CHAPTER IV

THE CONNOTATION OF TERMS

Section 1. Terms are next to be classified according to their Connotation-that is, according to what they imply as characteristic of the things denoted. We have seen that general names are used to denote many things in the same sense, because the things denoted resemble one another in certain ways: it is this resemblance in certain points that leads us to class the things together and call them by the same name; and therefore the points of resemblance constitute the sense or meaning of the name, or its Connotation, and limit its applicability to such things as have these characteristic qualities. 'Sheep' for example, is used in the same sense, to denote any of a multitude of animals that resemble one another: their size, shape, woolly coats, cloven hoofs, innocent ways and edibility are well known. When we apply to anything the term 'sheep,' we imply that it has these qualities: 'sheep,' denoting the animal, connotes its possessing these characteristics; and, of course, it cannot, without a figure of speech or a blunder, be used to denote anything that does not possess all these qualities. It is by a figure of speech that the term 'sheep' is applied to some men; and to apply it to goats would be a blunder.

Most people are very imperfectly aware of the connotation of the words they use, and are guided in using them merely by the custom of the language. A man who employs a word quite correctly may be sadly posed by a request to explain or define it. Moreover, so far as we are aware of the connotation of terms, the number and the kind of attributes we think of, in any given case, vary with the depth of our interest, and with the nature of our interest in the things denoted. 'Sheep' has one meaning to a touring townsman, a much fuller one to a farmer, and yet a different one to a zoologist. But this does not prevent them agreeing in the use of the word, as long as the qualities they severally include in its meaning are not incompatible.

All general names, and therefore not only class-names, like 'sheep,' but all attributives, have some connotation. 'Woolly' denotes anything that bears wool, and connotes the fact of bearing wool; 'innocent' denotes anything that habitually and by its disposition does no harm (or has not been guilty of a particular offence), and connotes a harmless character (or freedom from particular guilt); 'edible' denotes whatever can be eaten with good results, and connotes its suitability for mastication, deglutition, digestion, and assimilation.

Section 2. But whether all terms must connote as well as denote something, has been much debated. Proper names, according to what seems the better opinion, are, in their ordinary use, not connotative. To say that they have no meaning may seem violent: if any one is called John Doe, this name, no doubt, means a great deal to his friends and neighbours, reminding them of his stature and physiognomy, his air and gait, his wit and wisdom, some queer stories, and an indefinite number of other things. But all this significance is local or accidental; it only exists for those who know the individual or have heard him described: whereas a general name gives information about any thing or person it denotes to everybody who understands the language, without any particular knowledge of the individual.

We must distinguish, in fact, between the peculiar associations of the proper name and the commonly recognised meaning of the general name. This is why proper names are not in the dictionary. Such a name as London, to be sure, or Napoleon Buonaparte, has a significance not merely local; still, it is accidental. These names are borne by other places and persons than those that have rendered them famous. There are Londons in various latitudes, and, no doubt, many Napoleon Buonapartes in Louisiana; and each name has in its several denotations an altogether different suggestiveness. For its suggestiveness is in each application determined by the peculiarities of the place or person denoted; it is not given to the different places (or to the different persons) because they have certain characteristics in common.

However, the scientific grounds of the doctrine that proper names are non-connotative, are these: The peculiarities that distinguish an individual person or thing are admitted to be infinite, and anything less than a complete enumeration of these peculiarities may fail to distinguish and identify the individual. For, short of a complete enumeration of them, the description may be satisfied by two or more individuals; and in that case the term denoting them, if limited by such a description, is not a proper but a general name, since it is applicable to two or more in the same sense. The existence of other individuals to whom it applies may be highly improbable; but, if it be logically possible, that is enough. On the other hand, the enumeration of infinite peculiarities is certainly impossible. Therefore proper names have no assignable connotation. The only escape from this reasoning lies in falling back upon time and place, the principles of individuation, as constituting the connotation of proper names. Two things cannot be at the same time in the same place: hence 'the man who was at a certain spot on the bridge of Lodi at a certain instant in a certain year' suffices to identify Napoleon Buonaparte for that instant. Supposing no one else to have borne the name, then, is this its connotation? No one has ever thought so. And, at any rate, time and place are only extrinsic determinations (suitable indeed to events like the battle of Lodi, or to places themselves like London); whereas the connotation of a general term, such as 'sheep,' consists of intrinsic qualities. Hence, then, the scholastic doctrine 'that individuals have no essence' (see chap. xxii, section 9), and Hamilton's dictum 'that every concept is inadequate to the individual,' are justified.

General names, when used as proper names, lose their connotation, as Euxine or Newfoundland.

Singular terms, other than Proper, have connotation; either in themselves, like the singular pronouns 'he,' 'she,' 'it,' which are general in their applicability, though singular in application; or, derivatively, from the general names that combine to form them, as in 'the first Emperor of the French' or the 'Capital of the British Empire.'

Section 3. Whether Abstract Terms have any connotation is another disputed question. We have seen that they denote a quality or qualities of something, and that is precisely what general terms connote: 'honesty' denotes a quality of some men; 'honest' connotes the same quality, whilst denoting the men who have it.

The denotation of abstract terms thus seems to exhaust their force or meaning. It has been proposed, however, to regard them as

connoting the qualities they directly stand for, and not denoting anything; but surely this is too violent. To denote something is the same as to be the name of something (whether real or unreal), which every term must be. It is a better proposal to regard their denotation and connotation as coinciding; though open to the objection that 'connote' means 'to mark along with' something else, and this plan leaves nothing else. Mill thought that abstract terms are connotative when, besides denoting a quality, they suggest a quality of that quality (as 'fault' implies 'hurtfulness'); but against this it may be urged that one quality cannot bear another, since every qualification of a quality constitutes a distinct quality in the total ('milk-whiteness' is distinct from 'whiteness,' cf. chap. iii, section 4. After all, if it is the most consistent plan, why not say that abstract, like proper, terms have no connotation?

But if abstract terms must be made to connote something, should it not be those things, indefinitely suggested, to which the qualities belong? Thus 'whiteness' may be considered to connote either snow or vapour, or any white thing, apart from one or other of which the quality has no existence; whose existence therefore it implies. By this course the denotation and connotation of abstract and of general names would be exactly reversed. Whilst the denotation of a general name is limited by the qualities connoted, the connotation of an abstract name includes all the things in which its denotation is realised. But the whole difficulty may be avoided by making it a rule to translate, for logical purposes, all abstract into the corresponding general terms.

Section 4. If we ask how the connotation of a term is to be known, the answer depends upon how it is used. If used scientifically, its connotation is determined by, and is the same as, its definition; and the definition is determined by examining the things to be denoted, as we shall see in <u>chap. xxii</u>. If the same word is used as a term in different sciences, as 'property' in Law and in Logic, it will be differently defined by them, and will have, in each use, a correspondingly different connotation. But terms used in popular discourse should, as far as possible, have their connotations determined by classical usage, *i.e.*, by the sense in which they are used by writers and speakers who are acknowledged masters of the language, such as Dryden and Burke. In this case the classical connotation determines the definition; so that to define terms thus used is nothing else than to analyse their accepted meanings.

It must not, however, be supposed that in popular use the connotation of any word is invariable. Logicians have attempted to classify terms into Univocal (having only one meaning) and Æquivocal (or ambiguous); and no doubt some words (like 'civil,' 'natural,' 'proud,' 'liberal,' 'humorous') are more manifestly liable to ambiguous use than some others. But in truth all general terms are popularly and classically used in somewhat different senses.

Figurative or tropical language chiefly consists in the transfer of words to new senses, as by metaphor or metonymy. In the course of years, too, words change their meanings; and before the time of Dryden our whole vocabulary was much more fluid and adaptable than it has since become. Such authors as Bacon, Milton, and Sir Thomas Browne often used words derived from the Latin in some sense they originally had in Latin, though in English they had acquired another meaning. Spenser and Shakespeare, besides this practice, sometimes use words in a way that can only be justified by their choosing to have it so; whilst their contemporaries, Beaumont and Fletcher, write the perfect modern language, as Dryden observed. Lapse of time, however, is not the chief cause of variation in the sense of words. The matters which terms are used to denote are often so complicated or so refined in the assemblage, interfusion, or gradation of their qualities, that terms do not exist in sufficient abundance and discriminativeness to denote the things and, at the same time, to convey by connotation a determinate sense of their agreements and differences. In discussing politics, religion, ethics, æsthetics, this imperfection of language is continually felt; and the only escape from it, short of coining new words, is to use such words as we have, now in one sense, now in another somewhat different, and to trust to the context, or to the resources of the literary art, in order to convey the true meaning. Against this evil the having been born since Dryden is no protection. It behoves us, then, to remember that terms are not classifiable into Univocal and Æquivocal, but that all terms are susceptible of being used æquivocally, and that honesty and lucidity require us to try, as well as we can, to use each term univocally in the same context.

The context of any proposition always proceeds upon some assumption or understanding as to the scope of the discussion, which controls the interpretation of every statement and of every word. This was called by De Morgan the "universe of discourse": an older name for it, revived by Dr. Venn, and surely a better one, is *suppositio*. If we are talking of children, and 'play' is mentioned, the *suppositio* limits the suggestiveness of the word in one way; whilst if Monaco is the subject of conversation, the same word 'play,' under the influence of a different *suppositio*, excites altogether different ideas. Hence to ignore the *suppositio* is a great source of fallacies of equivocation. 'Man' is generally defined as a kind of animal; but 'animal' is often used as opposed to and excluding man. 'Liberal' has one meaning under the suppositio of politics, another with regard to culture, and still another as to the disposal of one's private means. Clearly, therefore, the connotation of general terms is relative to the *suppositio*, or "universe of discourse."

Section 5. Relative and Absolute Terms.—Some words go in couples or groups: like 'up-down,' 'former-latter,' 'father-motherchildren,' 'hunter-prey,' 'cause-effect,' *etc*. These are called Relative Terms, and their nature, as explained by Mill, is that the connotations of the members of such a pair or group are derived from the same set of facts (the *fundamentum relationis*). There cannot be an 'up' without a 'down,' a 'father' without a 'mother' and 'child'; there cannot be a 'hunter' without something hunted, nor 'prey' without a pursuer. What makes a man a 'hunter' is his activities in pursuit; and what turns a chamois into 'prey' is its interest in these activities. The meaning of both terms, therefore, is derived from the same set of facts; neither term can be explained without explaining the other, because the relation between them is connoted by both; and neither can with propriety be used without reference to the other, or to some equivalent, as 'game' for 'prey.'

In contrast with such Relative Terms, others have been called Absolute or Non-relative. Whilst 'hunter' and 'prey' are relative, 'man' and 'chamois' have been considered absolute, as we may use them without thinking of any special connection between their meanings. However, if we believe in the unity of Nature and in the relativity of knowledge (that is, that all knowledge depends upon comparison, or a perception of the resemblances and differences of things), it follows that nothing can be completely understood except through its agreements or contrasts with everything else, and that all terms derive their connotation from the same set of facts, namely, from general experience. Thus both man and chamois are animals; this fact is an important part of the meaning of both terms, and to that extent they are relative terms. 'Five yards' and 'five minutes' are very different notions, yet they are profoundly related; for their very difference helps to make both notions distinct; and their intimate connection is shown in this, that five yards are traversed in a certain time, and that five minutes are measured by the motion of an index over some fraction of a yard upon the dial.

The distinction, then, between relative and non-relative terms must rest, not upon a fundamental difference between them (since, in fact, all words are relative), but upon the way in which words are used. We have seen that some words, such as 'up-down,' 'causeeffect,' can only be used relatively; and these may, for distinction, be called Correlatives. But other words, whose meanings are only partially interdependent, may often be used without attending to their relativity, and may then be considered as absolute. We cannot say 'the hunter returned empty handed,' without implying that 'the prey escaped'; but we may say 'the man went supperless to bed,' without implying that 'the chamois rejoiced upon the mountain.' Such words as 'man' and 'chamois' may, then, in their use, be, as to one another, non-relative.

To illustrate further the relativity of terms, we may mention some of the chief classes of them.

Numerical order: 1st, 2nd, 3rd, *etc.*; 1st implies 2nd, and 2nd 1st; and 3rd implies 1st and 2nd, but these do not imply 3rd; and so on.

Order in Time or Place: before-after; early-punctual-late; right-middle-left; North-South, *etc*.

As to Extent, Volume, and Degree: greater-equal-less; largemedium-small; whole and part.

Genus and Species are a peculiar case of whole and part (cf. chaps. xxi.-ii.-iii.). Sometimes a term connotes all the attributes

that another does, and more besides, which, as distinguishing it, are called differential. Thus 'man' connotes all that 'animal' does, and also (as *differentiæ*) the erect gait, articulate speech, and other attributes. In such a case as this, where there are well-marked classes, the term whose connotation is included in the others' is called a Genus of that Species. We have a Genus, triangle; and a Species, isosceles, marked off from all other triangles by the differential quality of having two equal sides: again-Genus, book; Species, quarto; Difference, having each sheet folded into four leaves.

There are other cases where these expressions 'genus' and 'species' cannot be so applied without a departure from usage, as, e.g., if we call snow a species of the genus 'white,' for 'white' is not a recognised class. The connotation of white (*i.e.*, whiteness) is, however, part of the connotation of snow, just as the qualities of 'animal' are amongst those of 'man'; and for logical purposes it is desirable to use 'genus and species' to express that relativity of terms which consists in the connotation of one being part of the connotation of the other.

Two or more terms whose connotations severally include that of another term, whilst at the same time exceeding it, are (in relation to that other term) called Co-ordinate. Thus in relation to 'white,' snow and silver are co-ordinate; in relation to colour, yellow and red and blue are co-ordinate. And when all the terms thus related stand for recognised natural classes, the co-ordinate terms are called co-ordinate species; thus man and chamois are (in Logic) co-ordinate species of the genus animal.

Section 6. From such examples of terms whose connotations are related as whole and part, it is easy to see the general truth of the doctrine that as connotation decreases, denotation increases: for 'animal,' with less connotation than man or chamois, denotes many more objects; 'white,' with less connotation than snow or silver, denotes many more things, It is not, however, certain that this doctrine is always true in the concrete: since there may be a term connoting two or more qualities, all of which qualities are peculiar to all the things it denotes; and, if so, by subtracting one of the qualities from its connotation, we should not increase its denotation. If 'man,' for example, has among mammals the two peculiar attributes of erect gait and articulate speech, then, by omitting 'articulate speech' from the connotation of man, we could not apply the name to any more of the existing mammalia than we can at present. Still we might have been able to do so; there might have been an erect inarticulate ape, and perhaps there once was one; and, if so, to omit 'articulate' from the connotation of man would make the term 'man' denote that animal (supposing that there was no other difference to exclude it). Hence, potentially, an increase of the connotation of any term implies a decrease of its denotation. And, on the other hand, we can only increase the denotation of a term, or apply it to more objects, by decreasing its connotation; for, if the new things denoted by the term had already possessed its whole connotation, they must already have been denoted by it. However, we may increase the known denotation without decreasing the connotation, if we can discover the full connotation in things not formerly supposed to have it, as when dolphins were discovered to be mammals; or if we can impose the requisite qualities upon new individuals, as when by annexing some millions of Africans we extend the denotation of 'British subject' without altering its connotation.

Many of the things noticed in this chapter, especially in this section and the preceding, will be discussed at greater length in the chapters on Classification and Definition.

Section 7. Contradictory Relative Terms.—Every term has, or may have, another corresponding with it in such a way that, whatever differential qualities (Section 5) it connotes, this other connotes merely their absence; so that one or the other is always formally predicable of any Subject, but both these terms are never predicable of the same Subject in the same relation: such pairs of terms are called Contradictories. Whatever Subject we take, it is either visible or invisible, but not both; either human or nonhuman, but not both.

This at least is true formally, though in practice we should think ourselves trifled with if any one told us that 'A mountain is either human or non-human, but not both.' It is symbolic terms, such as X and x, that are properly said to be contradictories in relation to any subject whatever, S or M. For, as we have seen, the ordinary use of terms is limited by some *suppositio*, and this is true of Contradictories. 'Human' and 'non-human' may refer to zoological classification, or to the scope of physical, mental, or moral powers—as if we ask whether to flourish a dumbbell of a ton weight, or to know the future by intuition, or impeccability, be human or non-human. Similarly, 'visible' and 'invisible' refer either to the power of emitting or reflecting light, so that the words have no hold upon a sound or a scent, or else to power of vision and such qualifications as 'with the naked eye' or 'with a microscope.'

Again, the above definition of Contradictories tells us that they cannot be predicated of the same Subject "in the same relation"; that is, at the same time or place, or under the same conditions. The lamp is visible to me now, but will be invisible if I turn it out; one side of it is now visible, but the other is not: therefore without this restriction, "in the same relation," few or no terms would be contradictory.

If a man is called wise, it may mean 'on the whole' or 'in a certain action'; and clearly a man may for once be wise (or act wisely) who, on the whole, is not-wise. So that here again, by this ambiguity, terms that seem contradictory are predicable of the same subject, but not "in the same relation." In order to avoid the ambiguity, however, we have only to construct the term so as to express the relation, as 'wise on the whole'; and this immediately generates the contradictory 'not-wise on the whole.' Similarly, at one age a man may have black hair, at another not-black hair; but the difficulty is practically removable by stating the age referred to.

Still, this case easily leads us to a real difficulty in the use of contradictory terms, a difficulty arising from the continuous change or 'flux' of natural phenomena. If things are continually changing, it may be urged that contradictory terms are always applicable to the same subject, at least as fast as we can utter them: for if we have just said that a man's hair is black, since (like everything else) his hair is changing, it must now be not-black, though (to be sure) it may still seem black. The difficulty, such as it is, lies in this, that the human mind and its instrument language are not equal to the subtlety of Nature. All things flow, but the terms of human discourse assume a certain fixity of things; everything at every moment changes, but for the most part we can neither perceive this change nor express it in ordinary language.

This paradox, however, may, I suppose, be easily over-stated. The change that continually agitates Nature consists in the movements of masses or molecules, and such movements of things are compatible with a considerable persistence of their qualities. Not only are the molecular changes always going on in a piece of gold compatible with its remaining yellow, but its persistent vellowness depends on the continuance of some of those changes. Similarly, a man's hair may remain black for some years; though, no doubt, at a certain age its colour may begin to be problematical, and the applicability to it of 'black' or 'not-black' may become a matter of genuine anxiety. Whilst being on our guard, then, against fallacies of contradiction arising from the imperfect correspondence of fact with thought and language, we shall often have to put up with it. Candour and humility having been satisfied by the above acknowledgment of the subtlety of Nature, we may henceforward proceed upon the postulate—that it is possible to use contradictory terms such as cannot both be predicated of the same subject in the same relation, though one of them may be; that, for example, it may be truly said of a man for some years that his hair is black; and, if so, that during those years to call it not-black is false or extremely misleading.

The most opposed terms of the literary vocabulary, however, such as 'wise-foolish,' 'old-young,' 'sweet-bitter,' are rarely true contradictories: wise and foolish, indeed, cannot be predicated of the same man in the same relation; but there are many middling men, of whom neither can be predicated on the whole. For the comparison of quantities, again, we have three correlative terms, 'greater—equal—less,' and none of these is the contradictory of either of the others. In fact, the contradictory of any term is one that denotes the sum of its co-ordinates (Section 6); and to obtain a contradictory, the surest way is to coin one by prefixing to the given term the particle 'not' or (sometimes) 'non': as 'wise, not-wise,' 'human, non-human,' 'greater, not-greater.'

The separate word 'not' is surer to constitute a contradictory than the usual prefixes of negation, 'un-' or 'in-,' or even 'non'; since compounds of these are generally warped by common use from a purely negative meaning. Thus, 'Nonconformist' does not denote everybody who fails to conform. 'Unwise' is not equivalent to 'notwise,' but means 'rather foolish'; a very foolish action is not-wise, but can only be called unwise by meiosis or irony. Still, negatives formed by 'in' or 'un' or 'non' are sometimes really contradictory of their positives; as 'visible, invisible,' 'equal, unequal.'

Section 8. The distinction between Positive and Negative terms is not of much value in Logic, what importance would else attach to it being absorbed by the more definite distinction of contradictories. For contradictories are positive and negative in essence and, when least ambiguously stated, also in form. And, on the other hand, as we have seen, when positive and negative terms are not contradictory, they are misleading. As with 'wise-unwise,' so with many others, such as 'happy-unhappy'; which are not contradictories; since a man may be neither happy nor unhappy, but indifferent, or (again) so miserable that he can only be called unhappy by a figure of speech. In fact, in the common vocabulary a formal negative often has a limited positive sense; and this is the case with unhappy, signifying the state of feeling in the milder shades of Purgatory.

When a Negative term is fully contradictory of its Positive it is said to be Infinite; because it denotes an unascertained multitude of things, a multitude only limited by the positive term and the *suppositio*; thus 'not-wise' denotes all except the wise, within the *suppositio* of 'intelligent beings.' Formally (disregarding any *suppositio*), such a negative term stands for all possible terms except its positive: x denotes everything but X; and 'not-wise' may be taken to include stones, triangles and hippogriffs. And even in this sense, a negative term has some positive meaning, though a very indefinite one, not a specific positive force like 'unwise' or 'unhappy': it denotes any and everything that has not the attributes connoted by the corresponding positive term.

Privative Terms connote the absence of a quality that normally belongs to the kind of thing denoted, as 'blind' or 'deaf.' We may predicate 'blind' or 'deaf' of a man, dog or cow that happens not to be able to see or hear, because the powers of seeing and hearing generally belong to those species; but of a stone or idol these terms can only be used figuratively. Indeed, since the contradictory of a privative carries with it the privative limitation, a stone is strictly 'not-blind': that is, it is 'not-something-that-normally-having-sightwants-it.'

Contrary Terms are those that (within a certain genus or suppositio) severally connote differential qualities that are, in fact, mutually incompatible in the same relation to the same thing, and therefore cannot be predicated of the same subject in the same relation; and, so far, they resemble Contradictory Terms: but they differ from contradictory terms in this, that the differential quality connoted by each of them is definitely positive; no Contrary Term is infinite, but is limited to part of the *suppositio* excluded by the others; so that, possibly, neither of two Contraries is truly predicable of a given subject. Thus 'blue' and 'red' are Contraries, for they cannot both be predicated of the same thing in the same relation; but are not Contradictories, since, in a given case, neither may be predicable: if a flower is blue in a certain part, it cannot in the same part be red; but it may be neither blue nor red, but yellow; though it is certainly either blue or not-blue. All co-ordinate terms are formal Contraries; but if, in fact, a series of co-ordinates comprises only two (as male-female), they are empirical Contradictories; since each includes all that area of the suppositio which the other excludes.

The extremes of a series of co-ordinate terms are Opposites; as, in a list of colours, white and black, the most strongly contrasted, are said to be opposites, or as among moods of feeling, rapture and misery are opposites. But this distinction is of slight logical importance. Imperfect Positive and Negative couples, like 'happy and unhappy,' which (as we have seen) are not contradictories, are often called Opposites.

The members of any series of Contraries are all included by any one of them and its contradictory, as all colours come under 'red' and 'not-red,' all moods of feeling under 'happy' and 'not-happy.'