John Lyons, *Semantics* (1977)

[…]

7. REFERENCE, SENSE AND DENOTATION

7.1. Introductory

Language – descriptive, social and expressive (vide 2.4.)

It is now customary, as we shall see, to draw a two-fold distinction between what we shall call sense* and reference*.

The term 'reference' […] has to do with the relationship which holds between an expression and what that expression stands for on particular occasions of its utterance. (p.175.)

Ogden and Richards distinguished between the reference of words and expressions and what they called their emotive* meaning.

'Horse' and 'steed'. The opposition between a more central, or stylistically neutral, component of meaning and a more peripheral, or subjective, component of meaning is a commonplace of discussions of synonymy (p.175.)

'reference' and 'referential meaning' are fairly well established in the sense of 'cognitive meaning' and 'descriptive meaning'. (p.175.)

Beware: 'connotation' has the philosophical sense of common abstract (e.g., whiteness) but the commonplace sense of 'associated ideas' (e.g., pleasant connotation).

7.2. Reference

'Napoleon is a Corsican' refers to Napoleon by means of the referring expression. 'It is raining' does not assert that some entity has a certain property or that it is engaged in some process or activity […] it is not ascribing* to the weather some property or characteristic.

If the reference is successful, the referring expression will correctly identify for the hearer the individual in question: the referent*. (p.177.) It should be noted that […] it is the speaker who refers […] It is terminologically convenient, however, to be able to say that an expression refers to its referent […] and we will follow this practice. (p.177.)

   Ftn. 'There are many authors for whom this sense of the term 'refer' is not derivative but primary.

In the case of sentences which contain only one referring expression [this is] typically the subject of the sentence […] combined with a predicative expression* - e.g., 'Napoleon was a Corsican'. In other cases there are more than one predicate, e.g., 'Alfred killed Bill' [predicate calculus notation as K(a, b)].

Reference Types: Singular definite reference – individuals [singular*] or general* expressions (distributively* or collectively*); definite* and indefinite expressions*.

(i) Singular definite reference. Definite description: 'we can identify a referent, not only by naming it, but also by providing the hearer or reader with description of it, sufficiently detailed, in the particular context of the utterance, to distinguish it form all other individuals in the universe of discourse. (p.179.)

Borderline cases between kinds of definite reference incl. Spanish 'Usted' which began as a name (noble status) and became a personal pronoun. [Cf. Portuguese 'gente'.]

The fact that movement from one category to another may take place in the course of the historical development of a language suggests that the functional distinction between the three kinds of singular definite referring expressions is not absolutely clear cut. (p.179.)

Many philosophers have taken reference by naming to be essential to the language and have even tried to subsume the whole of reference under naming. But this is surely misguided [since we] can refer to [a] person or place quite satisfactorily by means of a definite description. […] It is easier, in fact, to conceive of a language without proper names than it is to conceive of a language operating without some systematic way of referring by definite description. (p.180.)

Personal pronouns – deixis [15.2]

It is a condition of successful reference that the speaker should select a referring expression […] which […] will enable the hearer […] to pick out the actual referent from the class of potential referents. (p.180.)

In many cases the use of a common noun preceded by a definite article will suffice (e.g., *The cat has not been in all day*; 'the Queen'.)

(ii) <u>Reference, truth and existence</u>. The condition that the referent must satisfy* the description has commonly been interpreted […] to imply that the description must be true to the referent. […] But successful reference does not depend upon the truth of the description contained in the referring expression. (p.181.)

It is arguable […] that the more basic and general notion governing the use of definite descriptions is that the hearer can be assumed capable of identifying the referent on the basis of the properties ascribed to it, whether correctly or not, in the description. (p.182).

Lyons discusses 'The present King of France is bald.' [Bertrand Russell, 1905] Vide, Strawson's concept of presupposed* in contrast to Russell's asserted* re the proposition (A) that there is a present King of France.

[According the Strawson] the sentence is meaningful, but the question whether it is true or false simply does not arise – because it presupposes rather than asserts that there is a present King of France.§ (p.183.)

The most that can be said is that the speaker, in using a singular definite referring expression commits himself, at least temporarily and provisionally, to the existence of a referent satisfying his description and invites the hearer to do the same. (p.183.)

Lyons questions condition of uniqueness said to be necessary for successful reference – re. the family cat: viz., 'it is in [a] rather restricted, context-dependent sense that the condition of uniqueness is to be interpreted. […] Most proper names are such that they are borne by many people (p.184.)

Philosophers are professionally concerned with the explication of the notions of truth, knowledge, belief and existence. The fundamental problem for the linguist, as far as reference is concerned, is to elucidate and to describe the way in which we use language to draw attention to what we are talking about. (p.184.)

(iii). <u>Non-referring definite noun-phrases</u>.

A definite-noun phrase can may occur as the complement of the verb 'to be' – "Giscard D'Estaing is the President of France" – where 'President of France' is not using used to refer to an individual. There is however an interpretation in which 'President of France' is a referring phrase – here cites the fact that the predicative and the predicative* and the equative* copula are identical in English.

'Smith's murderer is insane' [cited by Donnellan] can be referential or non-referential. (I.e., depending on whether the identity of the murderer is known.)§

Donnellan: 'in general, whether or not a definite description is used referentially or attributively is a function of the speaker's intentions in a particular case.' (Donnellan, 1966; here p.186.)

(iv). Distributive and collective general reference. E.g., 'Those books cost £5.' (Ambiguous – each or all together.)

Compares indeterminacy with ambiguity: 'The students have a right to smoke in lectures.' It should be noted that there are very few kinds of collective reference (Lyons, p.187.)

(v) <u>Specific* and non-specific* indefinite reference</u>.

A host of additional complexities (p.187). An indefinite noun-phrase is introduced by an indefinite pronoun or by an indefinite article. All indefinite noun-phrases are non-definite but the converse is not true.

> E.g., 'Every evening at six o'clock, a heron flies over the chalet. It nests in the grounds of the chateau.' Thus indefinite but specific reference – where 'a heron' can be any heron until it is made clear that the heron in question has a specific nesting place. § (Vide co-reference in ftn.)

Any information that the speaker gives the hearer about the referent when it is first referred to by means of an indefinite noun-phrase is available for both participants in the conversation to use in subsequent references. (E.g., X: 'A friend has just sent me a lovely Valentine card'; Y: '… your friend … &c.'.) It is not a necessary condition of successful reference that the speaker or hearer should be able to identify the individual being referred to in any sense of 'identification' other than this. (p.189.)

Controversy as to alternation of 'someone'/'something' and 'anyone'/'anything' – whether solely a matter of grammatical structure.

'John wants to marry a girl with green eyes' (Specific and non-specific use of the indefinite noun-phrase). Ambiguity: If the indefinite noun-phrase is construed as non-specific, there is no presumption or implication of existence at all. (p.190.)

Attributive and descriptive noun-phrases (Donnellan) – where the former attaches properties to an existing thing and the second might describe something wished-for but non-existent. §

'John wants to marry a girl with green eyes and take her back to Ireland with him' – pronoun with an antecedent used non-referentially. Two expressions cannot have the same reference if one of them is not a referring expression at all. […] If the notion of co-reference is to be salvaged in cases like this, some other referring expression must, therefore, be introduced into the deep structure* or semantic representation* of the sentence (cf. 10.5.)

(vi) <u>Referential opacity*</u> (Quine). Definite and indefinite expression in opaque contexts ('Mr Brown is looking for the Dean.') Referential or attributive (Donnellan).

When we report the statements made by others or describe their beliefs or intentions, we do not necessarily employ the same referring expressions as they have employed or would employ. We are free to select our own referring expressions; and the possibility of misunderstanding or misreporting

which arise [...] derive from this fact. (They are compounded by, but do not depend solely upon, the possibility of misconstruing an attributive expression as referential, or conversely.) The fact that the speaker is free to select his own referring expressions in the utterance of what are traditionally described as sentences of indirect discourse (or reported speech) should be borne in mind in any discussion of the relationship between the grammatical structure of such sentences and their meaning on particular occasions of their utterance. (p.193.)

(vii) <u>Generic reference</u>. 'The lion is a friendly beast' / 'A lion is a friendly beast.' Cf. 'The dinosaur was a friendly beast' (not in the past of a particular instance but as true of an extinct species). §

Essential propositions are perhaps the most easily definable subclass of generic propositions. Not all generic propositions are, however, essential propositions [where essential means a defining quality of the thing named]. (p.198.)

Generic proposition: 'The lion is extinct'; 'The lion is no longer to be seen roaming the hills of Scotland.' NOT 'A lion is extinct.'

7.3. Sense

Customary to distinguish sense* from reference*. Sense often used for descriptive or cognitive meaning – hence reference and meaning.

Frege's classic example: 'The Morning Star is the Evening Star.' Same reference (*Bedeutung*) but different sense (*Sinn*) – otherwise the statement would be tautologous.

Expressions may differ in sense, but have the same reference; and 'synonymous' means 'having the same sense', not 'having the same reference'. (p.199.)

[On Frege:] It is, incidentally, unfortunate, that Frege selected 'Bedeutung' as his technical term for what is now generally called reference in English. That he did choose the German word in non-technical usage covers much of what is covered by the English word 'meaning' was no doubt due to the fact that he, like many philosophers, thought of reference as the basic semantic relationship. (p.199.) [Goes on to discuss the alternative German distinction between Bedeutung and Bezeichung ('designation') – where the former equates with 'Sinn' and the latter with 'Bedeutung'.)

On of the advantages of using 'meaning' as a very general pre-theoretical term is that it enables us to avoid the kind of problem that has arisen in German. […] our use of 'sense' as a theoretical term is somewhat narrower than is customary in philosophical writings (p.199.)

[…] a purely extensional theory of semantics. (p.199.) If the meaning of an expression is the class of entities to which it refers (or may refer), how is it that even uniquely referring expressions […] such as 'the Morning Star' and 'the Evening Star' […] are not synonymous and do not satisfy Leibniz's principle of substitutability?

If x and y are two expressions which refer to the same entity, it is certainly not the case that either of them may be substituted for the [199] other without affecting the truth-value of the proposition that is expressed, in sentences like 'He does not believe that x is y.'

> Bertram Russell: '[The thesis of extensionality] is sought to be maintained for several reasons. It is very convenient technically in mathematical logic, it is obviously true of the sort of statements that mathematicians want to make, it is essential to the maintenance of physicalism and behaviourism, not only as metaphysical systems, but even in the linguistic sense adopted by a Carnap. None of these reasons, however, gives any ground for supposing the thesis to be true.' (*An Enquiry into Meaning and Truth*, 1940, p.247.)

Compares 'John is a fool' and 'John is a linguist' – i.e., a predicative sentence and an equative sentence: To put it in a nutshell, the criterion for substitutability in subject position in this construction is referential identity; the criterion for substitutability in predicate position is identity of sense. (p.201.)

Attempts have been made by many philosophers to apply the Leibnizian principle of substitutability without change of truth-value to define both reference and sense. Two expressions would have the same reference […] if they could be substituted for one another without affecting the truth value of any of the statements that could be made by uttering any of the sentences […] (p.201.)

Two or more expressions will be defined to have the same sense (i.e., to be synonymous*) over a certain range of utterances if and only if they are substitutable in the utterances without affecting their descriptive meaning. (p.202.)

Quine: 'sentences are synonymous if and only if their biconditional (formed by joining them with "if and only if") is analytic.' (1960; here p.202.) [Analytic is taken to mean a priori.]

7.4. Denotation
By denotation* of a lexeme […] will be meant the relationship that holds between that lexeme and persons, things, places, properties, processes and activities external to the language-system. (p.207.)

Intension and extension: Many [..] would say with Carnap that the extension of 'red' is the class of all red objects and its intension is the property of being red. (p.207.)

Denotatum/denotata. Denotation and reference. To say that there is a distinction between denotation and reference does not imply that they are unconnected. (p.208.)

The point being made is simply this: there may be no single correct way, in practical terms of specifying the denotation of a lexeme. (p.209.) Lyons repudiates Bloomfield's conception of 'the denotation of lexemes as a "scientifically accurate" description of the denotata' (1935; here p.210.)

Until we have a satisfactory theory of culture, in the construction of which not only sociology, but also cognitive and social psychology, have played their part, it is idle to speculate further about the possibility of constructing anything more than a rather ad hoc practical account of the denotation of lexemes. (p.210.)

[T]here are serious objections to making either sense or denotation basic in terms of the traditional diagram of signification. (p.210.)

[S]peakers of English are always aware of sense-relations. E.g., 'There is no such animal as a unicorn' v. 'There is no such book as a unicorn.' (p.210-11.)

We might […] consider the alternative method of reduction: that of taking sense to be basic in all instances and treating denotation as a derivative relation. But there are problems here too. […] It appears to be no more correct to say that denotation is wholly dependent upon sense than it is to say that sense is wholly dependent upon denotation. (p.211.)

Lyons notes that it may not be possible to establish denotation and sense as distinct but interdependent aspects of meaning, but holds that we can 'use the two terms to avoid commitment on the philosophical and psychological issues involved in the controversy between nominalism and realism. (vide 4.3.)

The fact that 'unicorn', &c., have no extension in the actual world can be treated as irrelevant within any theory of semantics which allows for the relativisation of truth and denotation to possible worlds. (p.212.)

Lyons discusses the word 'intelligent' and its variable other-language counterparts – including the approximations of Plato's *sophos* and *eumathes*.

'Is it not possible that the world "intelligent" is used by speakers of English in a variety of circumstances, among which we can perhaps discern certain family resemblances?' (Lyons, p.212; citing Wittgenstein, *Philosophical Investigations*, 1953, et al.)

Applicability*; we may use the term […] for any relation that can be established between elements or units of language (including prosodic* and paralinguistic* features of utterances) and entities in, or aspects of the world in which language operates. (p.213.)

'The man drinking a martini is a crook.': […] the denotation of 'to be a crook' is the intension of the class whose extension is the denotatum of 'crook'. (p.214.)

It is less clear if referring expressions have denotation in the sense in which we are using the term 'denotation'. (p.214.)

Personal and demonstrative pronoun: it would be rather odd to talk of the denotation of 'he' or the pronoun 'this' […]

Descriptive noun-phrases [e.g., 'the man drinking the martini …']: it seems preferable […] to say that it is the complex predicative expression which has denotation […] and that the use of the definite noun-phrase to refer to an individual implies or presupposes that the complex predicative expression is true of the individual in question. (p.215.)

If we decide to use the term [for lexemes and their extensions] we cannot consistently apply it to referring expressions. [… M]any philosophers, if they use 'denotation' at all, would probably prefer to link it more closely to 'reference'. (p.215.)

7.5. Naming
As far back as we can trace the history of language speculation, the basic semantic function of words has been seen as that of naming. The story [215] of Adam naming the animals, so that "whatever the man called every living creature, that was the name thereof" (Gen. 2.19), is typical of the conception of meaning that is to be found in many other sacred or mythological accounts of the origin of language.

Also cites St. Augustine (quoted by Wittgenstein), and Ryle ('Fido'-Fido, 1937) on the fact that naming has long been identified as 'the basic semantic function of words'. (p.215.)

It [is] very clear that the relation which hold between a proper name and its denotation is very different from the relation which hold between a common noun and its denotata […] This is not to say that there were no connexion between naming and denotation as far as the acquisition of language is concerned. If there were no such connexion it would indeed be surprising that generations of subtle thinkers should have fallen victim to the alleged error of confusing the two, and even more surprising if ordinary folk should find it natural to talk of words as names for things. (p.216.)

Lyons distinguishes the following uses of names: referential* and vocative; also appellative* ('This is John') – incl. nomination* ('He is called John), didactic* and performative* ('I name this ship Queen Elizabeth I' – Austin, 1958).

Didactic nomination not only operates in the acquisition of language, but is a continuing and important semiotic function of language. (p.217.)

The name of a person is something that is held to be an essential part of him. (p.218.) Cites performative renomination in anthropology.

Linguistic status of names – a subject of controversy - hotly disputed whether names have a sense. (p.219.)

'He is no Cicero' – the name is being used predicatively [in view of its sense or denotation as referring to an articulate public speaker].

The principle that names have no sense is not invalidated by the fact that performative nomination, whether formal or informal, may be determined by certainly culturally prescribed conditions of semantic appropriateness. (p.221.)

Semantic appropriateness – *John has just cut herself.* Equivalent names [not] James/Jacques. Danzig/Gdansk.

Place-names: if there is a translation equivalent, it will always be used. Linguistic status of names: whether they belong to a language or not and whether they have a meaning or not do not admit of a simple and universally valid answer. [… S]ome names have a symbolic, etymological or translational meaning [b]ut they do not have a sense, or some unique and special kind of meaning which distinguishes them as a class from common nouns. (p.223.)

7.6. Reference, sense and denotation in language-acquisition.

Distinction of common and proper nouns: The grammatical structure of English is such that any singular countable noun in a referring expression must be accompanied by a determiner*, quantifier*, or syntactically equivalent for (The boy came yesterday' or 'James came yesterday', not 'Boy came yesterday' or 'The James came yesterday'). (p.224.)

The way in which the child comes to re-identify individuals and group them into classes might very well depend upon an innate faculty or mechanism [..] the linguist should not feel obliged to commit himself on such issues. (p.225.)

Quine: the ontogenesis of reference and denotation (or 'reference'): 1) words with unique denotata; 2) distinguishes proper names and words with multiple denotation; learns to use collocations such as 'tall man'; masters collocations like 'taller than Daddy'. (p.226.)

It is probable that the principles of individuation are, to some considerable degree at least, universal and independent of the language we are brought up to speak as children. At the same time [… neither] the grammatical distinction of countable nouns and mass nouns ['books' and 'water'] nor the grammatical distinction of singular and plural which in English support and strengthen our appreciation of the corresponding semantic distinctions are […] universal in language. (p..227.)

'I like salmon'; 'I like herrings' – class of individuals or stuff or substance?

Reference and denotation [in child language acquisition:] [W]hat eventually becomes lexemes which denote classes of individuals in the adult language may have been first used and understood by the child as names. At this stage, a purely nominalistic interpretation of the meaning of all expressions is, we may assume, [227] acceptable. There is no need to distinguish between reference and denotations because each expression will be used to refer to what it denotes and what precisely it does refer to may be somewhat indeterminate.

Denotation and sense: Sense-relations determine the limits of the denotation of particular lexemes (for lexemes that have denotation); and the sense and denotation of semantically related lexemes is learned, more or less simultaneously and presumably by a process of gradual refinement (involving both

specialisation* and generalisation*) during the child's acquisition of the language-system. Neither sense nor denotation is psychologically or logically prior to the other. Normally […] the child learns or infers the denotationally relevant differences between boys and girls […] at the same time as he is learning the sense of 'boy' and 'girl' […] and as part of the same process. Ostensive definition* […] in so far as it plays any role at all in language-acquisition, usually involves both the sense and the denotation of lexemes.

[… I]t is clear enough that the acquisition of the denotation of words cannot be separated from the acquisition of their sense, and that neither can be separated from learning the applicability of words and utterances in actual situations of use. (p.229; end chapter.)