stimulated an interest in a more philosophical universal language. The Chinese language on the other hand appeared to Wilkins to be equivocal and Wilkins was one with his century in rejecting the doubtfulness and absurdity of language caused by equivocality or ambiguity - which was associated so strongly with the current scholasticism.2

As we have noted earlier, Wilkins takes for granted that men for the most part receive the same 'notions' of things from their experience of the real world. On this assumption the first step in

1. Ibid., pp. 6 and 8.
2. Ibid., pp. 10, 17, and 18.
developing a philosophical language consists in enumerating and describing every thing and every notion that we decide should bear a name. Wilkins reduces everything which requires a name to forty main genera; such a classification of things he contends, together with the determination of a 'distinct mark' for each thing and consistent provisions of a grammatical and inflexional sort enable us to express 'our Conceptions by Marks which should signifie things, and not words'.¹ One would be inclined to think that a real character would carry some natural link with that which it is meant to represent. This, however, is not so. Wilkins's real characters, like Bacon's, bear no resemblance to that which they denote. Characters, he says, signify either 'naturally' or 'by institution'; members of the former class either picture things or symbolically represent them. He thinks it desirable that the names of things should resemble in some way the nature of the things they represent, and that the 'character' of these names should bear some resemblance to the sounds men use: he is unable to see, however, any way in which this may be done, and

¹. Ibid., p. 21.
therefore assumes that if we are to use a real character it must be arrived at on a conventionally agreed basis.¹ What he did not seem to see was that the instituted nature of his character detracts from any 'reality' it might purport to have. Although these characters are to be such by institution they are nevertheless still thought of as bearing some relation to the nature of the things referred to or named.

But now if these Marks or Notes could be so contrived, as to have such a dependance upon, and relation to one another, as might be suitable [sic] to the nature of the things and notions which they represented; and so likewise if the Names of things could be so ordered, as to contain such a kind of affinity or opposition in their letter and sounds, as might be some way answerable to the nature of the things which they signified; This would yet be a farther advantage superadded: by which, besides the best way of helping the Memory by natural Method, the Understanding likewise would be highly improved; and we should by learning the Character and the Names of things, be instructed likewise in their Natures, the knowledge of both which ought to be conjoin'd. (2)

This is Wilkins's programme, one which he is confident has been more or less fulfilled in his work.³

1. Ibid., p. 386.
2. Ibid., p. 21.
3. Although note that according to at least one report Wilkins had not finished his work in the Real Character: the Real Character 'was his Darling, and nothing troubled him so much when he dyed, as that he had not compleated it'. See 'Life of Wilkins' in Aubrey's Brief Lives (1958), ed. O.L. Dick, p. 320.
After enumerating all the things there are in their various classes and sub-classes Wilkins proceeds to a discussion of the grammar of his language. The details of his grammar - as indeed the details of his language generally - are not our concern here. It is sufficient to note that the different genera are assigned certain letters and sounds, their species and differences are given further letters and so on: once we have committed the tables of existent things to memory we can determine what class of things a word denotes simply by seeing or hearing it. In line, of course, with the current empiricism and allied anti-scholasticism of his day Wilkins dispenses altogether with names for fictitious or non-existent entities: his language, that is, is a language for the scientist not for the poet. ¹ Although in the 'Epistle Dedicatory' he expresses the hope that his language will come into 'common use' this is only to say that he looks forward to the day when it will be the common language of natural science and philosophy.

¹ Also on fictions, see: Bacon, Works, Vol. IV, p. 61; Sprat, History of the Royal Society, p. 29; and Cumberland, De Legibus Naturae, especially a note by the translator, p. 45.
Wilkins holds to the usual view of language of his day that 'Writing is but the figure of Articulate Sound and therefore subsequent to it', it is 'but the figure of Speech'. Nevertheless, he proceeds first to invent a 'character' on the ground that if he were to deal first with 'language' (i.e. uttered sounds) then the student would have to learn both character and language. The character devised by Wilkins consists of dots and lines, both straight and curved, analogous to those used in shorthand systems. Wilkins also suggests that men might communicate by means of his real character and yet retain their own distinct languages; because of this he deals first with his character and then sets out to show how this may be made 'effable' in a distinct language.

Wilkins contends that the language evolved in this way has many advantages over existing languages:

Every Word being a description of the thing signified by it; Every Letter being significant, either as to the Nature of the Thing, or the Grammatical Variations of the Word, which cannot be said of any of the rest; besides the constant Analogy observed in all kinds of Derivations and Inflexions. (2)

1. Wilkins, Real Character, p. 385.
2. Ibid., p. 440.
The notion of a word being a 'description' of the thing signified by it seems foreign to our ears. Wilkins's language, however, was so organized that each element of a word 'means' or refers to some class or sub-class of things so that the mere sight of a word to the initiated would be sufficient to advise them what sort of thing was being talked about. Thus a certain word might mean 'cloven-footed beast' to he that saw it, provided that - and this is a very big proviso - he was familiar with Wilkins's 'Tables', their relations to each other, and the letters associated with each genus, species, and difference within these tables. In this way each word is both the name of and a description of the thing signified by the name in much the same way as a chemical formula, to the initiated, may be said to both denote and to describe that which is named by it. Thus a student of chemistry might say that 'H₂O' is the name of a certain substance and that this name also describes the substance so far as it says that this substance is composed of two parts of hydrogen for every part of oxygen. But, of course, it only 'describes' in this way to one who is familiar with the table of elements, the theory of valencies, and much else besides.
Essentially the 'radical' element in seventeenth-century linguistic reform demanded an ideal language in the sense that language was to be an accurate representation of reality, it was to picture reality and was at the same time to reveal the essential nature of the real things in the world, discovered by an a priori consideration of the simple elements of experience. Despite the anti-scholasticism of the period, this request for language reform was rooted in the medieval notion that we might attain to a perfect knowledge of the universe, that we might be able to place everything in its appropriate pigeon-hole. Broadly, two main attitudes were adopted towards such an ideal language in this century. On the one hand there were those who felt that this scientific paradise would probably be attained some time in the not too distant future; when this happy state of affairs did occur a philosophical language would be possible. Those with this attitude towards a radical reform were for the most part those philosophers and scientists who were content, at the present stage of human knowledge, to call for a stricter attention to definition, and a greater self-consciousness about the use of language, as preparation for, and to assist the approach of, the scientific millenium. On the other hand, men with the
attitude of Wilkins felt that the time had already arrived when such a philosophical language should be instituted, though they were prepared to allow room for the alteration and expansion of their language as knowledge about the world increased.

Oddly enough, those like Bacon, Hobbes and Burthogge, who believed in the impracticibility of a philosophical language at the present stage of human knowledge, and who placed greater emphasis upon the importance and usefulness of ordinary or 'vulgar' language, were those who would have done away with ordinary language when the scientific millenium was reached. In a world which was completely known 'ordinary language' would disappear. As contrasted with this those who wished for the introduction of a philosophical language immediately wished to introduce it as a mere technical language which would have left a place for ordinary linguistic practices. Wilkins, Ward, and Petty - and mathematicians generally - were those who wished for the immediate introduction of the philosophical language; and generally speaking, they were those who did not concern themselves, in their philosophical work, with any uses of language other than those of the scientist and technician.
Again we do not have to look far to find a blurring of divisions between the 'radical' and 'conservative' reformers of the century. Glanvill, for example, who we earlier found to be a conservative reformer in the manner of Bacon and Hobbes, in the same year as the publication of Wilkins's Real Character came to support the notion of a philosophical language;\(^1\) and Richard Cumberland, although arguing for a greater care in our definitions of words, is not convinced that definition alone is sufficient to conquer the disadvantages of ordinary usage.\(^2\)

It was left to Robert Hooke in some comments upon prose style unwittingly to point to the absurdities towards which this reform of language might conceivably lead. In our learned writing we should take care that there should be nothing 'superfluous in the words'. In choosing our words we should exercise 'Care and Circumspection, that they be such as are shortest and express the Matter with the least Ambiguity, and the greatest Plainness and Significance, avoiding all kinds of Rhetorical Flourishes, or Oratorical Garnishes, and all sorts of Periphrases and Circumlocutions...'. So far Hooke merely adopts

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2. Cumberland, *De Legibus Naturae*, p. 45.
the current anti-scholasticism and a demand for a plainness in speech. However, he goes on,

'twill not be amiss to write it in a very fine piece of Paper, and to enter it in the most compendious manner of writing that the Historian is acquainted with, such as some very good Short-hand or Abbreviation, whereby the whole History may be contracted into as little Space as is possible. (1)

One cannot help but feel that even the seventeenth century was faced with the problems associated with the storage of government records.

A consideration of the requests for reform in the seventeenth century makes clear certain views concerning theory of meaning held at this time. It needs to be borne in mind, firstly, that the requests for reform were requests for the reform of scientific prose, not for the reform of language in general. In the previous chapter we saw abundant evidence that the philosophers of the early seventeenth century were content to allow a place in the hierarchy of languages to what we normally call 'ordinary language',

1. See Hooke's 'General Scheme, or Idea of the Present State of Natural Philosophy' in Posthumous Works (1705), pp. 63-4; quoted by Cope, Joseph Glanvill, Anglican Apologist.
which to them was a sub-class of those uses of language habitually referred to as 'the civil use of words'. It was scientific prose, prose designed to increase our knowledge of the natural world, which they found 'wanting'. Essentially, in science at least, they adopted naming theories of meaning; every word was to name an element of reality, or - what amounted to the same thing - every word was to name our 'notion' of these elements of reality.

There were differences of opinion here of course. Some philosophers made the grand assumption that we must all receive identical 'notions' from the things in the world; others believed that these might differ as between recipients. If one believed, as many did, that our 'ideas' of objects were the same in all of us then it was quite sensible and proper to say that our words directly named these elements of our experience, because communication would be possible upon such a theory. On the other hand, where it was held that these ideas might differ it became more appropriate to say that our words were names of the things in the world. Directly or indirectly, however, the seventeenth-century philosophers demanded as exact a correspondence between words and things as was humanly possible. Our scientific language, to qualify
as such, had to represent, or picture, the world closely. This belief, together with the belief in the misleading character of previous knowledge-asserting language, prompted the omnipresent demand for linguistic reform.

That the reformers differed as to the extent of the reform they conceived to be possible is of little importance to an assessment of their views concerning meaning in scientific prose. Both radicals and conservatives were anxious to show that our language must reflect the world, although they differed as to how far the essential nature of the real was mirrored by their reformed language. Both factions wished to do away with those words that purported to label entities which were not possible objects of experience; they both wished to reduce language to a cataloguing and indexing device for dealing with the tangible and visible.

It was suggested before that the more prominent seventeenth-century thinkers did not hold the simple naming theories of meaning normally ascribed to them even at the level of scientific or descriptive prose; if they did subscribe to a naming theory it was not naively that they did so. There is no doubt, however, that their demands for reform embodied a movement
towards naming theories of a simpler type. If these demands, especially the more radical demand for a philosophical language, had been adopted as their proponents would have wished they would have been committed to \textit{simple} naming theories with all their disadvantages. Though this was the tendency of their thought it is nevertheless not true, as we saw, to accuse them of such naivety even in their beliefs about existing descriptive or scientific language.
I have suggested that, on the one hand, empiricists of seventeenth-century England devoted a great deal of attention to questions of meaning, and that their interest in these questions was especially motivated by their awareness that the growth of the 'new' science demanded a criticism of existing philosophical practices. So far as they were concerned to destroy what they considered an outmoded way of philosophizing, so far as they were concerned to do away with scholastic 'occultism', they were tempted to put forward naming theories of meaning of a fairly simple and naive type. It is these \textit{prima facie} simple views of the nature of linguistic meaning that have become written into the history of philosophy as the official views of these thinkers. Consequently criticisms of empiricist theories of meaning have for the most part taken the form of an attack both upon the whole notion of words being correlated with entities which are their meanings, and
upon the nature and status of the entities which were commonly elected to this position.

On the other hand, I have suggested that any account of the meaning-theories of this century which concerns itself only with the destructive side of their theorizing is a partial and misleading account if it professes to do more than outline the reaction of the time against the current scholasticism. Most commentators have, I suggest, given us nothing more than this partial and misleading account; they have, nevertheless, professed to offer this, not as an account of a weapon forged solely for offence, but as the constructive mature views of these thinkers upon meaning questions. Where the commentators have, vaguely, recognized that this was perhaps not the whole story they have neglected the philosophical importance of the hints they discovered.

Closer examination of these apparently simple theories of meaning reveals a complexity quite alien to the interpretations of them that we are asked to accept: an awareness of what was happening in the worlds of science and of literature at the time reinforces our doubts as to the exhaustiveness of these interpretations. It would be impossible to uphold the sort of view I have been putting forward if it could not be shown that John Locke did not
also reflect this advance in views concerning the nature of meaning. That Locke did reflect this advance I intend to show.

Locke, in fact, embodied all the characteristics of seventeenth-century empiricism that have so far been discussed. Not only was he concerned with the theory of meaning but also realized, perhaps more than his predecessors, that a theory of meaning was of the utmost importance and usefulness in relation to his general views concerning our knowledge of the world. He was also imbued with the current anti-scholasticism and the consequent distrust of language. This stemmed in part from his own university training at Oxford; as Cranston has noted while Locke was happy at Oxford, 'his happiness was not found in his work'.

Locke reacted in the same way as did Hobbes some fifty years earlier to the 'scholasticism' then current in the universities.

He was not uninfluenced also by the complexity of the 'naming' theories of men like Hobbes, although he was equally alive to the diversity of problems linked with any adequate philosophy of language and

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was as aware as was Hobbes of the multitudinous actual uses of language. As an early member of the Royal Society, and a life-long friend of Boyle, he could not fail also to be affected by the contemporary scientific views as to the place of language in the world of knowledge. Nothing could be more true than to say of Locke that 'his work stands in the closest relation to the contemporary movements of thought in his own country whether in religion, ethics, politics, or science'; while Locke had a happy facility of expressing his views regarding meaning in a manner attractive to posterity there is little in these views which had not been suggested earlier in the century. How far Gibson is correct in maintaining that Locke 'owed little or nothing, in the way of positive inspiration, to the greatest of his English predecessors' - Bacon and Hobbes - should become apparent in the sequel.

Locke's avowed intention in writing the Essay was 'to inquire into the original, certainty and extent of human knowledge, together with the grounds and degrees of belief, opinion, and assent'; 'to describe

to others more particularly than has been done before, what it is their minds do, when they perform the action they call knowing'. Since for Locke knowledge was equated with certainty, it was clear to him from the outset that a large amount of what we in practical life call knowledge would be more properly called 'opinion'; consequently he was as much concerned with the bases of belief or probability as with knowledge properly so-called.

As we have seen, Locke was only mirroring the intellectual climate of his time in seeking for the bases of truth and certainty within the realm of experience alone. As early as 1668 - more than 20 years before the publication of the Essay - he was to write:

True knowledge grew first in the world by experience and rational observations; but proud man, not content with the knowledge he was capable of, and which was useful to him, would needs penetrate into the hidden causes of things, lay down principles, and establish maxims to himself about the operations of nature, and then vainly expect that nature should proceed according to those laws which his maxims had prescribed to him.

In fact, however, Locke continues, we are unable to know,

neither should we expect to know, more than some few facts produced by visible external causes; to expect to know more is to put ourselves alongside God, a 'vanity' which has 'spread itself into many useful parts of natural philosophy'. Although for the most part we are confined to probabilities this is all we need for the practical affairs of life. The essence of things, their innermost structure, is 'as far beyond our capacity as it is besides our use'.

nevertheless, we need not complain at the paucity of our knowledge for the aim of speculation is to provide us with 'solid advantage' and to make our lives happier. The degree of knowledge that we do in fact attain to sufficiently achieves this aim.

Locke wrote several drafts of the Essay the first of which bears the date 1671. Draft B was also written in this year, Draft C being completed as late as 1685. Locke completed Book III of the


5. Ibid., p. 55
Essay by the autumn of 1686 and Book IV by the end of that year. Because of the greater complexity of the completed Book III compared with those sections of the earlier drafts dealing with the same general topics, together with the wider variety of subjects examined in the final version it seems reasonable to suppose that Locke's written material on Book III remained much as it had been in 1671 until after the completion of Draft G in 1685. It is significant also that Draft G contained no equivalent of Book III. That Book III did occasion Locke more trouble than he had at first bargained for is evidenced by his remark in a letter to Molyneux:

'Some parts of that third book concerning words, though the thoughts were easy and clear enough, yet cost me more pains to express than all the rest of my Essay'.


2. Locke to Molyneux, 20 January 1693; _Works_, Vol. III, p. 509. Note also the continuation of this letter: 'And therefore I shall not much wonder, if there be in some places of it obscurity and doubtfulness!'
Also, in the Essay itself, Locke says:

Having thus given an account...of our IDEAS... the method I at first proposed to myself would now require that I should immediately proceed to show, what use the understanding makes of them, and what KNOWLEDGE we have by them. This was...all I thought I should have to do: but, upon a nearer approach, I find that there is so close a connexion between ideas and WORDS, and our abstract ideas and general words have so constant a relation one to another, that it is impossible to speak clearly and distinctly of our knowledge, which all consists in propositions, without considering first, the nature, use, and signification of Language... (1)

Locke failed when writing Draft C to finish the task he had set himself in 1671, namely, the delimitation of the scope of our knowledge, not because of other demands upon his time or because of his chronically poor health but simply, it is suggested, because he had not at this stage seen where his argument should lead. Until 1685 at the earliest he was still groping for the answer that he sought; it was not until after he had forwarded Draft C to Clarke in that year that he was able to complete Books III and IV. One of the contentions I wish to uphold here is that Book IV could

1. Locke, Essay, II. 33. 19.

2. Aaron and Gibb, An Early Draft of Locke's Essay. Aaron and Gibb, in speaking of Draft B, say: 'The truth seems rather to have been that the second draft remained unfinished because its author did not know how to finish it'.

not be written until Book III had been completed to Locke's satisfaction: not only because of the theory of universals which Book III was to contain but because of the philosophy of language which it outlined. The writing of Book III was to prove the most formidable task of the whole Essay.

While Aaron and Gibb are correct in saying that Draft B remained unfinished because Locke did not know how to finish it, it is not the whole truth to add 'it is unfinished in respect of the very problem which Locke set out to solve, namely, that of the nature and extent of human knowledge'.

In addition, Locke had failed to arrive at a satisfactory philosophy of language to which to refer his theory of knowledge. Aaron has emphasized elsewhere the point made above, namely, that Locke's first intention was to proceed immediately following the discussion of Books I and II to an account of the extent and limitations of human knowledge; however, Locke's announcement of his recognition that this task could only follow an analysis of the functioning of language was added to

the last chapter of Book II, a chapter not added to the Essay until the fourth edition although, according to Fraser, there is evidence of it having been written much earlier.\(^1\) The obvious purpose of this passage is to bridge the apparent gap between the more or less familiar theory put forward in Book II and the more unfamiliar doctrines of the third book. It appears that the four last chapters of Book II in the earlier editions - on clarity, reality, adequacy, and truth of ideas - were themselves late writings and were, it has been suggested, written after Book IV had been sketched.\(^2\) If this is so then, \textit{a fortiori}, we may regard Book III itself as having been written after Book IV was fairly well advanced. It must also be borne in mind that in point of fact Book III was completed in September 1686, several months before the completion of Book IV. The fact that there elapsed so little time between the completion of Book III and the final work on Book IV is itself, I would suggest, evidence in favour of the belief that the contents of Book III did not appear necessary to Locke until the major part of the work upon the original problem of


\(^2\) Aaron, \textit{John Locke} (1955), p. 192, fn. 1; cf. p. 73.
the Essay was done; then, as I have suggested above, he adopted a philosophy of language consistent with his first conclusions concerning knowledge, and in turn adapted some of these latter as the argument of Book III became clear to him. It appears to me then to be very wrong to under-emphasize the importance of Book III in any discussion of the Essay. It is not an 'Appendix to Book II',¹ but is rather one of the major sections of the whole work upon which depends, and which is itself dependent upon, the theory of knowledge expressed in Book IV.

Following the first publication of the Essay, Book III was mainly ignored by Locke's critics; where it was not ignored it was misunderstood. Although Locke himself attributed great importance to this section of the Essay his contemporary and later critics were of a different opinion. Not that these critics considered Book III to be unimportant; according to Yolton, with the exception of the doctrines of real and nominal essences and of substances, they simply failed to understand Locke's objective in making this early excursion into the field of linguistic analysis.²

To this it may be briefly replied that if Locke's moves in this direction were misunderstood, his readers were unfamiliar with the intellectual history of their own time.

Section 2 Preliminary Doubts

I should like now by examining the things Locke actually said in Book III alongside his actual practice to show that in fact he held quite a different theory of meaning from that which we have seen is commonly attributed to him. In effect, my contention will be that he held two such theories for, as we have seen, he does fit into the general environment of Bacon, Hobbes, Glanvill, and the rest - in short, he accepts initially the naming theory of meaning which was commonplace for his contemporaries in their discussions of scientific discourse, although I shall contend that he came to see more clearly than did they that this theory was inadequate to explain our use of language in all contexts. Even though it can be said that Locke accepts the contemporary views upon this question this is only partly true for, as we have seen, a close examination of the use of 'idea' in the Essay leads us to make assertions which are not
consistent with the opinions of his contemporaries. For example, we saw that an explanation of meaning in terms of Locke's 'ideas' leads one to assert that any test of a meaningful use of words must be pragmatic in nature; further, though allied to this, we noted that a large amount of what Locke says when speaking in this way can only be interpreted as a denial of any simple representational view of meaning.

These aspects of what Locke has to say are closely linked. Because words 'properly and immediately' signify only the ideas in the mind of the person that uses them the most basic characteristic of meaning in Locke is that it is subjective or private in nature; my words stand for the ideas in my mind as yours stand for the ideas in yours. Even this sort of view, however - explicit though it is in Locke - should not be taken to imply a simple representational or picturing view of meaning. An idea for Locke - or at least a general idea, without which knowledge would be impossible - is not a simple copy or picture of reality, whatever else it may be.

The fact that Locke insists at this stage that the meanings of words are ideas leads me to suggest that on his view pragmatic or behavioural tests are the only
ones available to us for determining whether or not we are using a public language. Locke argues from the fact that we are understood by others to the fact that therefore their minds contain the same ideas as ours; but to do this is to argue fallaciously and is equivalent to saying that because private languages are possible, and prior in order of time, public language must in some occult way be derivable from these. However, although Locke says that words are primarily signs of our own ideas he goes on to say that constant use causes 'such a connexion between certain sounds and the ideas they stand for, that the names heard, almost as readily excite certain ideas as if the objects themselves, which are apt to produce them, did actually affect the senses';\(^1\) thus not only do objects excite ideas in us, but also words excite these same ideas. At the same time as saying that words properly signify only the ideas in the mind of the speaker he is also quite definite that no word is of much use in language if it 'does not excite in the hearer the same idea which it stands for in the speaker'.\(^2\)

Thus, Locke says on the one hand that it is reasonable

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2. Ibid., II.9.4.
to assume that ideas the same as those in the mind of the speaker are caused in the hearer's mind by the utterance of words, and, on the other hand, that no word would be useful for language unless this were the case. That is to say, he tries to infer from a doubtful premíss (that my words mean my ideas), together with an assumption whose warrantability is to say the least uncertain (that my words if understood refer to ideas in your mind), to the conclusion that it is necessary if there is to be language for the ideas in the minds of both speaker and hearer to be the same. However, we noted earlier that the only ground he produces in support of the assumption that the ideas in the hearer's mind must be the same as those in the mind of the speaker is that we are commonly understood; we saw further that it was hard to give a sense to this phrase unless we adopted a purely practical test of what it is to be understood. To conclude from this that the hearer's ideas are the same as those of the speaker is simply a disguised begging of the question.

Briefly, Locke's argument appears to be this: my words mean my ideas; you understand me when I talk; therefore, necessarily, if a word is to mean in a public way it must raise the same ideas to the hearer
as in the speaker. Any plausibility this argument has is caused by the ambiguity of the word 'understood'. It can mean, as I have suggested, that the hearer responds to the speaker's language in an appropriate manner in which case it will not do as a supporting premiss for the conclusion Locke wishes to draw. On the other hand - and this is the sense Locke must give it if he wishes to draw his conclusion - 'you understand my language' can be taken to have the sense 'you know what I mean'. But then Locke's argument amounts to no more than: my words mean my ideas, you know what I mean by my words (you 'know' my ideas), therefore you have the same ideas in your mind as I have in mine. This, however, is to assume in the second premiss the very point at issue.

Because of the lack of clarity in Locke's thought about the meaning of 'idea' he did not see that pragmatic tests were the only ground we could possibly have for asserting an identity of idea between speaker and hearer. It is however implicit, not only in Locke but also in the work of those other philosophers of the time who began from a similar position, that a right to say that our hearers entertain the same ideas as ourselves can only be a shorthand way of saying that we do communicate.
successfully - for there is no other possible evidence available to us that our hearers entertain the same ideas that we entertain. The theory of meaning which I shall later say is Locke's contribution to the philosophy of language does recognize the pragmatic elements necessary to any adequate account of meaning. It will be shown further that while Locke recognized this necessity he clung to the naming-model for the same special purposes as did his contemporaries. He failed, however, to see that the difficulties of a naming theory are inherent within it and cannot be avoided by limiting its scope.

However, if Locke did in fact hold the theory of meaning commonly attributed to him it certainly would be necessary for him to hold that the words in our language do refer to the same idea in both speaker and hearer, no matter how we interpret the phrase 'same idea'. For, if by speaking I communicate my thoughts to my hearer the same thoughts must be aroused in him if I am to be understood - if I say, 'Cats are furry' and you think 'Cows are stolid', i.e. if you understand by my statement what I would have understood by the statement 'Cows are stolid', then we do not communicate. No matter how we go about testing this, successful practical communication must depend
upon a similarity of thought; certainly one of the (misleading) ways we can express this is by saying that we 'have the same ideas'. And Locke is quite clear in the early part of Book III, where he seems to align himself more with those of his contemporaries who have held a simple naming theory of meaning, that the words in our language do refer to the same ideas in different people when they communicate. Not only is this a fact of communication, it is also a necessary condition of it.

The point I have been labouring at some length is that if Locke holds the theory of meaning normally attributed to him he must say that the fact of communication is itself sufficient proof that in discourse the same ideas are in the minds of both speaker and hearer; for if words mean primarily those ideas which are in the mind of the speaker then, if my words are to 'mean' anything to the hearer, they must refer to ideas in the hearer's mind — and if I am 'understood' these ideas must be the same as mine. If they were not, then the practical effects of any particular use of words would be different for both speaker and hearer, which would amount ultimately to a denial of the fact of communication. Leaving aside for the moment the pragmatic implications of Locke's use of 'idea' we may conclude that for him it is essential, if he is to admit the fact of communication,
that he admit to a similarity between the ideas of different people that are occasioned by a particular word.

We should expect, therefore, that Locke, for whom language is essentially a communicative activity, would wish to hold that by and large we do find this correspondence between the ideas of different people. It is therefore surprising and completely destructive of any suggestion that Locke holds a simple naming theory of the 'idea'-type to find that he goes on to say that seldom, if ever, are the ideas that two men attach to the same word identical.

The names of mixed modes, for example, are most liable to be uncertain in their signification — i.e., they are the most likely of all names to be referred to quite different ideas in different people. The reason for this uncertainty is that these words name ideas which are as a rule very complex, ideas which we form for our own purposes without being able to have any recourse to any standard in nature as an aid in our construction of them.¹ The ideas signified by the names of substances are also often doubtful as between persons.

¹ Ibid., II.9.6.
though for the opposite reason, namely, that they are derived from natural standards. The difficulty we experience in determining the signification of names of this sort arises from the fact that the standards from which we 'take' our ideas either cannot be known at all - as in the case of 'real essences' - or, if they are known, are known only imperfectly.¹

It is even possible for there to be doubt concerning the signification of the most simple of all names, the names of simple ideas. Locke does say that the names of simple ideas and, next to them, the names of simple modes are the least doubtful in signification. 'White and sweet, yellow and bitter, carry a very obvious meaning with them, which everyone precisely comprehends...'; and 'Who ever that had a mind to them mistook the ordinary meaning of seven, or a triangle?'. Nevertheless, despite these clear remarks, Locke - with characteristic caution - still does not wish to say that there can be no possibility of error between men so far as attaching names to their simple ideas and simple modes is concerned. He only goes so far as to hold that the names of simple...

¹. Ibid., II.9.11.
ideas are 'the least liable to mistakes' while those of simple modes are 'next to those of simple ideas, least liable to doubt and uncertainty'. Though it is slight there still remains a very real possibility of error in attaching names to these sorts of ideas just as there is in the case of the more complex ideas of mixed modes and substances.¹

There is here an apparently major inconsistency in Book III of the Essay: on the one hand we are told that the development of a language common to several people entails that the words used by anyone should arouse in the mind of a hearer the same ideas which were the occasion of the speaker's utterance; on the other hand, we find that seldom, if ever, do the ideas in the minds of the speaker and hearer happen to be the same. No matter what name we use we can never be certain that it refers to the same idea in our mind as it does in that of the person who hears us. Even the simple ideas, which Locke is convinced as possible must be the same in each of us, may not in fact be so; 'they are generally less doubtful than those of mixed modes and substances!',² but he is not prepared to admit

¹. Ibid., II.9.18 and II.9.19.
². Ibid., III.4.15 (underlining added).
that we can be assured of a correspondence between our simple idea of, say, yellow, and another's idea to which he applies this word. This slight doubt in the case of the names of simple ideas is increased many times when we come to use the names of the more complex ideas: the name we use for a particular idea of substance 'unavoidably comes to have, in several men, very different significations' ¹ and 'there are few names of complex ideas which any two men use for the same just precise collection of simple ideas'.²

As far as we have gone then we find Locke holding two incompatible positions. If we are to communicate, the ideas to which our words refer must be the same in both speaker and hearer; nevertheless, he says quite definitely that this state of agreement between our ideas never in fact exists - or, if it does, it is so very rare as to be unimportant. The suggestion that I wish to make is that the first of these views was demanded by Locke's psychological approach to the theory of knowledge in Book II; this, however, he found to be incapable of providing an adequate account of the notion of meaning as it occurs in our

1. Ibid., III.9.13 (underlining added).
2. Ibid., III.10.22.
ordinary language. When struggling with the problems that his theory of knowledge raised for him he came near to proposing a more satisfactory and fruitful theory of meaning than that usually attributed to him and in doing this he appears from time to time to be repudiating completely the subjective nature of the meaning-relation implied in Book II. As it was he never did this but permitted the two theories to exist side by side; one of these we can see as looking back to Book II, the other as anticipating Book IV.

Locke, on the face of it, is wanting to hold to the truth of the following propositions: (a) men never have the same ideas; (b) men without the same ideas cannot converse; (c) the chief end of language is communication. The difficulty here is that (c) is incompatible with the conjunction of (a) and (b). Locke has no doubts about the truth of (c) - in fact, it is difficult to see how he could have; therefore, he should be prepared, if he is to remain consistent, to give up his belief in the truth of either (a) or (b). The truth of the second proposition is central to his statements in Book II - e.g., '... if it should happen that any two men should have different ideas, I do not see how they could discourse or argue one
with another..." On the other hand, in Book III he tends to discard this belief the more he progresses into his chosen topic until we find him making such remarks as that 'unavoidably' the names of particular substances refer to different ideas in different men. Bearing in mind that Book III was conceived and written after the subject matter of Book IV had become fairly clear to Locke, I think it is fair to say that he found the private and subjective nature of the theory of meaning suggested by Book II inadequate to account for the fact of communication of knowledge by means of propositions. I would want to suggest therefore that to say that for Locke words mean ideas - as do Aaron and O'Connor - might be consistent with the psychologism of Book II, but it is simply a misleading interpretation of Locke when considered alongside the later part of the Essay. To uphold the word-idea theory is to deny the possibility of communication, and to do this is to refuse to face the facts; this Locke would never have done.

Section 3  
Locke's Double Theory of Meaning

The first suggestion of the theory of public meaning to be developed in Book III occurs in Chapter 2

1. Ibid., II.13.28.
where, after insisting that words can stand only for the ideas in the mind of him that uses them, he goes on to say that men also customarily refer their words to two other things, namely, the ideas in other men's minds and the things in the real world. We customarily, that is, take our words to be signs of, or stand for, the ideas in the minds of our hearers as well as real objects. As we have seen, when Locke is interpreted as holding a simple naming theory of meaning, these suppositions are essential for his view if we are to communicate by means of language. Nevertheless, he holds that such an attitude towards words is a perversion of their use: however, although it is a perversion of our words so to refer them, such an extension of their original and proper reference is necessary as a practical measure, a measure essential to a communicative language. That we do secretly refer our words to the ideas in other men's minds is a fact about language for Locke, though he speaks for the first time in this section - and it is this that interests us here - as though it does not matter a jot whether or not the words we use do in fact name the same idea in both speaker and hearer so long as they use their words in what they take to be the 'common
acceptation of the language.¹

In thus using words in what we take to be the 'common acceptation' of the language we suppose that we make our word the sign of the same idea to which most people apply that word. That is to say, Locke speaks here as though it might possibly be false that our words do in fact stand for ideas in the minds of other men, or even for the 'reality of things', but that this possibility is unimportant and irrelevant provided that any difference in the meanings of our words is indiscernible in ordinary talk. My idea of a centaur might differ from yours but, it is implied, so long as the discrepancies between our ideas are not too great this will not matter for the purposes of discourse. On whatever view of 'idea' we take this remains true; if we consider ideas as images it might be the case that my 'picture' differs markedly from yours; if we think of 'idea' in the more Lockean sense as a sort of disposition it might be the case that you have a preparedness, a willingness, to classify more or different objects as centaurs than I. However, so long as these different classificatory tendencies are not

¹. Ibid., III. 2.4.
reflected in too gross a difference in behaviour, we will still be able to talk. On the other hand, where major differences exist between two persons' ideas these differences will be made apparent in conversation; where they do become apparent they may, following discussion, be overcome or corrected. I think it is suggested by the things that Locke says here that so long as we do not find that we are unable to speak to one another intelligibly, it does not matter whether our words have the same meaning - in the sense of 'stand for the same idea' - or not; our words will have meaning in the sense that we will each be able to know what the other means, we will be able to understand what is being said.

We find here, then, the first suggestion of the double theory of meaning that Locke is going to employ: while words have meaning in the sense that they stand for, represent, ideas in the mind of the speaker, and are supposed also to stand for ideas in the mind of the hearer, this is purely a theoretical notion of meaning which he considers to be implied by the conclusions of Book II. In practice he is prepared to admit that words have meaning if they are used and understood in conversation, whether or not they 'stand for' the same idea in people's minds. Here the
test of the meaningfulness of words does not involve any attempt to discover the ideas they are used to refer to: here there is involved only the simple pragmatic test - are they understood? because if so they are used meaningfully. The core of objectivity of meaning may be given to us by the word, but the public meaning of words arises out of the successful and consistent use of a word that has its private meaning for each of us. This suggestion recurs throughout Book III, becoming more explicit and receiving further development as Locke proceeds.

The most important chapter for our purposes in this Book of the Essay is Chapter 9; here we find the nucleus of Locke's theory of public meaning. This theory to which he in fact holds - at least for the purposes of ordinary discourse - is also, as we shall see, most consistent with the general attitude to knowledge expressed in Book IV. Because of the fact, however, that what he has to say in this respect conflicts with the suggestions of Book II we can see in the third Book these two apparently incompatible theories being held alongside one another: on the one hand Book III looks forward to Locke's solution of the
problem of the 'certainty, and extent of human knowledge'; on the other hand, it refers back to his account of the 'original' of this knowledge provided in Book II.

At the beginning of Chapter 9 Locke notes a 'double use' of words to which he has already referred, namely, their use for recording our thoughts and their use for communicating our thoughts to others. It is commonplace nowadays of course to say that the recording of our thoughts is simply a special case of communication in general for seldom, if ever, is it carried out without an intention to communicate, if only with ourselves at some future time. Recording, in the sense of writing down our thoughts for later perusal, is as much a type of communication as is our normal speech and writing. There is no doubt also here that Locke, looking back to Book II, has in mind the possibility of a private language where each word has for each of us its subjective private meaning. Here I do not wish to discuss the use of language for recording our thoughts but intend to consider its second use, its 'chief end', communication.

Communication, as Locke uses the word, refers to the public use of language; it is in this use of language,

1. Ibid., I.1.2.
2. Ibid., III.3.3.
if anywhere, that we will find him using in practice the theory of meaning which has already been suggested as becoming explicit in Book III. He draws a distinction between two types of communication - 'civil' and 'philosophical' -, a distinction which we have already encountered in our earlier discussion. At first sight, this distinction seems only to have been made in order to be avoided in what follows: Locke's commentators, if they mention it at all, do so only in passing. However, I hope to show that this distinction is of paramount importance for a proper understanding of Locke's explanation of the phenomenon of meaning.

By the civil use of words is meant 'such communication of thoughts and ideas by words as may serve for the upholding common conversation and commerce about the ordinary affairs and conveniences of civil life...'.

It is obviously this use of words that Locke has in mind when he suggests that identity of ideas in both speaker and hearer is unnecessary for our statements to be meaningful; provided that we are understood we may be said to be using our words with meaning. As contrasted

1. Ibid., III.9.3; also see above pp. 122-3.
2. Ibid., III.9.3.
3. Ibid., III.2.4; also see above pp. 94-6.
with this the philosophical use of words serves *to convey the precise notions of things, and to express in general propositions certain and undoubted truths, which the mind may rest upon and be satisfied with in its search after true knowledge*.

Already in the foregoing chapters we have seen that this distinction does not originate with Locke; it was in fact a commonplace distinction of his time which originated - so far as the limits of this thesis are concerned - with the various distinctions of a similar nature drawn by Francis Bacon. The distinction was bound up very closely with the desire for a special language of science tailored to meet the requirements of the great advances being made within the fields of endeavour which have since come to be called 'scientific'. It was also linked with the desire for reform whether this suggested reform was to take the direction suggested by Hobbes, or that suggested by Wilkins. The *philosophical use of words* was to be the exact, knowledge-expressing language of the special sciences; more exact and different criteria were demanded for a given 'philosophical' use of words to be counted as 'meaningful' language, than were required for the more ordinary uses of

1. Ibid., III.9.3.
language referred to by the phrase 'the civil use of words'.

Though at first sight this interesting distinction does not appear to be developed by Locke we do not have to look far to find evidence that it was never far from his mind. It is one of the avoidable abuses of words to suppose that they always have a certain and fixed signification:¹ though seldom are the words we use accompanied by 'clear, distinct, settled' ideas this does not matter for ordinary discourse. However, for there to be knowledge we require 'precise determinate ideas' which are the significata or meanings of our words in philosophical discourse. In ordinary language, that is, our words do not and need not refer to 'settled' ideas; in 'philosophical' language they must so refer. Locke's demand for precision in philosophical or scientific speaking is engendered by the belief of his century in the possibility of coming to know the minute constituents of things upon which their discernible qualities depend: words used loosely 'are utterly uncapeable to produce infallible knowledg of things or to make demonstrations of reall beings existing in rerum natura';² on the other hand he believed -

¹ Ibid., III.10.2.
² Aaron and Gibb, An Early Draft of Locke's Essay, (Draft A) p. 49.
in common with others of his time - that words used as rigid names of specific ideas could lead to our having certain and universal knowledge.

Locke, elected a Fellow of the Royal Society in 1666, is deeply conscious of that Society's demand for a 'plain' style of prose, an exact method of writing and speaking, as essential to the advancement of the Royal Society's aims. We have seen how the Society set out to concern itself with things, not names; how its members endeavoured to seek clarity and freedom from rhetorical flourishes in all their communications. It was the wish of the scientific men of this time - among whom Locke was proud to count himself - to seek a 'primitive purity and shortness' in their language:

They have exacted from all their members a close, naked, natural way of speaking; positive experiment; clear senses; a native easiness; bringing all things as near the mathematical plainness as they can; and preferring the language of artizans, countrymen and merchants, before that of wits and scholars; (1)

This search for clarity and exactitude was indicative of the belief of the Royal Society's virtuosi in the possibility of achieving a major advance in knowledge

through the medium of scientific exactitude in language. Words, wisely used, were in themselves to become almost an instrument of discovery. This general seventeenth-century attitude regarding the power of language is assumed by Locke throughout Book III: he had, after all, been continually in touch with views of this sort - both in his reading and in discussions - for some thirty or forty years prior to the publication of the Essay.

For Locke the chief end of communicative language in general - that is, for both the philosophical and civil uses of words - is to be understood. Locke says again here that words do not serve this end 'well', that is, it is not easy to make oneself understood by means of them, unless they excite the same idea in the hearer as they do in the speaker.¹ He even goes so far as to say that to serve the end of communication - which is to be understood - it is necessary that words excite 'exactly' the same idea in both speaker and hearer:² unfortunately, however, for those who would wish a simple naming theory of meaning upon Locke, in this same section we find him saying that, in the case of compound ideas at least, words 'have seldom in two different men the same precise signification' where

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¹ Locke, Essay, III.9.4.
² Ibid., III.9.6.
'having the same signification' can only be taken as equivalent to 'standing for the same idea'. Thus we find Locke holding, within the space of a few lines, the apparently inconsistent position which we have already noted; i.e., on the one hand he wishes to hold that for communicative language to be understood it is necessary that the speaker's and hearer's ideas should be the same, while on the other hand, he notes that it is seldom that ideas are in fact the same between any two people. The constant recurrence of these two strains of thought, particularly occurring as they do close together, makes it reasonable to assume that Locke was fully aware of their apparent inconsistency. These two trends imply, as we have seen, two separate theories of meaning: that Locke felt he could successfully hold these two views together is borne out by the use which he makes of them in his discussion of knowledge.

Certainly if Locke did not believe that he could advance both these views then his remarks in these sections considered alongside the fact that we do communicate by means of words would make nonsense of much that he has said elsewhere. Or, at least, they would do if it were not for one further fact. This further fact is that over a large area of human discourse Locke is satisfied with a more vaguely stated but nevertheless interesting and important theory of meaning.
which makes the meanings of words dependent upon their successful and consistent use in discourse regardless of the 'ideas' for which they are supposed to be representative. Neither is it purely coincidental that the sphere of human activity to which Locke denies the possibility of knowledge in his restricted use of this term, is the same sphere to which Locke asks us to apply different meaning-criteria from those with which he initially presents us. A corollary of this view of meaning is that it is no longer a property of words as such, but is a function of statements - for meaning is now a function of successful human discourse which is impossible without the use of statements.

Not only is this so but also the theory concerning meaning which is beginning to be put forward here is able to ascribe meaning to certain sentence-forms excluded from the 'word-idea-thing' theory usually attributed to Locke: although Locke does not himself develop this view, interrogatives, commands, interjections may all be said to have meaning in the sense that they may be used successfully and consistently.

Where ideas do in fact differ between speaker and hearer - and from many remarks that Locke makes one is tempted to say that this is all the time - 'common use' is the standard to which Locke appeals.
It is true, common use (that is, the rule of propriety) may be supposed here to afford some aid, to settle the signification of language; and it cannot be denied that in some measure it does. Common use regulates the meaning of words pretty well for common conversation; but nobody having an authority to settle the proper signification of words, nor determined [sic] to what ideas any one shall annex them, common use is not sufficient to adjust them to philosophical discourse; there being scarce any name of any very complex idea (to say nothing of others) which in common use has not a great latitude, and which, keeping within the bounds of propriety, may not be made the sign of far different ideas. (1)

The nature of Locke's 'philosophical use of words' remains to be examined in what follows; here, however, we should note that the meanings of words in ordinary conversation are regulated by common use. The 'common acceptation' of a language is the criterion that we employ in practice to determine the meanings of the words we use, for

...men stand not usually to examine whether the idea they and those they discourse with have in their minds be the same, but think it enough that they use the word, as they imagine, in the common acceptation of that language, in which they suppose that the idea they make it a sign of is precisely the same, to which the understanding men of that country apply the name. (2)

Surely, also, where Locke is deploring the fact that rules for determining common usage are not available.

1. Ibid., III.9.3.
2. Ibid., III.2.4.
we find the suggestion that not only are the meanings of our words regulated by common use, but the meanings of the words are equated with the uses to which we put them? For example, where Locke says, 'it is often a matter of dispute, whether this or that way of using a word be propriety of speech or no:¹ the use given to a word, the way in which it is used, is almost, though vaguely, being seen as the meaning of the word; that is to say, Locke is beginning to see that 'meaning' (at least in civil conversation) is not a relation between a word and some sort of entity, but is nothing except the range of possible uses which this word may be given. He is beginning to see, with Humpty Dumpty, that we, and not words, are to be masters.² However, no matter what attitude we are tempted to take here it is clear that for Locke the only available test of whether or not we are speaking meaningfully in the ordinary affairs of life is to be found in the fact that we are able to use words in a manner which is understood by others.

As we have already noted briefly, Locke has

1. Ibid., III.9.8.
2. 'The question is', said Alice, 'whether you can make words mean so many different things.' 'The question is', said Humpty Dumpty, 'which is to be master - that's all.'
already shown us why it is impossible, no matter what type of word we use, that they should stand for the same ideas in the mouths of all men. Each type of name - whether it be a name of a simple idea, a mixed mode, or a substance - is liable to variation between men, though for a different reason in each case. The name of mixed modes, Locke says, especially moral words, are more often than not learnt before we have 'annexed' any precise ideas to them; 'these moral words are in most men's mouths little more than bare sounds...'.\(^1\) Because we often learn them before being aware of any determinate ideas which they signify, because men do not have in their minds the same collection of ideas when they use moral words, we have been at a loss to reach even a small amount of agreement in moral matters; most of our arguments involving the use of these words are only about the meaning of a sound, not about the precise idea for which the word should stand.

The names of substances also seldom stand for the same idea in speaker and hearer. In forming the ideas to which Locke at times thinks these names refer we follow 'patterns' or 'archetypes' which we perceive

in nature: our ideas of substances, however, although derived from nature's patterns do not correspond to these patterns completely if - as we do - we refer our ideas to the real but unknown essences of things. On the other hand, where we do not refer our ideas to unknown essences but simply to nominal essences which we can all know we here only know the essence imperfectly. The reason for this is that there are so many co-existing simple ideas which can go to make up our idea of a particular substance that different men habitually frame different ideas about the same substance simply by considering either more or less of the simple ideas as going to make up the complex idea of that substance. Thus 'in the substance of gold one satisfies himself with colour and weight, yet another thinks solubility in aq. regia as necessary to be joined with the colour in his idea of gold, as anyone does its fusibility'.

Any one of these qualities, Locke is saying, has as much right to be included in the complex idea of gold as another - no particular quality has special place as a defining characteristic of the substance.

1. Ibid., III, 9.13.
Again, however, we find Locke saying that this more or less unavoidable discrepancy between the different ideas men have of substances is not material to the carrying on of ordinary human discourse: while we are seldom, if ever, agreed about the precise number of simple ideas belonging to any sort of things to which we refer by one name, this does not matter for 'gross and confused conceptions, and inaccurate ways of talking and thinking'.¹ Most of us adopt the names which we already find in use, or even coin names of our own, without being clearly aware of a precise number of simple ideas as making up the general idea to which we refer by the name. Nevertheless, for the purposes of 'common conversation' this lack of definition does not matter. We saw also before that even the names of the simple ideas and the simple modes do not always name the same idea in speaker and hearer; however, once again these 'imperfections' do not matter so far as common conversation is concerned, though Locke considers them important hindrances to the 'philosophical' use of words.²

To my contention that for Locke 'having a use' is a sufficient criterion of the meaningfulness of

1. Ibid., III.6.30.
2. Ibid., III.9.15.
statements it might be objected that I am overlooking Locke's criticism of 'scholastic jargon' in Chapter 10 of Book III. If, it might be said, 'having a use' is enough to determine the meaningfulness of statements, how is 'scholastic jargon' to be criticized - for this has a use. This objection, however, quite misses the mark. I have not meant to say that for Locke 'having a use' is a criterion of meaning in the sense that being in fact used or uttered in sentences makes words meaningful. I have said that Locke was greatly concerned when talking in this way with notions such as the 'common acceptation' of a language, and with 'rules of propriety' - it is these rules and usages which enable us to say that an expression has meaning, but the meaning is not identical with the use of an expression. If there is a common use of an expression in the language, a use in understood sentences, there is no doubt that for Locke the word has a meaning. But it has a meaning only in 'civil' or ordinary conversation. And the whole point of the seventeenth-century attack upon 'scholastic jargon' was to deny its claim to be a knowledge-expressing or 'philosophical' use of language.

Locke's attack upon scholasticism in Chapter 10 of Book III takes the form of a series of illustrations
of the 'abuses' or 'wrong use' of words. He has already dealt in Chapter 9 with the more or less natural and inevitable 'imperfections' of language and now turns his attention to those variations from the norm which he considers to be capable of correction, namely, the 'abuses' of language. In section 4 of Chapter 9 he has said that words are inevitably imperfect because of their doubtful reference as between different people, i.e., they may refer to quite different ideas when used by two different people. This natural imperfection of language may be remedied sufficiently well for ordinary discourse by the rules and customs of ordinary usage; but this, of course, is not sufficient to make words well-fitted for 'philosophical discourse'.

It is clear then that Locke is quite happy to say throughout Book III that for words in their most common use to be meaningful, for language in its ordinary sense to have meaning, it is not necessary that words should stand either for **precise** ideas in the mind of the speaker, or for the **same** ideas in the minds of both speaker and hearer; in fact he seems to be

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1. This will be discussed further when we come to consider what Locke has to say about 'philosophical discourse'.
wanting to say that in our ordinary talk such requirements are necessarily incapable of fulfillment. All that is necessary to judge the words of a language to be meaningful is that they should enable us to communicate with and be understood by those to whom we address ourselves. Thus, though Locke's professed belief is that

Words, in their primary and immediate signification, stand for nothing but the ideas in the mind of him that uses them, how imperfectly soever or carelessly these ideas are collected from the things they are supposed to represent, (1)

his practice is that the only possible test of a word having public meaning is to see whether or not it is successfully used in ordinary conversation. This being so, it is difficult to see the point of insisting that the meaning of a word is the idea it refers to in the mind of the speaker; in fact it would be contradictory to say this and at the same time to say that the word for the hearer 'means' the idea in his own mind - an idea which we have seen is usually different from that of the speaker.

For then we would be saying that the hearer understands the speaker, i.e. knows what he means,

1. Locke, Essay, III.2.2.
understands his meaning, at the same time as saying that the speaker's words mean something different for him from what they mean to the hearer. If my idea of a tiger differs from yours yet I am able to understand your statements about tigers - run inside if told that there is a tiger in the garden, expect stripes if told there is a tiger skin on the floor, and so on - then we may (and do) say that I know the meaning of 'tiger' in these statements, not in the sense that I am aware of those characteristics which you take to be the defining characteristics of tigers, but in the practical and important sense that I react appropriately to remarks about tigers. And this - or something like it - is the way Locke uses the word 'meaning' when he casts logic and his psychological presuppositions aside and allows common sense to prevail.

We have seen, however, that Locke holds a further view of meaning linked with his second main use of language, namely, the philosophical use.

It is only in comparatively recent times that a distinction has been drawn between 'science' and 'philosophy'. For Locke 'philosophy' is 'nothing but
true knowledge of things: 1 Boyle, a physicist; Sydenham, a medical scientist; Huygens, a mathematician; and 'the incomparable Mr. Newton' are all philosophers in Locke's sense. The subject-matter of philosophy is whatever it is that a man knows when he knows with certainty - it is a term which covers the whole body of knowledge. Knowledge Locke divides into 'natural philosophy' (or 'science' as we understand it), moral philosophy, and logic ('the doctrine of signs'). 2 The philosopher's intention is 'to erect as complete and adequate a system as he possibly can .... Locke's researches into social and moral problems would, of course, be philosophical, but so also would his work in medicine'. 3 Locke regarded his own work in the Essay as simply preliminary to the study of philosophy proper which he tended to identify with the sort of work done by Newton, the discovery or formulation of, he thought, universally true and certain propositions concerning the nature of our world and the behaviour of the objects within it.

1. Ibid., 'Epistle to the Reader'.
2. Ibid., IV.21.2.
To equate Locke's 'philosophical use of words' with a 'scientific' use of words - i.e., the use of language required and expected in scientific theories - is quite usual. I think that this suggested equivalence between 'scientific' and 'philosophical' in the Essay is approximately correct - and only approximately - but we shall see later that it is in some ways misleading to make this identification. Especially we must remember that the 'scientific' facts mentioned by Aaron are not the scientific facts with which Locke would be concerned. For the moment however it will be a good working rule for us to remember that where Locke speaks of the 'philosophical use of words' he has in mind primarily the sort of verbalization of scientific theories which we find in the work of men like Newton.

This distinction between philosophical and civil discourse was common to Locke's time, just as to-day we would distinguish between scientific and ordinary talk. For example in the Fort Royal Logic there is a discussion of fallacious reasoning which employs the same sort of division which we find in the Essay. The major part of this discussion is

1. See, e.g., above p. 122.
intended to show the sort of fallacies common among 'philosophers' yet the examples given are of the sort which we would call 'scientific'. The authors go on to say, 'We have seen some examples of the faults which are most common in reasoning on scientific subjects' before drawing attention to fallacies 'which are important in civil life, and which constitute the ordinary subject of [men's] conversation'.

Well, it is the philosophical use of words, for Locke, which expresses and conveys to others exact and precise ideas and thus conveys 'the precise notions of things'. It is by means of this use of words that we are able to make universal propositions which are certainly true; those propositions which are the ideal type of known propositions. These are the propositions which give us a 'knowledge of things, as they are in their own proper beings, their constitution, properties, and operations...' the systematic study of which - ending in 'bare speculative truth' - Locke calls 'natural philosophy'. It will be remembered that Locke seemed to be saying at first that nowhere do words achieve their purpose of being understood - or, at least, they do not

1. The Fort Royal Logic; trans. T.S. Baynes (7th edition); ch. 20, pp. 266-7.
serve it well - unless they cause the same idea to arise in the hearer as was present in the mind of the speaker when he uttered the word. We saw further that he was prepared to believe that 'exactly' the same idea must be present in both minds. While in 'civil use' there is good reason to believe Locke did not insist upon this as a requirement for the words in our statements to have meaning - in fact, he saw its impossibility - in the case of the 'philosophical' use of words he does not deviate from his original position. Any philosophical use of words must involve the same idea in both speaker and hearer.

We also saw that the rules of propriety allow us a great deal of latitude in the civil use of words. This permits them to be used with a great variety of 'meanings' - in the sense of 'for a variety of ideas' - within a vaguely limited range. Rules of propriety, therefore, are sufficient to regulate the meanings of words in civil use: which is to say, of course, that a test of whether or not a word is used meaningfully, or with one of a possible range of correct meanings, is to see whether or not the use of the word accords with common usage. On the other hand, this is not sufficient for the philosophical use of words because the 'common acceptation' of a language is too loose a standard to satisfy Locke's demand for a language with
the high degree of precision which he envisages. No latitude in the meanings of 'philosophical' words is permissible - each word must stand for one determinate idea in the mind of the speaker and, if he is to be understood, the use of this word must also call up exactly the same idea in the mind of the hearer.

The paradigm cases of a philosophical use of words are, according to Locke, to be found in the studies of morality and mathematics. Both morality and mathematics are disciplines in which we can have real instructive knowledge because the ideas to which mathematical and moral words refer are 'their own archetypes' - i.e. they are not copied from, neither do they profess to copy, anything in nature. Confining ourselves for the moment to arithmetic we may say that arithmetical ideas are simple modes formed by a repetition of the simple idea of unity; 'By repeating this idea in our minds, and adding the repetitions together, we come by the complex ideas of the modes of it'. In doing this, in adding, say, 2 and 2 to make 4, we make no assumptions about the natural world; whether or not there are four things in the universe we are still able to add 2 and 2 and gain the answer, 4.

1. Ibid., II.16.2.
The idea of 'four' is an idea which we construct by the mere repetition of the idea of unity, and its real essence therefore coincides with its nominal essence. The simple modes of numbers are completely distinct from each other; differences between them are obvious because the smallest difference possible is that of a unit which, as Locke says, makes 'each combination as clearly different from that which approacheth nearest to it, as the most remote...'.

It is because of this clarity of ideas, and the distinctions between different ideas, in arithmetic that arithmetic is an ideal subject for the philosophical use of words. Locke is contending that my idea of 'four' cannot fail to be precise and determinate any more than my use of the word 'four' can fail to call up the same idea in the mind of my hearer. Although I have confined myself here to arithmetic alone we shall see later that Locke has what he takes to be good reasons for extending these suggestions to the whole of mathematics.

Moral words also may be the subject of philosophical discourse because the ideas to which moral words refer are all of them 'their own archetypes'.

1. Ibid., II.16.3
We do not necessarily, according to Locke, first observe certain situations and then frame ideas corresponding to certain features of these situations in the formation of our moral notions. Rather, we put together certain ideas received through experience in an arbitrary but consistent fashion and label the resulting complex idea by a certain word. Moral terms can be used in 'philosophical' or scientific and exact discourse because we can define them exactly and completely, thus ensuring as it were that the same idea which is in our mind is raised in the mind of our audience. This ability is, of course, based upon the assumption that the simple ideas are the same in everyone, but we have already seen that Locke does not always hold to this belief.

Locke also says in Book III that moral words are usually 'loose', 'undetermined', and 'obscure and confused' in their signification. At first sight this seems to deny the possibility of their occurring in a philosophical use of words. However, despite the fact that these words usually have these disadvantages, they do not necessarily exhibit these features. Locke is quite firmly of the opinion that because these

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1. Ibid., III.9.9.
words refer to ideas which are of our own construction, to ideas which can be defined exactly and made clear in discussion, because their real essence can be known, the looseness and obscurity which we customarily find in them are not necessary faults of the words but are simply the result of the carelessness and laziness that men habitually bring to the study of moral ideas. However, Locke does not develop the notion of a science of morality in the Essay beyond giving a few hints of his view; he is prepared to accept mathematical statements as the model of those which are able to be used in philosophical discourse. We have already seen, and shall see later, that this view presents certain difficulties for him.

While he believes that the philosophical use of words is possible in the case of morals and mathematics these two disciplines are, on his view, very special cases. Although he wants to say, and does say, that moral and mathematical propositions give us real instructive knowledge it is difficult to discover wherein propositions of this sort differ from those propositions which he regards as trivial such as, for example, those dealing with the nominal essences of substances. In view of the fact that a philosophical use of words is defined as that which conveys 'the
precise notions of *things* and, *prima facie* at least, mathematics and morality are on Locke's view not concerned with things, it would seem that the interesting case so far as philosophical use is concerned would be to consider whether in our talk about the things in the world, in our talk about 'substances', we can indulge in 'philosophical discourse'.

Locke denies that we can make a 'philosophical' use of the names of substances. Because every simple idea 'communicates' with countless others we are unable to determine how many simple ideas are going to make up the precise collection to which we are going to refer by the name of one substance.¹ We can have, he says, no possible authority for including certain qualities within our idea of gold, for example, and for leaving others out. But in the philosophical use of words the words must stand for, signify, determinate ideas which reveal to us the real essences of that which we are talking about, for only then are we able to arrive at universal known propositions concerning the nature of things. In brief then, all our discussion about things in the world - or at least our universal statements - is, at the present stage of science,

necessarily inaccurate so far as we are unaware of the innermost structure of those things upon which depend all their more obvious qualities: they are not fit topics for philosophical discourse.

This fact, the fact that our ideas of substances never accurately picture reality, does not matter in ordinary life — in the 'civil use' of words — for there we can manage our affairs well enough without a strict correspondence between our ideas and reality.

But in philosophical inquiries and debates, where general truths are to be established, and consequences drawn from positions laid down, there the precise signification of the names of substances will be found not only not to be well-established, but also very hard to be so. (1)

Locke makes his position clear by means of an example concerning gold. If we make malleableness part of our complex idea of gold, a defining characteristic, we may construct universal propositions about gold and draw true consequences from these propositions. These will be propositions about gold given the definition of gold which we have accepted. But if another man should happen not to include 'malleableness' as a defining characteristic in his use of the word he will remain unconvinced of the truth of the consequences we have

1. Ibid., III.9.15.
deduced, for the argument will only be about nominal essences, not about something really existing in nature. As a scholastic would say, we are drawing consequences from a verbal, and not a real, definition. It is impossible at the present stage of human discovery for us to determine the real precise signification of 'gold', i.e. we cannot know what are the essential properties of gold, or the governing principles, the innermost structure which determines the properties which it does in fact have. To do this, on Locke's view, we should need to be aware of this real constitution upon which the properties depend, and not only this - for we should need to 'see' that necessarily a thing of this constitution has these properties. Our descriptions of things, being necessarily partial, are imperfect, and our words naming substances considered as existing in nature must always have an uncertain correlate or meaning.

As we noted earlier, the names of simple ideas, simple and mixed modes, are all liable to uncertainty - as are those of substances. However, there is nothing in the nature of the ideas named by the words of the former sort which prohibits us having clear ideas about which we can make universal propositions and from which we can draw true consequences. We cannot, for
example, know for certain as a rule the 'precise collection of simple ideas' that make up the complex idea of a mixed mode in another's mind; however, if we take sufficient care with our definitions we are able to have in our mind precisely the same idea which is in another's mind, and thus needless arguments on these questions may be settled conclusively one way or the other. Once we have settled the nature and extent of the ideas for which these words stand we have \textit{in so fact}o settled their real signification, for these ideas have no archetypes in reality to which they are supposed to conform. On the other hand, in the case of substances we are \textit{necessarily} barred from knowing that our ideas conform to their archetypes in reality because of 'our want of knowledge and inability to penetrate into their real constitutions'.

Throughout Book III we find reference to the fact that Locke does not consider that at the present stage of human knowledge substance-names lend themselves to a philosophical use. More particularly, we see in Chapter 10 that he is of the opinion that these names would be much more \textit{useful} if we had ideas of the real essences of that which they profess to name; as well

\footnote{Ibid., III.9.2.}
as being more useful the propositions containing them would be more certain. 1 While substance-names standing for a 'more or less perfect collection of simple ideas' refer sufficiently well to the real object with which we are concerned for all ordinary purposes, such partial collections will not suffice for philosophical discourse. 2 The almost irresistible tendency that we feel to take substance-names as being indicative of real essences is based upon two false assumptions.

Firstly, we usually assume that there are certain real essences according to which nature not only makes things, but also by means of which she distinguishes them into species. Secondly, we commonly, but erroneously, suppose that we have ideas of these essences. Although Locke is himself convinced that everything in nature does have a real constitution which is the source and sustainer of its sensible qualities - the qualities we see - nevertheless, this constitution does not distinguish these things into species. We make species and fix the boundaries of application of names upon the basis of partially

1. Ibid., III.10.18.
2. Ibid., III.10.19.
arbitrarily chosen qualities or characteristics. Locke believes that individuals called by the same name, as for example so many different pieces of gold, may be in their internal constitution as different from each other as most of us would want to say that the internal constitution of chalk is from that of cheese.1

However, the 'gross and confused' conceptions which we do have of substances are satisfactory enough for our ordinary use though this is not sufficient for philosophical inquiries because 'knowledge and reasoning require precise determinate ideas' and these we have seen to be unobtainable in our talk about the substances which occur in nature.

Let us remind ourselves at this point of the more general things Locke has said about language and its purposes in order to see how far, if at all, our ordinary discourse concerning substances achieves these purposes. The two main functions of language are to record our thoughts and to communicate; the main purpose of communicating by means of language is to be understood. There are two types of such communication, namely, civil and philosophical - two types of

1. Ibid., III.10. 20 and III.10.21.
possible discourse. Although the general aim of all discourse is to be understood we may distinguish, Locke holds, between three main ends of language in both types of discourse: (1) to lay our thoughts before another, (2) to do so easily and quickly, (3) to convey a knowledge of things to our hearers.¹

While it would seem that the second aim is fairly trivial, to communicate our thoughts to others, and to impart a knowledge of things to others are both important ends of language. Language is deficient, does not fulfil its purpose, if it fails to accomplish either of these ends for they are both necessary conditions of our talk being comprehensible. We are able to fulfil the first of these conditions in our use of substance-names - namely, the communication of our thoughts - by the careful use of definitions. However, for the purposes of philosophical enquiry it is the last of these - the conveyance of a knowledge of things - which is all-important. Unless our ideas of things conform to reality there is no knowledge of things conveyed by language² if we have ideas of substances disagreeing with the real existence of things we have not even got the materials for knowledge,

¹. Ibid., III.10.23.
². Ibid., III.10.25.
and certainly therefore cannot have knowledge. To avoid these difficulties it would be necessary that in naming substances our names should correspond to things in their real existence: so far as language fails in its function of giving us knowledge, in Locke's sense, of the internal constitution and necessary relatedness of the qualities of objects it fails to 'convey the knowledge of things'. Exactness of this sort is necessary for inquiries after philosophical knowledge and in controversies about truth. All this amounts to saying that in talking about substances, in talking about the things in the world, we do not have knowledge in Locke's sense of the term.

In the case of substances men must inquire into the whole nature, and abstruse hidden constitution, and various qualities of a thing existing without them. We do not have a knowledge, in Locke's sense, of substances. And his answer, then, to the question of whether or not we can make a philosophical use of words in connexion with substances is quite unequivocal; necessarily, at the present stage of human abilities,

1. Ibid., III.10.31.
2. Ibid., III.11.10.
3. Ibid., III.11.17.
our talk about the things in the world is inexact and hence 'unphilosophical'.

These then are the limits of philosophical discourse and enquiry: while such discourse includes or can include all talk concerning modes and relations, it leaves outside its boundaries universal propositions about the things in the world. What is Locke looking for, then, in suggesting as he does that a philosophical use of words in connexion with substances is desirable and perhaps even possible? It would seem that his demand for a 'philosophical use of words' in this connexion could be interpreted as a demand for an ideal language in which our ideas do picture the world in a very real sense. Here he does not rest satisfied with 'gross and confused' conceptions but wants clear, determinate ideas corresponding to the 'minute particles' of substances which can reveal to us necessary connexions between themselves and the sensible qualities of substances of which we are already aware.

This, of course, is to say that Locke also is asking for the sort of language suggested by, among others, John Wilkins. He, too, is wishing to return to an Adam-like state of affairs where things are named 'for their natures', where by learning the name
of the thing we would at the same time be instructed in its nature.

Locke seems to be asking also for a science of bodies, a physics, in which we would not generalize from several instances to a universal law, but in which we, by some means not at all clear, would become aware of the governing principles - the existence of which he never doubts for a moment - that make things what they are. Although largely an empiricist so far as the origin of the materials of knowledge are concerned, he wishes to believe in and make a case for the possibility of a rational deductive science, a physical science which is only empirical so far as the principles upon which it is to rest can somehow be made clear to us by some perceptive process. His thesis in short is a denial of the scientific practice as we know it to-day. It is also a denial of our right to move from particular to general; a denial of induction.

He even seems to envisage at times that the knowledge he is asking for, whose mode of expression would be in a philosophical use of words, is not necessarily precluded from us. He suggests that if we keep asking the scientist he may come up one day
with the information we seek:

...in substances, we are not always to rest in the ordinary complex idea commonly received as the signification of that word, but must go a little further, and inquire into the nature and properties of the things themselves, and thereby perfect, as much as we can, our ideas of their distinct species; or else learn them from such as are used to that sort of thing, and are experienced in them.(1)

This is especially necessary for those who search after knowledge and philosophical truth.

It would help us in this search if men versed in physical inquiry should note down the simple ideas wherein they find individuals of the same sort 'do constantly agree'.(2) He also seems to suggest that if we improve - in an evolutionary sense - we might come to have this knowledge. This might seem rather far-fetched but, after all, he does see it as possible that angels and the like may have this knowledge of the 'radical constitution of substances' just as we have a similar knowledge of a triangle; they may also be able to perceive how the properties and operations of a substance 'flow' from this constitution, just as we are able to deduce true consequences from the idea we have of a triangle.

1. Ibid., III.11.24.
2. Ibid., III.11.25.
Seventeenth-century empiricism in England has always been misinterpreted on questions of meaning; this misinterpretation results from neglect rather than distortion, from not seeing what was there to be seen rather than from seeing the contribution of the seventeenth century through the eyes of a later time.

We saw that the common interpretations of the meaning-theories of the seventeenth century restricted themselves to the suggestion that the theorists of the time were naive and unsophisticated at this level of their discussion. Part of the blame for this neglect may be seen to lie in the fact that the most well-known commentators were themselves brought up in a tradition not far removed in this way from the tradition already well-established in England some two centuries ago. Philosophers have seldom questioned their fundamental beliefs about meaning; certainly they did not become vociferous about it until Wittgenstein pointed out the importance of this question in two quite different ways from 1920 onwards.
Words, for these philosophers - or, the only words that mattered - were 'names'. They named objects, ideas, universals...; about this they disputed, but about the notion of naming as an adequate explanation of the problems of meaning they disputed little, if at all. They therefore were prepared to say that for the seventeenth century in general, and for Locke in particular, words were directly the 'names' of our 'ideas' and that indirectly - in the case of substance-names at least - they named the things in the world from which the ideas were derived. The word named the idea or object and the idea or object correlated with the word was the 'meaning' of the word.\(^1\) These views regarding seventeenth-century meaning theory, though quite mistaken, even if considered only as a partial account, nevertheless are not without evidence in their favour.

This evidence is very familiar. It is a fact that Locke and his contemporaries spoke quite freely of the referring aspects of word use, of their correlation with 'ideas', and the correlation of these latter with the real things in the world. All our knowledge, every idea, is derived from our experience

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and our words 'signify' our ideas. Also, too, when they spoke of their 'new' science and looked forward to the great advances in human knowledge foreshadowed by Bacon, they said that their words signified the 'things' with which science was concerned. Finally, their distrust of scholastic jargon, together with their parallel requests for the relinquishment of metaphor and the adoption of a plainness in speech and writing, prompts one to say that their notions regarding meaning centred around the belief that each word was to name an object in the world which was its meaning: for, after all, this plainness was more consonant than was the verbal superfluity of scholasticism with the aims of those who saw themselves as the gatherers of real scientific knowledge about things in the world.

There is no doubt that views of this sort were put forward. The two main factors contributing to this sort of view in the seventeenth century were, on the one hand, their destructive purpose and, on the other, their veneration of the 'new' science. We saw that the original motivation of empiricism in this century was the desire to attack and destroy the scholasticism current in the universities; essentially this attack took the form of an insistence that as all
our ideas are derived from experience, where we have no idea, there can be no thing, and there should accordingly be no word; for words must ultimately correspond with things. And alongside this, of course, was the view already mentioned that exactness in scientific knowledge could only be achieved by correlating our words accurately with things. Only in this way were the 'intentional nothings' of the schools to be avoided.

Basic to this view attributed to these philosophers is the equation of the phrases 'having meaning' and 'standing for'—a perennial mistake in philosophy which reached its logical conclusion in our own century with the philosophy of logical atomism. For the seventeenth-century empiricist, on this interpretation, words signify ideas, ideas which on analysis may be seen to be either simple or complex. Ideas signify and are derived from the things in the world which ultimately our words may be regarded as naming. Our words, that is, 'stand for' or 'mean' the objects in the world which they name. Propositions for the logical atomist, on the other hand, are expressed in sentences and state facts. A logical analysis of propositions, or statements, reveals that they are not unitary in character but are, on the contrary, complex
in structure: they are composed of parts, or elements. Some at least of these elements, on the logical atomist view, are names of objects in the world; they represent, stand for, signify, or 'mean', the objects of which they are the names.

For Locke there are simple ideas and complex ideas; for Russell, particular things and general objects. While Locke may be accused of seeing the world as composed of his simple and complex ideas, or the things they represented, and of seeing the complex ideas as being made up from collections of simple ideas; so Russell asks us to see the world as an aggregate of separate things, qualities, and relations, all of which are either the ultimate irreducible elements that compose the world or, if they are not, are at least reducible to such elements or atoms.

The word for, or name of, a Lockeian idea corresponds to the object, quality, or relation 'signified' by the word; the words of Russell's propositions correspond with parts of the appropriate fact represented by the proposition. For atomism logical connectives 'do not represent';¹ for seventeenth-century empiricism

¹. Wittgenstein, Tractatus Logico-Philosophicus, 4.0312.
'particles' are not 'names of ideas in the mind'.

For the atomist logical connectives are syntactical words; for the empiricists particles 'intimate some particular action of the mind'.

While the differences between the views of logical atomism and the views commonly attributed to Locke and others on questions of meaning are too obvious to need stating, it needs to be noted that logical atomism rests upon the same assumption which lies behind the usual interpretation of seventeenth-century theories of meaning; namely, that the meaning of a word is that thing which is named or designated by the word. Coupled with this assumption in both Locke and Russell is the belief that we must be able to learn the names of at least some things in isolation—that is, without necessarily having any linguistic background. These two beliefs together are linked with the further belief that there must be simple elements—whether logical or psychological—which may be named, but not described: firstly, because any 'element' which may be described is ipso facto not a simple element; secondly, because the ability to describe the

2. Ibid., III.7.1.
simple elements would entail the denial of the contention that their names can be learnt in complete isolation.

The theories of meaning which relied upon this identity between 'having meaning' and 'standing for' reached their climax in the second and third decades of the twentieth century. Both logical atomism and the empiricism of the seventeenth century tried to take their start from the activities of the scientists; in criticizing this development Wittgenstein made the advance which had fore-runners in the period with which we are concerned.¹

However, seventeenth-century empiricism was not only concerned to destroy an outmoded way of philosophizing; it also had constructive purposes and it is this constructive element in the thinking of the period that has been largely overlooked when commentators have been assessing the contributions made by the period to the theory of meaning. Despite their continual protestations to the contrary, philosophers of the seventeenth century were not merely 'clearing the ground a little, and removing some of the rubbish that lies in

¹. On Wittgenstein’s criticism of philosophers modelling their activities on those of the scientist, see J.A. Passmore, A Hundred Years of Philosophy, p. 426.
the way to knowledge'; they were also at least beginning work on the foundations for the building of the sciences so far as they tried to outline and clarify the conceptual framework within which the scientist needed to work if he were to achieve his aim of advancing human knowledge about the world. To pursue the metaphor a little further - not only was the ground cleared, but the foundations were laid in such a way that the form of the scientific building was partially determined. The rather becoming modesty of the century in philosophy, known to most of us through Locke's attitude, should not blind us to the fact that their contributions to the mapping and clarification of the concepts of both science and ordinary life, though often misguided, were of real and lasting value.

As we saw, particularly when dealing with Locke, theorists of the seventeenth century began from two mistaken assumptions which, though helpful in one way, tended to keep them in an intellectual straight-jacket which prevented them making full use of the advances towards which their thought led them. These two assumptions were those of 'privacy' and 'atomicity'. The reasons for their clinging to these assumptions despite contrary tendencies in their thought are not hard to find; both these notions were basic to the century for
the criticism of scholasticism. Even though by the end of the century - and before - the notion of 'idea' was no longer the notion of a picture-image of some real external object, their beliefs in the origin of all our ideas in experience and the need to correlate any significant utterance with this experience preserved their tendency to say, for example, that words mean the ideas of he that uses them. And, they said, where the user can describe no such idea to which his word refers, or for which it stands, he is using the word unintelligibly, he uses it without 'meaning'. Briefly, the notion of 'privacy' of experience, and the basic privacy of the meaning-relation, was a powerful weapon in their hands for the purposes of the scholastic criticism.

The notion of atomicity was also helpful for this destructive purpose. For if we are to be able to describe our ideas unambiguously - and this we need to do if they are to be seen to signify or 'stand for' something in the real world - we need to be able to reduce our ordinary ideas to their simplest possible elements, which latter can be made clear to others by the supposedly unambiguous method of 'showing', that we now often call ostensive definition. And when the scholastics were asked to do this with certain crucial
words, it was contended, they were quite at a loss to reduce their words to the simple experienced elements from which it was supposed that all ideas, and hence all words, were ultimately derived.

Now, while these two notions were helpful beyond measure in assisting the attack upon the vagueness and 'other-worldliness' of scholasticism, at the same time they were severe hindrances in the way of the constructive side of the thought of the seventeenth-century philosophers. There was a constant vacillation between insisting upon the ultimate privacy of ideas - and hence of word-meanings - and the felt need to 'tie' our language to reality for the purposes of science. The realizations that the former of these views led to the development of private, and hence useless, theories of meaning and that a public theory of meaning was necessary for the development of human knowledge continually acted against each other. Although at times they appeared to be heading in the right direction; and although in the end, in my view, they at least went part of the way along the road; they nevertheless were constantly being turned aside from the dimly-seen road ahead by their continuing desire to account for the growth of our ideas in experience in a completely atomic way.
Their problem ultimately was: how are we to 'tie' or connect our words with reality, with the world of everyday objects and the objects of science that our language is employed in describing, referring to, or dealing with in one way or another? One such way was to insist upon the psychological way of ideas - and this was their mistake; another way was to approach language, not through the doorway of nameable experiences, but through the conceptual apparatus surrounding the notion of the different ways our language is employed in dealing with the world - this was their insight.

They said, for example, that if words mean ideas, then, if the purpose of our language is to convey thoughts from one mind to the other then my word, which names my idea, calls up the same idea in my hearer. At the simplest level the picture which lies behind this view is one of an 'idea' as an image of reality which is 'in our mind' as we talk; and coupled with this is the notion that we think, translate our thoughts into words, our words are heard by those we speak to, and these words in turn arouse the same 'thoughts' in our hearers as prompted our original remarks. This - the most naive interpretation of what is being said here - also, of course, leaves them open to the charge that they are advancing a view in terms of
a 'translation' theory of thinking which will not withstand criticism.\textsuperscript{1}

On the other hand, however, the seventeenth-century empiricists - and particularly Locke - saw that the empirical evidence was against this notion that speech was prompted by 'ideas' in the speaker which aroused the \textit{same} ideas in the mind of the hearer. While ideas do prompt our speech in this way, it was said, it is nevertheless not true to say that ideas are ever the same between the speaker and the hearer. Of course, if we take a less simple view of what it is for someone to 'have an idea' we are led to suspect that 'naming' ideas is not so much a tying of labels to mental images as it is an indication that the speaker knows how to recognize the objects or qualities or relations in the real world that he is talking about; or he knows how to describe or define them so that his hearer will quite literally, if he has roughly the same background of experience, know \textit{what} is being talked about.

That they did not explicitly - or, at least, not all the time - draw the logically demanded conclusion from the belief that 'ideas' are never, and could never,

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\textsuperscript{1} See O'Connor, \textit{John Locke}, pp. 125-8.
\end{flushright}
be the same between people must be laid at the door of their almost reverential attitude towards tying words directly to the world - as both a criticism of scholasticism, and a help to science. They should have drawn the simple conclusion that words do not mean ideas at all; and it is my belief that in a manner of speaking over a large area of human discourse they did draw this conclusion. Wedded as they were, however, to the crying need for a refutation of scholasticism and the equally important need for the provision of an adequate instrument for assisting the growth of the new science, they tended to draw the incorrect conclusion that our words should 'properly' mean our ideas.

Words should mean ideas if we are, firstly, to counteract the pernicious influence of scholasticism and, secondly, to promote the growth of scientific knowledge. Like most disputes, whether internal or external, the dispute Locke and his contemporaries had with themselves was settled, unsatisfactorily, by a compromise. They could not, off-hand, relinquish their belief in the essential privacy of the meaning-relation because of their polemical purpose; so they tended to say that even though there is this privacy its presence does not matter so much provided that we
find our language works. It is when they talk in this vein that we see them putting forward in a simple form a pragmatic test of meaning - a test which is taken to operate even at the level of scientific discourse. While, ideally, words should call up the same ideas in the hearer as are in the speaker - and until this is done 'science' in the full sense is impossible - this will not matter so very much provided we are able to be understood. Provided that people, even scientists, can talk about the natural world and be understood, - make appropriate actions, perform expected experiments, and so on -, provided they can do this, any empirical evidence against the identity of idea in speaker and hearer may be overlooked. In the short run it will not matter, although in the long run, as we shall see, it will matter very much indeed.

Of course, it is only in a back-handed way that we can say they adopted at this level a pragmatic test of meaning; for to say this seriously would involve holding that the notion that words named ideas which are the same for both speaker and hearer was a theory about language which may be seen to be true because it worked in practice. In actual fact, however, this theory, this explanation of how language functioned did not work in practice and, most important, it was known that it did not work. Ideas, for various reasons, were
always different, or nearly always, between different people. Language, as it was, worked; the explanatory theory of how it worked broke down immediately it was applied to any other aspects of the functioning of language than those which would have us believe in the existence of entities which had no possible exemplification in the world - the 'substances', 'intentional species', and 'quiddities' of the schools. The 'word-idea-thing' theory gained pragmatic justification from the fact that it was found to work in practice in refuting certain views concerning the nature of reality. It was not a pragmatic theory of, or explanation of, meaning in any actually functioning language for the simple reason that language worked, or appeared to, when certain conditions of the theory were not met, namely, the sameness of ideas between speaker and hearer.

To say then that we see the seventeenth-century philosophers adopting a pragmatic test of meaning in this connexion is simply to say that they recognised that language works in practice - even in philosophy and science. We know we can use a word without arousing an idea corresponding to the one in our mind in the mind of our hearer; the divergence between the ideas of different people does not matter. In a way this was to
say: 'We see language working at this level, i.e. at the level of science, perhaps not as well as it should but nevertheless we can manage. Therefore, don't let us try to explain further how it actually functions in the gaining and promotion of knowledge'.

If this were all that philosophers of the seventeenth century had to say about language the current interpretations would by and large be correct except so far as they neglect to stress the importance for the men of this period of the notion that a language that worked reasonably well was prima facie acceptable: except so far, that is, as they overlook what I have called, perhaps misleadingly, the pragmatic elements of what they were saying.

However, they go on to say more, and when they do so we see that the current interpretations of the meaning theories of the time are very partial indeed. These interpretations not only overlook the general satisfaction for practical purposes with a working language, but also neglect very important elements in the thought of the period which we have noticed in the preceding chapters. As we have seen, seventeenth-century philosophers said more than they are commonly supposed to have said about questions of
meaning in at least two respects: they talked about a special language of science, and secondly, they devoted quite a lot of their discussion to questions surrounding the notions of common usage.

When they talked in the first of these ways they said that the fact that 'ideas' do differ between people should matter very much indeed. In all uses of language which profess to give us knowledge about the world - in our 'philosophical' or scientific talk - ideas should not vary between people in the way we habitually find them varying. Also, in scientific discourse, our words should refer to or 'picture' reality in a way which we do not find in existing scientific language. That is to say, their fundamental inclination was to put forward and develop a 'picture' theory of meaning of the sort usually attributed to them: without this sort of relation between our words and the world real knowledge of the latter was considered to be impossible. Locke thought he had shown that we do have this sort of knowledge in the spheres of morality and mathematics, but that we lacked it in our dealings with 'substances', in our dealings with the concrete constituents of the world. It is these constituents of the world, the objects with which science deals, that were the particular concern of
the seventeenth century and the major part of their efforts was directed towards showing how, or at least how far, the human intellect could go in obtaining the sort of knowledge of the real world which was felt to be essential for the promotion of human well-being and advancement.

The most advanced of seventeenth-century thinkers still believed that there were 'real natures' - that every substance was composed of particles of some form or another a knowledge of whose movements and capabilities would entitle us to infer that the substance in question had this or that property or characteristic, in much the same way that the organization of the parts of an engine entail that, given a proper functioning of carburettor, pistons, drive shaft, and differential, the wheels must turn. And just as we are tempted to say that a good mechanic or engineer knows why the engine works as it does because he has this intimate knowledge of its construction, of its 'internal parts', so philosophers of the seventeenth century were prepared to believe that the objects in the world revealed the characteristics they in fact exhibited because of the arrangement and functioning of the 'minute particles' of which they were composed. Putting this another way: parallel to the presence of mind behind human behaviour
was the presence of material atoms behind the world as it appears to us; and just as our behaviour is determined by the organization and characteristics of our mind, so the behaviour and appearances of material substances are determined by the organization and characteristics of the particles of which each substance is composed.

For the 'substantial forms', the 'quiddities', the 'essences' of the scholastics the seventeenth century substituted the equally ghostly, ineffable hypothesis of minute material particles. They did not of course see this as the mere substitution of one ghost for another: looking at the advances that had already been made in science, and anticipating a rapid further advance, they did genuinely believe that further experiment and resulting technological advances would in fact enable them to discover both 'how' and 'why' things were the way they are. Until we made this material advance our knowledge of material objects would, in Bacon's phrase, be 'found wanting'. Obviously enough, as is well known, this belief in our present inability to penetrate behind the 'primary-quality curtain' led to their agnostic attitude so far as knowledge of the world was concerned.

1. The secret new world laid bare by the invention of the microscope obviously contributed to this notion.
As well as the notion of real natures which they retained from their scholastic heritage the empiricists also were unable to free themselves from the traditional equation of knowledge with certainty. They saw, and said, that we do not have 'certain' knowledge of reality in the sense in which the scholastics had held that they had certain knowledge; neither do we have this knowledge in the way we could have a knowledge of studies like mathematics and morals. Nevertheless, the seventeenth-century philosophers were inclined to think that such knowledge must be available — certainly God and the angels had it — and with luck and perseverance it would become available also to the scientist, if not to all mankind. This vague, but optimistic, hope that one day we would become aware of the internal operation and constitution of the objects in the world was supremely important for its effect upon empiricist views concerning language in general, and on the question of meaning in particular.

Ideally it was felt that our language should 'mean' in some such way as this. Our words should 'picture' reality in the sense that they should refer clearly and unequivocally to the very structure of bodies, in much the same way that the symbol for a
chemical compound, say, NaCl, is used by scientists to refer to a molecule constructed of electrons and protons organized in a particular way and upon which of course the properties of sodium chloride depend. In a scientific use the symbol NaCl cannot be misunderstood or misinterpreted; our words in philosophical language were to be of this type, so that the mere hearing or seeing of a word would call to the mind of the person concerned the precise unambiguous idea of what it was the word stood for. Obviously, they said, if we have real knowledge of the way things are then ideas will not differ between people; one step towards achieving this end of sameness of ideas was seen to lie in a re-modelling of language, of scientific language, to conform as nearly as possible to this picture. Because of this, they suggested a reform of language, especially so far as it was to be used for scientific purposes.

Part of this suggested reform was a request for an ideal language; and this request for an ideal language was only one aspect of the more general suggestions that existing languages should be reformed. Until the late sixteenth and early seventeenth centuries Europe had always had an auxiliary language which promoted intercourse between the traders and 'philosophers' of
different countries: the increasing interest in, and the stabilization of, national tongues in the seventeenth century in part contributed towards a gradually lessening knowledge of Latin which had served as an international language for centuries. Latin also was the language in which the mistakes of the schoolmen had been perpetrated and for this reason was to be avoided as much as possible in favour of the vernacular. The growth of seventeenth-century science also brought with it many unfamiliar concepts with which Latin was ill-equipped to deal. The various reasons for the gradual disappearance of the Latin tongue from learned circles are not, however, so much our concern as is the fact that this gradual failure of the traditional international language left a gap in the century which the language movements of the time were partially concerned to fill. This aspect of linguistic reform has had its effects and its counterparts even in our own day: there is no doubt that modern suggestions that we develop and use an international auxiliary language such as Esperanto or Basic English had their origins in the discussions of the seventeenth-century philosophers.

The sort of classification attempted by Wilkins also lies behind the work of men like Roget in his
Thesaurus of English Words and Phrases: here, as in the Real Character we have an arrangement, a collection, of English words and phrases arranged not as in a dictionary but 'according to the ideas which they express', an arrangement 'strictly according to their signification'.¹ Roget, too, thought he was doing more than merely making a writers' dictionary: writing half-way through the nineteenth century he felt that the sort of analysis his work put before us would lie at the basis of any future attempt to construct 'a strictly Philosophical Language'.² Roget quotes Horne Tooke with approval:

The Languages which are commonly used throughout the world, are much more simple and easy, convenient and philosophical, than Wilkins' scheme for a real character; or than any other scheme that has been at any other time imagined or proposed for the purpose. (3)

Thus Roget, while acknowledging Wilkins as a predecessor in the same field of endeavour, dismisses the Real Character as too 'abstruse' and too 'recondite' for the

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¹ P.M. Roget, Thesaurus of English Words and Phrases (1852), ed. by J.R. Roget, 1936; author's Introduction, p. xiii (underlining in text).
² Ibid., p. xxvii.
³ Ibid., p. xxvii, fn.
Thus the seventeenth-century philosophical views on language may be seen as lying behind both the movements for the development of an international auxiliary language and for the development of dictionaries of synonyms and antonyms constructed in the manner of Roget's *Thesaurus*. These aspects of the linguistic reform however, while interesting in themselves, are not the philosophically-interesting parts of this movement.

The philosophical movement for language reform - as opposed to what we might call the philological movements - consisted in the attempt, by constructing ideal languages, to create an instrument which would enable us to express quite accurately all the knowledge we possessed about the world as well as all the knowledge we could come to have. It was both to function as a 'reality-revealing' language and to assist the scientist in *discovering* further facts about the universe. The language was to be so constructed that it revealed the 'inner natures' of things; a word heard or written would tell the initiated all about the thing in question to which it referred. With the model of the new scientific instruments in mind - the microscope and
the telescope - it was but a short step from saying this to the development of the further view that from such a knowledge we would be able to derive further knowledge quite rationally, and without recourse to experience, by calculating the implications of the minute structure of objects in the manner later envisaged by Leibniz. Thus we would come to have in science the sort of knowledge that Locke, for one, thought that we could have in mathematics and morality - a knowledge both necessary and synthetic. We could gain new knowledge of matters of fact, which nevertheless would be 'knowledge' in the sense of being an absolutely certain, strictly necessary, knowledge of the world, not only as it is but also as it has to be.

Now, so far as it was seriously thought that an ideal language should and could be constructed which would reveal to us the real nature of the universe, - i.e. so far as this language was seen as anything other than a mere scientific shorthand like the table of elements - the views of the seventeenth-century philosophers have obvious affinities with those of logical atomism in this century. Where they went wrong was, in a less sophisticated way, where both Russell and Wittgenstein went wrong. If, as we have already
seen, the philosophers of the seventeenth century said simply that words mean ideas and ideas signify things; then the current interpretations offered of their views on meaning are substantially correct. We found however that they said more than this—they went on to talk of an ideal language, and it is this aspect of their thought that may be seen to have close connexions with the theory of logical atomism.

Again, for that matter if this were all they had said we might be content to say only that as well as holding the naive theories of meaning usually attributed to them, they also made the same mistakes that lay behind the theorizing of the logical atomists. But once more, this was not all they said. In many ways the seventeenth century may be seen as anticipating the revolution on questions of meaning stimulated by the work of the later Wittgenstein.

Contemporary criticisms of naming theories of meaning, developed by Wittgenstein and Ryle, have been directed both against the naive Augustinian view of language and against the views of logical atomism.¹

The Augustinian view criticized by Wittgenstein may in particular be seen as the view responsible for the naming theories of meaning which the seventeenth-century theorists took as their starting-point, and which are officially attributed to them as being all that they had to say on these questions. The theory of logical atomism, which also came to be criticized in the same movement, bears many similarities to the seventeenth-century theories regarding the development of an ideal language of science.

Essentially, modern criticism of naming theories of meaning has been directed against the suggested synonymity of the expressions 'having meaning' and 'standing for'. The misleading picture of language encouraged by the Augustinian model results, according to Wittgenstein, in our tendency to believe the truth of three propositions which, it is suggested, are in fact false:

1. Every word has a meaning;
2. This meaning is correlated with the word;
3. The meaning of a word is the object for which the word stands.¹

¹ Wittgenstein, Philosophical Investigations, para. 1.
We think primarily of substantives like 'chair', 'table', and 'desk' when we theorize about questions of meaning in this way, and little, if at all, about the 'logical connectives' of atomism or the 'particles' of the seventeenth century. When bemused by the Augustinian model we fail to see that there are an infinite number of kinds of words, and that there is not only one use to which words may be put; and we fail also to realize that a word may have a 'meaning' and yet not have a 'bearer'. Modern criticisms of naive theories of meaning have relied upon the multitude of language-uses in our actual language; they have aimed specifically at breaking down the deeply-rooted belief that language has but one use, namely, to refer to the world.

Now, we have seen abundant evidence that the philosophers of the seventeenth century were far from being unaware that language had a multitude of uses and so far as they were thus aware we may say that they made the point, though obscurely, that 'having meaning' and 'standing for' were not synonymous expressions. They did this so far as, like Hobbes, they talked of questioning, commanding, praying, advising, persuading, and threatening; so far as they paid heed to functions of language other than that of
referring to or signifying the objects in the world or the images in our minds. We cannot say with any justice that seventeenth-century philosophers were unaware of the multitudinous uses of language, for this they saw very well indeed; what they failed to see was that this question of a multitude of uses was of very real concern to them as philosophers. It is to Wittgenstein's and Ryle's credit in particular in our century that they pointed out the importance of this notion to philosophy. The seventeenth-century philosophers did not see this importance, or where they did see it they saw it only vaguely. Remembering however the polemical nature of their writing it is surprising, not that they failed to make full use of this important point, but that they saw it at all. They did make at least some philosophical use of this notion.

It is interesting to contrast the seventeenth-century empiricists with the logical positivists of this century. The latter were trying to give us criteria for deciding whether or not a particular piece of prose, say, was empirically meaningful. The positivists, too, as we well know, were far from being unaware of other uses of language but their concern - as positivists - was
with language of a particular sort. This was the case also with seventeenth-century philosophers in England. As the proponents of the new scientific movement and the antagonists of the philosophical legacy of scholasticism still current in the universities they saw their task as being primarily that of providing a rationale for the investigations of the modern scientist. They wished above all to provide the scientist with an impetus in his search for real knowledge by tidying up the conceptual and linguistic framework with which he was to work.

But just as positivism was able, while carrying out its main programme, to make some pertinent and useful remarks regarding emotive and poetic language, so also the seventeenth-century philosophers canvassed certain issues about language which were not directly relevant to their task of laying a foundation for science. At the level of their 'philosophical language' the notions of 'standing for' and 'having meaning' were synonymous - or were supposed to be. It is here that the seventeenth-century theorists made their mistake - a mistake which was also to be made later by Russell and by Wittgenstein in the Tractatus. When thinking on these lines they did assimilate all or most words
They also, of course, had enough foresight to say that this was not the way our language actually functions; they said rather that it should function like this, and in talking in this way they revealed an incomplete grasp of the problems surrounding the notion of meaning which they did not show when speaking of our ordinary uses of language. The more far-sighted among them said that language would only ever function in this ideal way for very special purposes, namely, for the communication of scientific knowledge, and for the discovery of new knowledge about the constitution and powers of substances. We have noted that they demanded more than this even in their reform - most of them wanted an auxiliary language for international trade to replace Latin, they also wanted it to serve as a system of symbolizing akin to modern symbolic logic, and they wished it to catalogue all the things there were in some such manner as that followed by Roget in his Thesaurus. Although not all these things could be

1. That it was impossible to create a language which could do all these things at once has been pointed out by J. Cohen, 'On the Project of a Universal Character', Mind (1954).
done at the same time with the same all-purpose instrument, it is nevertheless not *prima facie* absurd to ask, as they did, for the development of an ideal language for the accurate communication of scientific knowledge.

While those who were more far-sighted wished to restrict this ideal language to accurate scientific communication there were those among them also, as we have seen, who envisaged the day when this ideal language would replace natural languages throughout the world; where everything to be expressed would be expressed through the medium of some seventeenth-century Esperanto or Basic English.¹

The seventeenth-century philosophers did have these various and often conflicting views regarding the nature of language, and regarding the ideal that language should aim at. They all had in common, however, their recognition of and interest in language-uses other than the scientific. So although they did not - as Wittgenstein was to do in our century - see the analysis of all language-uses as the task of their philosophizing they did, we might say almost by accident,

¹. See above, Ch. 6, sect. 2.
present us with an at least partially-formed account of what it is for words to mean at levels other than the scientific. And the way they did this was to emphasize two things: firstly, they emphasized the notion of 'common use' and developed certain views as to what it is for language to be meaningful at this level; secondly, they stressed the importance of taking account of the notion of 'being understood' for any proper assessment of the way our words mean.

At any level short of the 'philosophical', our language is meaningful where our words are used in accordance with common practice. Where we feel tempted to ask 'Is this a meaningful use of words, a meaningful utterance?' our question is answered if we receive an affirmative answer to the further question, 'Is this utterance made in accordance with usual speech practices?'. This is linked very closely with - in fact, is almost the same as - the second main emphasis in the language-theory of the century at this level of ordinary use, namely, the notion of 'being understood' - the notion of our language 'working'. 1 If when I

1. This bears similarities to the well-known emphasis of modern meaning-theory upon the need for examining a working language; that an 'idling' language is a misleading language.
give a cry of pain I am understood; if people know
what I am doing, and respond appropriately as their
nature or their feelings towards me permit, then my cry
was a meaningful cry. If I give someone an order and
in response to this order he carries out the task I
demanded then my use of words was a meaningful use;
and if, for other reasons, the task is not carried out
my use of language is meaningful provided that my
hearer understood what it was that was required of him.

These two criteria of whether or not my utterances
have meaning overlap. If debate arises over the
meaningfulness of a certain utterance because perhaps
it was not understood, because it did not achieve the
end at which it aimed, it would be sufficient to
resolve this debate if it could be shown that the
utterance was made in accordance with our ordinary
usages. It is a sufficient test of the meaningfulness
of an expression at the ordinary level that the hearer
should understand what the speaker has said - and he
understands the speaker when he acts in any one of
many appropriate ways. On the other hand, if my
hearer understands me, knows what I mean, - even though
no one else does - my utterance is meaningful within
a very restricted group, although we cannot say that
it is a meaningful expression within a certain natural
language unless it also passes the test of according with 'common acceptation'. Once again, then, it is a sufficient test of the meaningfulness of an expression that it should be understood - although that it is understood under certain circumstances is not sufficient for it to be a meaningful expression in a particular natural language.

Of course, it happens to be the case that word-uses that we understand are also those that are in common use, and commonly-used expressions are usually understood. This, however, is not a contingent fact about the world, but a necessary fact about language - it is logically impossible that nobody should ever understand commonly-used expressions. If there is to be language, with all that this means in terms of communication, then commonly-used expressions must be understood: it would be self-contradictory to assert the existence of a 'language' the commonly-used expressions of which were not understood by anybody.

However, even though the end of language is 'to be understood' and despite the fact that 'being understood' is one of the tests of the meaningfulness of expressions, we all know that sometimes a vast
amount of talking fails to achieve this end. Yet we
would not wish to say that our misunderstood expressions
were, because of this fact, to be counted meaningless.
The notion of common use then, while intimately
connected with the pragmatic notion of being understood,
is basic to the assessment of the meaningfulness of
utterances at levels other than the 'philosophical'.
Instead of asking 'Is this meaningful?', we may always
ask 'Is this in accordance with common usage?' - i.e.,
'Has this expression a use in the language?'.

Now, it is well-known that Wittgenstein and
Ryle have emphasized this aspect of the theory of
meaning in our own time. It is often said, however,
that for Wittgenstein the meaning of an expression is
its use in the language, and this has led some people
to be more abrupt than this and to say 'meaning equals
use'. To interpret Wittgenstein's remarks in this
abrupt fashion is very misleading indeed; so far as
I am aware this, or an equivalent remark, was never
made by him. What he did say was to utter the slogan
- and it was only a slogan - 'Don't ask for the meaning,
ask for the use' and the point of his doing this was
to lead our minds away from the bewitching influence
of the Augustinian picture of language; it was to
prevent us seeing 'meaning' as a relation between a word and an object; it was to prevent us saying 'the meaning of a word is the object for which it stands'. We misinterpret what Wittgenstein was saying when we answer the question 'What is the meaning of this expression?' by the phrase 'Its use' for this tempts us to make the misleading equation of 'meaning' with 'use'. Wittgenstein's answer is clear enough - 'Don't ask for the meaning ...'. It is this that is illegitimate, namely, asking for the meaning. Instead of saying, as we are tempted to say, that the meaning of an expression is its use, it is better to say 'Expressions don't have meanings; they only have uses'. Of course, this too can be misleading for the expressions of our language do have 'meaning' in one sense, and an unharmful sense with which we are all familiar.

As Ryle pointed out1 words do not have meaning because they refer to things, but because they have meaning some of them are able to refer to things. To say they have a meaning is to say that they have a use, and one of these uses might be that they are able to refer, or to denote. The meaning of a word, however,

is not equivalent to its use. We can point to a motor-car and say 'This has a carburettor' and, if asked 'What is the carburettor?' we can point to one; if we say 'This has horse-power' we cannot answer the question 'What is the horse-power?' except by talking in terms of performance or going into such detail that would ultimately involve a total description of the engine. To ask 'What is the horse-power?' is obviously to ask an illegitimate question if we expect an answer of the form 'This is the horse-power'. And yet the horse-power is neither the performance nor the total description. Just as we can ask 'What is the horse-power?' and receive a sensible answer in terms of performance and description without identifying the horse-power with this description, so also we can receive a sensible answer to the question 'What is the meaning?' in terms of use within a language without identifying this meaning with the use.

To identify meaning with use is just as misleading as to identify meaning with reference or, for that matter, with anything else. When Wittgenstein said 'Don't ask for the meaning, ask for the use' he was not suggesting such an identification. He was suggesting, not how we were to find the meaning of an expression, but how we were to find that it had a
meaning — and the way we were to do this was to see if it had a use in the language. Where an expression has a use, it has a meaning, but the use is not identical with the meaning — the fact that an expression has a use in the language is a test of its meaningfulness. The question 'Has this a meaning?' may be replaced by 'Has this a use?' and vice versa; but this does not mean that the use is the meaning any more than the fact that we can always replace 'Have you more than a pound?' by 'Have you more than twenty shillings?' implies that twenty shillings is the same as a pound. Further, if 'to have a meaning' and 'to have a use' were equivalent expressions we should be able to do without either one of these in our language. But, in fact, while we could dispense with the former expression, and Wittgenstein suggests that we should do, we could not dispense with the latter — except in the trivial sense in which we could say that an expression has a 'function' or a 'role' instead of a use.

I want to hold then that the lesson to be learned from Wittgenstein is simply this: in our language the test of whether or not an expression has meaning is to see whether or not it has a use. Now, we have already seen the emphasis placed in the seventeenth century
upon this notion of the 'common use' of expressions. Locke, for example, says quite clearly that at the ordinary levels of language the sole test of meaning is to see whether or not the expression with which we are concerned accords with common usage; that is, if this accords with common usage then it has meaning. He, no more than Wittgenstein, says that 'meaning' is equivalent to 'use'. But neither, at the level of 'civil discourse' can he say - nor does he say - that 'the meaning' of an expression is its referent whether this be an occurrent or dispositional idea, or an object in the world.

The test of meaning at this level is the accordance with common usage. The question of what is the meaning then becomes otiose - as indeed it does for Wittgenstein. What Wittgenstein taught us was to look at language in a different way; he taught us to see that if meaningfulness was to be tested by referring to the use of an expression in the language it no longer made sense to ask for the meaning. He did not answer the question 'What is the meaning of an expression?' so much as to show us that if we see the world rightly,

1. See above Ch. 7, sect. 3.
if we remove our 'blinders', we see that this question is no longer a worrying question - we are no longer tempted to ask it, and hence are no longer misled by it into putting forward philosophical theories of varying degrees of absurdity in attempting an answer. In short, it took a philosophical genius to see what was lying before us all the time.

Although far from wanting to say that Wittgenstein's views on the question of meaning had been anticipated by other philosophers before him - for this would certainly not be true - I do hold that John Locke, and others of his time, came very near to seeing that over a large area of human discourse at least it made no sense to ask for the meaning of an expression. We could only determine whether it had meaning, and we were to do this by asking whether or not it had a use in our language, whether or not it accorded with the 'common propriety of speech'.

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Locke, as we have seen in earlier chapters, largely reflected the climate of opinion of his times; his *Essay Concerning Human Understanding* was a knitting together and summing up - a brilliant summing up - of the currents of scientific and philosophical thought
that had been circulating throughout England during the seventeenth century. Although we are concerned mainly with Locke's mature views on questions of meaning the earlier chapters should have made it clear that in doing so we are dealing with a man who was far from being at variance with the philosophical and scientific environment that surrounded him. Locke may be seen without any exaggeration as a spokesman for his century; an intelligent and original spokesman, but nevertheless one who in many ways was enunciating and making coherent currents of thought that were familiar to every educated person by 1690.

It is sometimes felt that when Locke draws the distinction between a 'civil' and a 'philosophical' use of words in Book III he is making what appears to be an important distinction, but one which he neither makes fully clear nor exploits to the full in the remainder of the Essay. This is partly true, although if we bear in mind that he was not alone in drawing this distinction in this century, and if we bear in mind also the developments of it offered by people like Wilkins, we can see, firstly, that Locke would have accepted it as an intellectual commonplace of his time and, secondly, that because of this he would possibly
not have felt the need of drawing explicit attention to its implications throughout the remainder of the *Essay*. It is in my view undoubtedly true that if this distinction is borne in mind, and if a serious attempt is made to apply it to the things Locke has to say throughout the remainder of Books III and IV it can be shown to be of considerable importance for a proper interpretation of his views on meaning.

It is only fair to Locke for us to try to discover why it was that he bothered to draw this distinction at all. One obvious reason, of course, was that it was a commonplace distinction. Apart from this, however, no possible grounds for his drawing this distinction are apparent in Book II of the *Essay*: to find any justification for the introduction of these two main uses of language we have to turn to his final book. In Book IV Locke contends that the field of 'knowledge' as he defines it is very small indeed; in our ordinary life we are for the most part restricted to probabilities, to 'judgement'. The propositions in which we express true and certain knowledge - limited though this is - are the propositions which make a 'philosophical' use of words; here our language pictures reality in a very accurate way. Falling short of this ideal state are our judgements or opinions,
which involve us in a 'civil' or ordinary use of words, a use of words which does not bear the same accurate relationship to the world that we find in a 'philosophical' use. Nevertheless, as we saw, the 'civil' use of language is found to be adequate in practice to fulfil the 'chief end' of communication, namely, the end of being understood.

When Locke found that his argument led him to restrict 'knowledge' to a much narrower field than he would have first suspected, he realized that these restrictions upon the extent of our knowledge were intimately connected with the uses to which we put language. It is difficult to see how he could have avoided this conclusion while ever-present in the forefront of his mind were the beliefs of the Royal Society and of Bishop Wilkins. Locke had to account for the obvious fact that we would all normally wish to say that we 'know' over a much wider area than his argument had suggested. He accounted for this fact by following the traditional suggestion that, although knowledge is severely restricted, in the ordinary affairs of life we rely upon judgement.¹ We find that a

¹. This suggestion, of course, is not only traditional in the seventeenth century: see, e.g., Plato's *Theaetetus*. 
reliance on judgement provides us with beneficial practical results, and this is all we need.

His commitment to a naming theory of meaning, however - at least so far as the known propositions were concerned - forced him to say that when we are dealing with judgement, and not knowledge, we must be making some other use of words than that which we make when stating our 'known' propositions. Of course, if Locke had not wished to define 'knowledge' as restrictively as he in fact does he might have come to see that his naming theory of meaning is neither necessary nor in accordance with the facts. He did come to see that this was so over a large area of human discourse but his insistence upon the possibility of a true and certain knowledge, his belief in 'ultimate explanations', prevented him from breaking away entirely from the naming model.

While it is true that when Locke is concerned with knowledge the meanings of our words are restricted to our ideas, he also reaches the conclusion that our knowledge is so slight as to be almost negligible. In our ordinary life we are guided by opinion and here we may (correctly) use words with very indistinct or
confused ideas 'annexed' to them, or even without any ideas at all. When Locke speaks of knowledge he thinks in terms of the word-idea-thing model of meaning explanation, and here he speaks in the name of the Royal Society: he speaks of the ideal result of the seventeenth-century scientific experiments which he, like his contemporaries, saw to lie just round the corner. On the other hand, when we are concerned with the judgements of ordinary life - and until we have a knowledge of the internal structure of things even our so-called statements of 'science' are statements of ordinary life - the sole criterion of whether or not a word has meaning in a particular use is to see whether or not the statements in which it occurs in ordinary discourse are understood. Locke certainly did not go so far as to say that the meaning of a word is the use to which it is put, but he does say that if it has a use (in the sense of being understood) it must have a meaning - whether or not the speaker 'annexes' an idea to the word in his mind.

In philosophical discourse the test of meaningfulness is a conformity to ideas and ultimately to things in the world in the manner envisaged by Bishop Wilkins, i.e. in the sense that our names in
philosophical discourse must refer to and reflect the nature of some real entity or other. And of course in the same way as his contemporaries he criticized the scholastics for using language in a way which, while purporting to give us knowledge of reality, in fact really talked about nothing. The important point here is that scholasticism did profess to give us real knowledge; this could not be the case in seventeenth-century eyes unless a correlate was found in the world for the words they used, for this was the ideal of the new science; scholastic language, therefore, was 'meaningless' so far as it was considered to be language which revealed the nature of reality to us.

In a very real sense it is true to say that for Locke ordinary language is 'in order as it is' - if it is understood, it is used properly, or meaningfully; if it is not understood, it is not being 'used', it does not function or, at best, it is being used without meaning. In our ordinary life we 'find it necessary to be understood', and we continue to speak until we are understood. Only when this happens do we make a meaningful use of language at this ordinary level, a use of language which has practical effects.¹

No one would doubt that Locke does propound a theory of meaning in the *Essay*; this despite the fact that he heads no chapter or section with the words 'The Theory of Meaning', and in fact seldom mentions the word 'meaning' throughout the whole of Book III. He is, however, greatly concerned with 'words, and the ways they are used' and in outlining to us the ways in which they are used he is putting forward a theory of meaning, he is offering an explanation of the notion of meaning. A theory need not always be explicit to be a theory. While no one would wish to deny that Locke presents us with a theory of meaning it might be held - and, in fact is held - that this is a single, reasonably coherent, though mistaken theory, and that to put forward the view advanced here, namely, that Locke held two such theories, is to manufacture theories where none exists. It might be held, for example, that Locke and his contemporaries held a certain theory of meaning - the naming theory - and alongside this advanced some scattered remarks on other uses of language.

I have tried to show, however, that they did

more than this - the distinction between 'ordinary' and 'scientific' uses of language was fundamental for them. They took themselves, as philosophers, to be mainly concerned with the scientific uses but as well as this Locke, in particular, advanced what amounts to a theory regarding the operation of language at more ordinary levels. He acknowledged the existence of ordinary uses of words, he gave criteria for determining their meaningfulness, and he held fairly firmly to the view that such language uses had their proper place in the scheme of things. What he did insist upon was that we should become self-conscious about the way we used words. Further, we should not confuse the two main uses of words; either by thinking that ordinary linguistic uses gave us the sort of knowledge he was seeking, or by supposing that 'philosophical' uses of words could possibly reveal the nature of reality to us - unless they mirrored that reality in the ideal way essential to a growth of knowledge about the world.

Locke may be seen as bringing together the many strands of thought on these issues as they had appeared in seventeenth-century England. He thinks, on the one hand, that we will never possess the desired scientific knowledge which was being sought in his day.
until we have the sort of ideal language suggested by Wilkins: he saw this as a worthwhile aim yet at the same time was doubtful of our ability ever to reach such a stage in human development where the knowledge necessary for such a language would be available to us. On the other hand, his confidence in the ability of mankind to conquer technical difficulties at times made him hope that improved technology would enable us to lay bare the 'innermost structures' of things. From this knowledge we should be able to proceed by a rational process to a further knowledge of the world; a real knowledge, exactly like that which he was convinced already lay at our call in the realms of mathematics and morality.

The seventeenth-century philosophers were concerned above all to eliminate the waste of scholasticism and to usher in the scientific millennium with an analysis of how we come to know, how much we can expect to know, and how our language is to reflect this reality. Their concern as philosophers was with the ideal scientific language, but while reflecting on the uses of language in general they came near to making more fruitful suggestions. In fact the suggestions are quite explicit: it is just what we
were not in a position to see these in their correct light until the modern criticisms of current meaning-theory were developed. These modern criticisms were directed in the main against the mistakes of logical atomism, mistakes which have their analogue in the work of the seventeenth-century philosophers, who also oddly enough had already freed 'one foot' from the 'denotationist camp'.

### SELECT BIBLIOGRAPHY

<table>
<thead>
<tr>
<th>Author</th>
<th>Title</th>
<th>Editions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aaron, R.I.</td>
<td>The Theory of Universals</td>
<td>(1952).</td>
</tr>
<tr>
<td>Adamson, J.</td>
<td>The Educational Writings of John Locke</td>
<td>(1922).</td>
</tr>
<tr>
<td>Anderson, F.H.</td>
<td>The Philosophy of Francis Bacon</td>
<td>(1943).</td>
</tr>
<tr>
<td>Baynes, T.S. (ed.)</td>
<td>The Port Royal Logic, translated with introd., notes, and appendix by the editor, (7th ed.).</td>
<td></td>
</tr>
<tr>
<td>Boyle, R.</td>
<td>The Sceptical Chymist</td>
<td>(Everyman, 1949).</td>
</tr>
</tbody>
</table>

Clark, W.J. International Language, past, present, and future (1907).


Farrington, B. Francis Bacon (1949).

Gibson, J. Locke's Theory of Knowledge and its Historical Relations (1917).

Glanvill, J. The Vanity of Dogmatizing; reproduced from the text of 1661 with bibliog. note by Moody E. Prior (1931).
Guerard, A.L.  
A Short History of the International Language Movement (1921).

Hall, J.  

Hobbes, T.  

Howell, W.S.  
Logic and Rhetoric in England, 1500-1700 (1956).

James, D.G.  

Jones, R.F.  
The Triumph of the English Language (1953).

Jones, R.F. (and others).  

Kemp Smith, N.  
John Locke (1933).

Krock, Dorothea  

Locke, J.  

Locke, J.  
An Essay Concerning the Understanding, Knowledge, Opinion, and Assent, edited by E. Rand (1931).
Locke, J.  

Mackay, J.  
*Directions Concerning the Matter and Stile of Sermons*, (Luttrell Reprints, 1952).

Martin, R.M.  

Miller, P.  

Morris, C.R.  
*Locke, Berkeley, Hume* (1931).

Morris, J.  
*A Collection of Miscellanies* (1687).

O'Connor, D.J.  
*John Locke* (1952).

Ogden, C.K. and Richards, I.A.  

Peters, R.  

Pole, D.  

Popkin, R.H.  

Prior, M.B.  

Richards, I.A.  
*Basic English and its Uses* (1949).
<table>
<thead>
<tr>
<th>Author</th>
<th>Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robinson, R.</td>
<td>Definition (1950).</td>
</tr>
<tr>
<td>Tulloch, J.</td>
<td>Rational Theology and Christian Philosophy in the Seventeenth Century (1874).</td>
</tr>
<tr>
<td>Wallace, K.R.</td>
<td>Francis Bacon on Communication and Rhetoric (1943).</td>
</tr>
<tr>
<td>Weinberg, J.R.</td>
<td>An Examination of Logical Positivism (1936).</td>
</tr>
<tr>
<td>Wilkins, J.</td>
<td>An Essay Towards a Real Character and a Philosophical Language (1663).</td>
</tr>
</tbody>
</table>
Willey, B. The Seventeenth Century Background (1949).

Wittgenstein, L. Tractatus Logico-Philosophicus (1922).

