

An Essay Concerning Human Understanding

Book III: Words

John Locke

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[Brackets] enclose editorial explanations. Small ·dots· enclose material that has been added, but can be read as though it were part of the original text. Occasional •bullets, and also indenting of passages that are not quotations, are meant as aids to grasping the structure of a sentence or a thought. Every four-point ellipsis indicates the omission of a brief passage that seems to present more difficulty than it is worth. Longer omissions are reported on, between [brackets], in normal-sized type.

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Contents

Chapter i: Words or language in general	145
Chapter ii: The signification of words	146
Chapter iii: General terms	148
Chapter iv: The names of simple ideas	155
Chapter v: The names of mixed modes and relations	158
Chapter vi: The names of substances	162
Chapter vii: Particles	175

Chapter viii: Abstract and concrete terms	176
Chapter ix: The imperfection of words	177
Chapter x: The misuse of words	183
Chapter xi: The remedies of those imperfections and misuses	190

Chapter i: Words or language in general

1. God, having designed man to be a sociable creature, not only made him with an inclination and a need to have fellowship with other men, but also equipped him with *language*, which was to be the great instrument and common tie of society. So nature shaped man's organs so that he could make articulate sounds, which we call 'words'. But this wasn't enough to produce language, for parrots and some other birds can learn to make distinct enough articulate sounds, yet they are far from being capable of language.

2. Besides articulate sounds, therefore, man had also to be able to use these sounds as signs of internal conceptions, making them stand as marks of ideas in his own mind. This was so that he could make those ideas known to others, thus conveying thoughts from one mind to another.

3. But this still didn't suffice to make words as useful as they ought to be. If every particular thing had to be given a separate name, there would be *so many* words that the language would be too complicated to use; so a fully satisfactory language needs sounds that, as well as being signs of ideas, can be used in such a way that one word covers a number of particular things. So language was improved in yet another way by coming to include *general terms*, so that one word can mark a multitude of particular things. Sounds could be used in this helpful manner only by signifying ideas of a special kind: names become general if they are made to stand for general ideas, and names remain particular if the ideas they signify are particular. [Locke regularly uses 'name' to cover not only proper names but also general words such as 'woman', 'island', 'atom' and so on.]

4. Besides these names standing for ideas, there are other words that men use to signify not any idea but rather the

lack or absence of certain ideas or of all ideas whatsoever. Examples are *nihil* [= 'nothing'] in Latin, and in English 'ignorance' and 'barrenness'. These negative or privative words can't be said properly to have no ideas associated with them, for then they would be perfectly meaningless sounds. Rather, they relate to positive ideas, and signify their absence.

[In section **5** Locke discusses the words referring to items far removed from anything of which we have sense-experience. The meanings of many such words, he says, are borrowed from ideas of sense-perception.] For example, 'imagine', 'apprehend', 'comprehend', 'adhere', 'conceive', etc. are all words taken from the operations of perceptible things and applied to certain modes of thinking. . . .

6. But to understand better the use and force of language as a means for instruction and knowledge, we should tackle two questions. **1** In the use of language, what are names immediately applied to? Also, given that all words (except proper names) are general, and so stand not for particular things but for sorts and kinds of things, **2** what *are* these sorts and kinds (or, if you prefer Latin, these species and genera)? what do they consist in? how do they come to be made? When we have explored these thoroughly, we'll have a better chance of finding the right use of words, the natural advantages and defects of language, and the remedies that ought to be used to avoid obscurity or uncertainty in the signification of words. Without that, we can't talk in a clear and orderly way about knowledge; and knowledge, which has to do with propositions (most of them universal ones), has a greater connection with words than perhaps is suspected. So these matters will be the topic of the following chapters.

Chapter ii: The signification of words

1. A man may have a great variety of thoughts that could bring profit and delight to others as well as to himself; but they are all locked up inside him, invisible and hidden from others, and incapable of being brought out into the open. If society is to flourish, thoughts must be communicated; so people had to devise some external perceptible signs through which they could let one another know of those invisible ideas of which their thoughts are made up. For this purpose nothing was so suitable—because plentiful and quickly available—as those articulate sounds they found they could make so easily and in such variety. That is presumably how men came to use spoken words as the signs of their ideas. There is no natural connection between particular sounds and particular ideas (if there were, there would be only one human language); but people arbitrarily *chose* to use such and such a word as the mark of such and such an idea. So that is what words are used for, to be perceptible marks of ideas; and the ideas they stand for are their proper and immediate signification [= ‘meaning’]. [Locke uses ‘arbitrary’ in what was then its dominant sense, as meaning ‘dependent on human choice’, not implying that the choice was random or unreasonable or unmotivated. This will be important in v.3 and thereafter.]

2. Men use these marks either •to record their own thoughts as an aid to their memory or •to bring their ideas out into the open (so to speak) where others could see them. So words in their primary or immediate signification stand for nothing but the ideas in the mind of him that uses them, however imperfectly or carelessly those ideas are taken from the things they are supposed to represent. When one man speaks to another, it is so as to be understood; and the goal of his speech is for those sounds to mark his ideas and

so make them known to the hearer. What words are the marks of, then, are the ideas of the speaker. And nobody can apply a word, *as a mark*, immediately to anything else. For that would involve making the word be a sign of his own conceptions, and yet apply it to another idea; which would be to make it a sign and yet not a sign of his ideas at the same time; which would in effect deprive it of all signification. ·In case it isn’t clear to you why I say ‘a sign of his own conceptions’, I shall explain: applying the word *as a mark* of a thing involves applying it *intending it to stand for* that thing, which means applying it with an accompanying thought about the word’s significance·.

·Here is a second argument for the same conclusion·. Words are voluntary signs, and can’t be voluntary signs imposed by someone on something that he doesn’t know, for that would be to make them signs of nothing, sounds without signification. For a man to make his words be the signs either of •qualities in things or of •conceptions in someone else’s mind, he must have *in his own mind* •ideas of those qualities or conceptions. Till he has some ideas of his own, he can’t suppose them to correspond with the conceptions of another man. And when a man represents to himself other men’s ideas by some of his own, he may agree to give them the same names that other men do; but it is still his own ideas ·that he immediately signifies·—ideas that he has, not ones that he lacks.

3. This is necessary if language is to succeed—so necessary that in this respect ignorant people and learned ones all use words in the same ways. Meaningful words, in each man’s mouth, stand for the ideas that he has and wants to express by them. A child who has seen some metal and heard it

called 'gold', and has noticed nothing in it but its bright shining yellow colour, will apply the word 'gold' only to his own idea of that colour and to nothing else; and so he will call that same colour in a peacock's tail 'gold'. Someone who has also noticed that the stuff is heavy will use the sound 'gold' to stand for a complex idea of a shining, yellow, *and very heavy* substance. Another adds fusibility to the list; and then for him the word 'gold' signifies a body that is bright, yellow, *fusible*, and very heavy. Another adds malleability, and so on. Each uses the word 'gold' when he has occasion to express the idea that he has associated with it; but obviously each can apply it only to his own idea, and can't make it stand as a sign of a complex idea that he doesn't have.

4. But although words can properly and immediately signify nothing but ideas in the mind of the speaker, yet men in their thoughts give words a secret reference to two other things. First, they suppose their words to be marks also of ideas in the mind of *the hearer*. Without that they would talk in vain; if the sounds they applied to one idea were applied by the hearer to another, they couldn't be understood, and would be speaking different languages. Men don't often pause to consider whether their ideas are the same as those of the hearers. They are satisfied with using the word in what they think to be its ordinary meaning in that language; which involves supposing that the idea they make it a sign of is precisely the same as the one to which literate people in that country apply that name.

5. Secondly, because a man wants his hearers to think he is talking not merely about his own imagination but about things as they really are, he will often suppose his words to stand *not just for his ideas but also for the reality of things*. This relates especially to *substances and their names*, as perhaps the former 'secret reference' does to *simple ideas*

and modes and their names; so I shall deal more fully with these two different ways of applying words when I come to discuss the names of mixed modes and especially of substances. Let me just say here that it is a perverting of the use of words, and brings unavoidable obscurity and confusion into their signification, whenever we make them stand for anything but ideas in our own minds.

6. Two further points about words are worth noting. First, because they immediately signify one's own ideas, . . . the constant use of a word may create such a connection between that sound and the idea it signifies that hearing the word excites the idea almost as readily as if the relevant kind of object were presented to the senses. This is manifestly so in regard to all the obvious perceptible qualities, and in regard to in all substances that frequently come our way.

7. Secondly, through familiar use of words from our cradles we come to learn certain articulate sounds very perfectly, and have them readily on our tongues and always at hand in our memories, yet aren't always careful about what exactly they mean; and so it comes about that men, even when they want to think hard and carefully, often direct their thoughts more to *words* than to *things*. Indeed it goes further. Many words are learned before the ideas for which they stand are known, and so it happens that some people—not only children, but adults—utter various words just as parrots do, because they have learned them and have been accustomed to those sounds. But so far as words are useful and significant, so far is there a constant connection between the sound and the idea, and a designation that the one stands for the other. 'Words' that are not thus connected with ideas are nothing but so much insignificant noise.

[In section **8** Locke emphasizes that each word has its meaning by a purely 'arbitrary imposition', and that ultimately it

is for each individual to decide what idea *he* will associate with a given word. There are practical reasons for wanting one's own word-idea pairings to be the same as those of most

speakers and hearer's in one's own society; but that is a practical concern that leaves standing the fact of personal responsibility for the meanings of one's speech.]

Chapter iii: General terms

1. Since all things that exist are particulars, it might be thought reasonable that words, which ought to conform to things, would stand for *particular* things. But the facts are quite different: most words in all languages are *general* terms. There are reasons for this; indeed it was inevitable—for three reasons.

2. First, it is impossible for every particular thing to have a name all of its own. Because the meaningful use of words depends on the mind's connecting them with the ideas of which they are signs, the mind must contain those ideas, and it must have stored within itself all the information about which idea is signified by each word. But it is beyond our power to form and retain separate ideas of all the particular things we meet with: every bird and beast that men have seen, every tree and plant that has affected the senses, couldn't find a place in the most capacious understanding. When a general knows by name every soldier in his army, this is thought to be a prodigious feat of memory; so it is easy to see why men have never tried to give a name to each sheep in their flock, or every crow that flies over their heads; much less to call every grass-blade or grain of sand that comes their way by its own proper name.

3. Secondly, even if this were possible, it would be useless, because it would get in the way of language's main purpose. Nothing would be achieved by heaping up names of particular things: that wouldn't help us to communicate our thoughts. The only reason to learn names and use them in talk with others is so as to be understood; and for that to happen the sound I make through my organs of speech must arouse in your mind the same idea that I had in mind when I spoke. This can't be done through names that stand only for particular things of which I alone have the ideas in my mind. If you haven't encountered those very same things, the words that I use to stand for them won't be intelligible to you.

4. Thirdly, even if this were feasible (which I don't think it is), a separate name for every particular thing wouldn't be of much use for increasing our knowledge. Although knowledge is ultimately based on particular things, it broadens itself to take general views of things; and for this it needs to group them into *sorts*, under *general* names. These sorts, with the names belonging to them, are fairly limited in number; they don't multiply beyond what the mind can contain or beyond what we have use for. That is why men have mostly relied on such general names, though they also give individual names

to particular things when it is convenient to do this—for example, giving proper names to individual people whom they often have occasion to mention.

5. Not only persons but also countries, cities, rivers, mountains, and other geographical items are often given singular names, and always for the same reason. If we had reason to mention particular *horses* as often as we have particular *men*, no doubt we would use proper names for the former as we do for the latter. . . . That is how it is with jockeys, for whom horses have proper names to be known and picked out by, because they often have occasion to mention this or that particular horse when he is out of sight and therefore can't be designated by pointing.

6. Now we must consider how general words come to be made. For since all things that exist are only particulars, how do we come by general terms? Where do we find those 'general natures' they are supposed to stand for? Words become general by being made the signs of general ideas; and ideas become general by separating from them the circumstances of time and place and any other ideas that may tie them down to this or that particular existence. By means of such *abstraction* they are fitted to represent more than one individual. Every individual that conforms to that abstract idea is of that *sort* (as we call it).

7. To understand this more clearly, let us trace our notions and names from their beginning in infancy, and see how they develop from there. It's perfectly obvious that the ideas of the persons that children encounter are, like the persons themselves, only particular. The ideas of the nurse and the mother are well formed in an infant's mind. They represent only those individuals, and the only words that the infant has for the individuals are, in effect, proper names, like 'Nurse' and 'Mamma'. As they get older and meet more

people, infants notice that many other things in the world resemble—in shape and in other ways—their father and mother and other people they have been used to; and they form an idea that applies equally to all those many particular people, associating this idea with the name 'man'. [Here, as nearly everywhere, Locke uses 'man' to mean 'human'; it isn't confined to the male sex.] That is how they come to have a general name and a general idea. In doing this, they don't •make anything new, but only •leave out of the complex ideas they had of Nurse and Mamma, Peter and James, Mary and Jane, whatever is unique to each, and retain only what is common to them all.

8. In the same way that they come by the general name 'man' and the general idea of man, they easily advance to names and notions that are even more general. They notice that various things that differ from their idea of man, and so can't be brought under the name 'man', nevertheless share certain qualities with *man*. By uniting just those qualities into one idea, leaving all other qualities out, they come to have another yet more general idea, which they associate with a new word that applies to more things than 'man' does. This new idea is made not by adding anything but only, as before, by leaving out the shape and some other properties signified by the name 'man', and retaining only *a body, with life, sense, and spontaneous motion*. Those are the properties signified by the name 'animal'.

9. It is obvious that this is how men first came to form general ideas and to associate general names with them. To see that it is right, you have only to consider what goes on in your mind, or in the minds of others, when you or they think and gain knowledge. Someone who thinks that general natures or notions are anything but such abstract and partial ideas, drawn from more complex ideas and originally

taken from particular existing things, will be at a loss to say what they are. Reflect on your own mind and then answer this: How does your idea of *man* differ from your idea of Peter and Paul (or your idea of *horse* differ from your idea of Bucephalus) except by leaving out whatever is unique to each individual and retaining only what is present in all the complex ideas of particular men (or particular horses)? Again, by starting with the complex ideas signified by the names 'man' and 'horse', omitting whatever features they don't share and retaining only those that are common to both, we can form a complex idea to which we give the name 'animal'. Leave *sense* and *spontaneous motion* out of the idea of animal, and what remains are the simpler ideas of *body*, *life*, and *nourishment*; they constitute a more general idea that we associate with the term 'living'. In the same way the mind proceeds to 'body', 'substance', and at last to universal terms that stand for any of our ideas whatsoever—I mean terms such as 'being' and 'thing'. To conclude, this whole mystery of genera and species, which they make such a fuss about in the schools and which are rightly disregarded everywhere else, is simply a matter of more or less comprehensive abstract ideas, with names tied to them. [A genus (plural: genera) is a large class; a species is a smaller one within it. Mankind may be seen as a species within the genus of animals. The 'schools' mentioned here are the universities of western Europe in the late Middle Ages. Thinkers who accepted the (mostly Aristotelian) doctrines in metaphysics, logic and theology that were taught there were known as 'Schoolmen' or 'Scholastics'.] There are no exceptions to this: every more general term stands for such an idea, and the idea is merely a part of any of the ideas associated with less general terms contained under the more general one—so that, for instance, the idea of 'animal' is a part of the ideas of 'man' and of 'tiger'.

10. This may show us why we sometimes define a word—that is, declare its meaning—in terms of the 'genus' or next general word that covers it. This saves the labour of listing all the simple ideas that the next general word or genus stands for; and it may sometimes spare us from the shame of not being *able* to do that! Although defining by genus and differentia is the shortest way, however, it may not be the best. . . . [The 'differentia' is what marks off the species within the genus. Taking *adult human* as a genus and *woman* as a species, the differentia is *female*.] It is certainly not the only way, so we aren't absolutely required to follow it. To define a word is simply to make someone else understand through words what idea the defined word stands for; and the best way to do this is by straightforwardly enumerating the simple ideas that are combined in the meaning of the word being defined. If, instead, most of those simple ideas are conveyed by naming the genus under which the defined word falls, that isn't done out of necessity, or even for greater clearness, but merely for the sake of speed and convenience. If someone wants to know what idea the word 'man' stands for, his needs will be as well met by being told that man is *a solid extended substance, having life, sense, spontaneous motion, and a capacity for reasoning* as by being told that man is *a rational animal*. The two definitions are really equivalent, by virtue of the meanings of 'animal', 'living' and 'body'. This example illustrates what led people to the rule that a definition must consist of genus and differentia; and it also shows that the rule is not necessary and not even very useful. . . . I shall say more about definitions in the next chapter.

11. To return to general words, it is plain from what I have said that *generality* and *universality* are not properties of reality itself, but are something the understanding has

invented for its own convenience, and they apply only to ·verbal and mental· signs—words and ideas. I repeat: •a word is general when it is used as a sign of a general idea, so that it applies to many particular things; and •an idea is general when it is taken to represent many particular things; but universality doesn't belong to things themselves, which are all particular in their existence—even the words and ideas that have general meanings. ·For example, the word 'chapter' at the end of your copy of the last section is *in itself* a particular array of ink on a page; but its *meaning* isn't particular but general, because it is applicable to *any* chapter·. So the only general items there are have been created by us, and they are 'general' only in the sense that we can use them to signify [= 'mean'] or represent many particulars. Their meaning is nothing but a relation that is added to them by the human mind.

12. Let us now consider what kind of signification general words have. Obviously such a word doesn't •signify just one particular thing—for then it wouldn't be a general term but a proper name—but it is equally evident that it doesn't •signify a plurality. ·For example, 'man' isn't the name of some one man; but nor is it a name for some group of men or for the totality of all men·. If it did signify a plurality, 'man' would mean the same as 'men', and the distinction between singular and plural would disappear. What a general word •signifies is a *sort* of things; and it does this by standing for an abstract idea in the mind. When existing things are found to conform to that idea, they come to be *classified under that name*, or—to say the same thing in different words—they come to be *of that sort*. This makes it evident that the essences of the sorts of things (or *species* of things if you prefer Latin) are nothing but these abstract ideas. [The 'essence' of a sort is the set of features that are *essential* for a thing to

be of that sort. To know what is needed for something to be of a the sort *gold* (Locke is saying), you start with the general word 'gold', are led from that to your abstract idea of *gold*, and the features represented in that abstract idea are the essence of *gold*.] What makes a thing belong to a ·sort or· species is its having the essence of that species; and what gives a thing a right to a species name is its conforming to the idea with which that name is associated. Thus, for something to •have the essence of a species is just for it to •conform to the idea associated with that species' name; that is all there is to it. ·I shall now re-state all this in slightly different terms, illustrating it through the sort *man*, though of course it applies equally well to any other sort, and any other general term·. Each of the items in the following list is equivalent to the item that immediately follows it:

- having the essence of man
- being a man, or belonging to the species *man*
- having a right to the name 'man'
- conforming to the abstract idea that the name 'man' stands for.

So the first item is equivalent to the last: the abstract idea for which the name stands, and the essence of the species, is one and the same. This makes it easy to see that the essences of the sorts of things, and consequently the sorting of things, is all done by the understanding that abstracts and makes those general ideas.

13. I haven't forgotten—still less do I deny—that nature makes things in such a way that some of them are *like* others. This is perfectly obvious, especially in the case of animals and plants. Still, it is all right to say that the sorting of things under ·general· names is the work of the understanding. What it does is to attend to the similarities it finds amongst things, and on the basis of those it makes abstract general ideas (with names attached), which it uses

as patterns. When a particular existing thing is found to agree with one of these patterns, it comes to be of that species, to have that name, or to be put into that class. For when we say 'This is a man', 'That is a horse', 'This is justice', 'That is cruelty', 'This is a watch', 'That is a bottle', all we do is to classify things under different specific names [= 'names of species'] because they conform with the abstract ideas that we use those names to signify. And the essences of the species that we have set out and marked by names are simply the abstract ideas in the mind, which are (as it were) the bonds that tie particular things to the names under which they are classified. What connects a general name with a particular thing is the abstract idea that unites them: So that the essences of species, as picked out and labelled by us, can't be anything but these abstract ideas that we have in our minds. If the supposed 'real essences' of things are different from our abstract ideas, they can't be the essences of the species into which *we* group things. Nothing in the natures of things themselves dictates which groups of them constitute a single species, rather than two species or parts of a single species. What changes can you make in a horse or a piece of lead without making either of them belong to a different species? If you go by our abstract ideas, this is easy to answer; but if you try to go by supposed real essences, you will be at a loss—you'll never be able to settle exactly when any thing ceases to belong to the species of *horse* or *lead*.

14. My claim that these essences or abstract ideas are the work of the understanding will come as no surprise to anyone who realizes that complex ideas are often *different* collections of simple ideas in the minds of different men—so that people will differ, for instance, in what they mean by saying that someone is 'covetous'. Abstract ideas of substances seem to

be dictated by the things themselves, yet even they are not settled and the same for everyone—even as regards our own species. It has sometimes been doubted whether a particular fetus born of a woman was human, with debates about whether it should be kept alive and baptized. This couldn't happen if the abstract idea or essence to which the name 'human' belonged were of nature's making, rather than being an uncertain collection of simple ideas that various people's understandings have put together in different ways and associated with a name. Really, then, every distinct abstract idea is a distinct essence, and the names that stand for such distinct ideas are the names of things that are different in their essences. Thus a circle is as essentially different from an oval as a sheep is from a goat; and rain is as essentially different from snow as water is from earth. In each case, the essence of one kind isn't present in the other. So any two abstract ideas that differ from one another in any way at all, with two distinct names annexed to them, constitute two distinct sorts or species, which are as essentially different as any two of the most remote or opposite in the world.

15. Some people think that the essences of things are wholly unknown, and they have some reason for this. To understand it, we should consider the various meanings of the word 'essence'. First, 'essence' may be taken for the very being of any thing—what makes it be what it is. Using the term in this way, a thing's 'essence' is its internal constitution—the real but usually unknown inner nature on which its perceptible qualities depend. This is the proper original meaning of the word, as can be seen from its origin: the Latin *essentia* comes from the verb *esse*, which means 'to be'. The word 'essence' is still used in this sense, when we speak of the essence of particular things without giving them any name. [The point of the last

five words is this. If I use the phrase ‘the essence of this gold coin’, I could be referring to its essence-considered-as-a-gold-coin, which is dictated by the meaning of the phrase ‘gold coin’. But if I hold up a gold coin and use the phrase ‘the essence of *this*’, without giving it any name, I have to mean ‘essence’ in some way that doesn’t depend on the meaning of a word; so I mean the inner nature of *this* thing, call it what you will.] Secondly, academic wrangling about genus and species has had the effect of almost entirely suppressing that original meaning of ‘essence’. Instead of referring to the *real* constitutions of things, essences these days are usually thought of in a second way, in which they are connected with the *artificial* constitution of genus and species. ‘Real constitutions are ones that are laid down in the things themselves; artificial ones are products of human artifice, that is, of human classificatory procedures’. When people talk in this way, they assume that each sort of things has a real constitution; and it is unquestionably true that any collection of simple ideas [here= ‘qualities’] that regularly go together must be based on some real constitution. But the fact remains that when things are classified into sorts or species, and named accordingly, what we *go by* are the abstract ideas with which we have associated those names. The essence of each genus or sort—that is, what fixes the sort, what determines membership in it—is just the abstract idea that the general name stands for. This, we shall find, is how ‘essence’ is mostly used. These two sorts of essences could reasonably be called the *real* and the *nominal* essence respectively [‘real’ comes from Latin *res* = ‘thing’; ‘nominal’ comes from Latin *nomen* = ‘name’].

16. Nominal essences are tied to names. Whether a given thing *x* is to be described by a given general name depends purely on whether *x* has the essence that makes it conform to the abstract idea that the name is associated with.

17. [Here and later Locke speaks of ‘monstrous’ births. A monster is an organism which is markedly and disturbingly different from what is normal for its species.] There are two opinions about the real essences of bodies. •Some people think there is a certain ‘limited’ number of real essences according to which all natural things are made. Each particular thing, they believe, exactly fits one of these essences, and thus belongs to one species. These folk use the word ‘essence’ without knowing what essences *are*. •Others have a more reasonable view: according to them, the essence of a natural thing is the real but unknown constitution of its imperceptible parts, from which flow the perceptible qualities on the basis of which we classify things into sorts under common names. The former of these opinions, which takes essences to be a certain number of forms or moulds into which all natural things are poured (so to speak) has created great confusion in the knowledge of natural things. In every animal species, births frequently occur, and human births sometimes produce imbeciles or other strange products ‘which are not clearly human and not clearly non-human’; and all this poses problems for this hypothesis about real essences. . . . Even apart from those difficulties, the mere fact that these ‘first-opinion’ real essences can’t be known means that they are useless to us in classifying things, although they are supposed to mark off the real boundaries of the species! In our thoughts about classification, then, we ought to set these supposed real essences aside—and, for the same reason, set aside ‘second-opinion’ real essences as well—and content ourselves with *knowable* essences of sorts or species. When we think the matter through, we shall see that these are, as I have said, nothing but the abstract complex ideas with which we have associated separate general names.

18. Having distinguished essences into *nominal* and *real*, I point out that in the species of •simple ideas and •modes the two kinds of essence are always the same, while with •substances they are always quite different. Thus •a mode such as • *a figure including a space between three straight lines* is the real as well as the nominal essence of a *triangle*; for it isn't only •the abstract idea to which the general name is attached, but also •the very *essentia* or being of the thing itself, that foundation from which all its properties flow and to which they are all inseparably united. It isn't like that with the portion of matter that makes the ring on my finger, which apparently has two different essences. All its perceptible properties of colour, weight, fusibility, fixedness, etc. flow from •its real essence, that is • the real constitution of its imperceptible parts; we don't know •this constitution, so we have no •particular idea of it and, therefore, no •name that is the sign of it. But its colour, weight, fusibility, fixedness, etc. are what make it *gold*, or give it a right to that name; so they are its nominal essence. •What they constitute really is an 'essence', properly so-called•, since nothing can be called 'gold' unless its qualities fit that abstract complex idea to which the word 'gold' is attached. This distinction between two kinds of essence is especially relevant to substances; I'll deal with it more fully when I come to the names of substances •in vi•.

19. For more evidence that such abstract ideas with names attached to them really are *essences*, consider what we are told regarding essences, namely that *they cannot be created or destroyed*. This can't be true of the real constitutions of things, which begin and perish with the things. All things that exist (except God) are liable to change, especially the things we have come across and have sorted into groups

under separate names. What is •grass to-day will tomorrow be •the flesh of a sheep, and a few days after that become •part of a man. In all such changes, it is evident that the thing's real essence—the constitution of it on which its properties depend—is destroyed, and perishes with the thing. On the other hand, essences considered as *ideas established in the mind with names attached to them* are supposed to remain steadily the same, whatever changes the particular substances undergo. Whatever becomes of Alexander and Bucephalus, the ideas to which 'man' and 'horse' are attached are supposed to remain the same; and so the essences of those species—•of *man* and of *horse*•—are preserved whole and undestroyed, whatever changes happen to any man or horse, or indeed to all men or horses. By this means the essence of a species remains safe and whole, even if there doesn't exist a single individual of that kind. [Locke gives other examples: the idea of *circle* (supposing there were no exact circles), of *unicorn*, of *mermaid*. He concludes:] From what has been said it is evident that the doctrine of the of essences proves them to be only abstract ideas. Being founded on the relation established between those ideas and certain sounds as signs of them, the doctrine will always be true as long as the same name can have the same meaning.

20. Summing up, all the great business of genera and species, and their essences, amounts to nothing but this: when people make abstract ideas and settle them in their minds with names attached, they enable themselves to think and talk about things in bundles, as it were. This enables them to communicate and learn more quickly and easily; their knowledge would grow very slowly if their words and thoughts were confined to particulars.

Chapter iv: The names of simple ideas

1. Although all words immediately signify ideas in the mind of the speaker, and nothing else, closer scrutiny shows that each of the main categories of names—of simple ideas, of mixed modes (which I take to include relations), and of natural substances—has peculiarities of its own. I shall point out six of these. The first (section 2) is a feature shared by names of simple ideas and substances but not by mixed modes, the second (section 3) is a feature of the names of simple ideas and mixed modes but not of substances, the third (sections 4–14) and fourth (15) and fifth (16) are peculiarities of the names of simple ideas; the sixth (17) also differentiates names of simple ideas from those of substances and, even more strongly, from those of mixed modes.

2. First, the names of simple ideas and substances, as well as the abstract ideas in the mind that they immediately signify, indicate also some real existence from which came the idea that was their original pattern. But the names of mixed modes *terminate in the idea in the mind* and don't lead thoughts any further. I shall enlarge on this in the next chapter.

3. Secondly, the names of simple ideas and modes signify always the *real* as well as *nominal* essence of their species because with each of these the nominal essence *is* the real essence. But the names of natural substances rarely if ever signify anything but the nominal essences of those species. I shall show this in vi.

4. Thirdly, the names of simple ideas can't be defined; the names of all complex ideas can. So can the names of substances, but I shall say nothing about them in the following ten sections. So far as I know, nobody has explored

the question of what words can and what can't be defined. The lack of knowledge about this seems to me to contribute to great wrangling and obscurity in men's discourses: some demand definitions of terms that can't be defined, and others think they ought to be satisfied with equating a word with a more general word and its restriction (or in technical terms, a 'definition through genus and difference' [see note in iii.10]), even when the definition made according to that rule doesn't help anyone to understand the meaning of the word better than he did before. I think, anyway, that it is relevant to my present purposes to show what words can and what cannot be defined, and what a good definition consists in. This may throw enough light onto the nature of these signs and of their relation to our ideas to justify this more thorough enquiry.

5. I shan't trouble myself here to prove that not all terms are definable, arguing from the infinite regress that we would obviously be led into if we tried to define all names: if the terms of each definition had to be defined by yet another, where would the process end? Rather than labouring that, I shall argue from the nature of our ideas and the signification of our words, showing *why* some names can be defined and others cannot, and which are which. The argument from infinite regress doesn't pick on any name as indefinable, still less show why it is so.

6. I think it is agreed that to define a word is to show its meaning through several other words no one of which is synonymous with it. The meaning of a word is just the idea that the user makes it stand for; so he shows the meaning of a term—he *defines* it—when he uses other words to set

before the hearers the idea that the defined word stands for. This is all that definitions are good for, and all they are meant to do; so it is the only measure of what is or is not a good definition.

7. On that basis, I say that the names of simple ideas, and they alone, cannot be defined. Here is why. Defining is really nothing but *showing the meaning of one word through several others no one of which signifies the same thing*; so the terms of a definition must *jointly* signify the idea that the defined word signifies; but the different terms of a definition, signifying different ideas, can't jointly represent an idea that is simple and thus has no complexity at all. So definitions can't be given for the names of simple ideas.

[In section **8** Locke jeers at Aristotelian philosophers ('the schools') for offering absurd definitions of some of these words, and for leaving many others 'untouched'. Their fault, one gathers, was to leave the latter untouched without saying why they had to do so.]

9. The modern philosophers have tried to throw off the jargon of the schools and to speak intelligibly, but they haven't had much more success in defining names of simple ideas, whether by explaining their causes or in any other way. Consider the atomists, who define 'motion' as a passage from one place to another: what do they do except to put one synonymous word for another? For what is *passage* other than *motion*? Isn't it at least as proper and significant to say 'Passage is a motion from one place to another' as to say 'Motion is a passage, etc.'? Equating two words that have the same signification is translating, not defining. If one word is better understood than the other, the equation may help someone to learn what idea the unknown word stands for; but this is very far from a *definition*. If you call it a definition, you will have to say that every English word in the dictionary

is the definition of the Latin word it corresponds to, so that 'motion' is a definition of *motus*. . . .

[In section **10** Locke mocks a supposed Aristotelian definition of 'light'. Its worthlessness can be seen, he says, from its obvious inability to enable a blind man understand 'light'. (He remarks in passing that *this* type of argument can't be used against definitions of 'motion', because the idea of motion can enter the mind through touch as well as sight, so that nobody is perceptually cut off from motion as the blind are from light.) He continues:] Those who tell us that *light is a great number of little globules striking briskly on the bottom of the eye* speak more intelligibly than the schools; but these words, however well understood, wouldn't help a man who has no idea of light to get such an idea. . . . Even if this account of the thing is true, it gives only the idea of *the cause of light*, and that doesn't give us the idea of *light*, any more than the idea of the shape and motion of a sharp piece of steel would give us the idea of the pain it can cause in us. The cause of a sensation and the sensation itself are two ideas, and are as different and distant one from another as two ideas can be. Therefore, if the globules that Descartes postulates were to strike ever so long on the retina of a blind man, that would never give him an idea of light, or anything like it, even though he perfectly understood what little globules are, and what it is for something to strike on another body. So the Cartesians do well to distinguish light that causes that sensation in us from the idea that the former produces in us. It is the latter that is *light* properly so-called.

11. Simple ideas, as I have shown, can be acquired only from the impressions that objects make on our minds through the appropriate sensory inlets. If one of them isn't received in this way, all the words in the world won't suffice to

explain or define its name by producing in us the idea it stands for. Words are just sounds, and the only simple ideas they can produce in us are the ideas of those very sounds—except when a simple idea is connected with a word through common usage in which that idea is the word's meaning. If you doubt this, see whether you can by words give anyone who has never tasted pineapple an idea of the taste of that fruit. He may approach a grasp of it by being told of its resemblance to other tastes of which he already has the ideas in his memory, imprinted there by things he has taken into his mouth; but this isn't giving him that idea by a definition, but merely raising up in him other simple ideas that will still be very different from the true taste of pineapple. [Locke continues with more along the same lines, applied to 'light and colours'. The section concludes:] A studious blind man who had used explanations written in books or given to him by his friends in an attempt to understand the names of light and colours that he often encountered bragged one day that he now understood what 'scarlet' signified. It was, he said, *like the sound of a trumpet!* That's the sort of 'understanding' of the name of a simple idea that can be expected from someone relying on verbal definitions or other explanations.

12. The case is quite otherwise with complex ideas. A complex idea consists of several simple ones, and words that stand for those constituent simple ideas can imprint the complex idea in the mind of someone who had never had it before, and so make him understand the name of that idea. When a single name applies to such a collection of ideas, a definition can occur, teaching the meaning of one word by several others, making us understand the names of things that never came within the reach of our senses. [Locke adds the proviso that the person who learns a meaning through a

definition must understand all the words that are used in it; and decorates this point with an uninformative joke about a blind man adjudicating between a statue and a picture.]

13. Someone who had never seen a rainbow but had seen all those colours separately could come to understand the word 'rainbow' perfectly through an enumeration of the shape, size, position and order of the colours. But even a perfect definition of that kind would never make a congenitally-blind man understand the word, because several of the simple ideas that make that complex one haven't been given to him through sensation and experience and can't be aroused in his mind by words.

[Section **14** summarizes the content of the preceding ten sections.]

15. Fourthly [following 'Thirdly' in section 4], although the names of •simple ideas don't have the help of definitions to fix their meanings, they are generally *less* doubtful and uncertain than are the names of •mixed modes and •substances. Because the former stand for one simple perception each, people mostly agree—easily and perfectly—about their meanings, there being little room for mistake and wrangling. Someone who once grasps that 'white' is the name of the colour he has observed in snow or milk won't be apt to misapply the word as long as he retains that idea; and if he entirely loses the idea, this will lead him not to mistake the meaning of the word but rather to see that he doesn't understand it. There is no multiplicity of simple ideas to be put together, which is what brings doubt into the names of •mixed modes; nor is there a supposed but unknown real essence. . . .which creates problems over the names of •substances. Rather, in the case of •simple ideas the whole signification of the name is known at once, and doesn't consist of parts of which more or fewer may be put in by different people, making the

signification of the name obscure or uncertain. **16.** Fifthly, simple ideas and their names have only a few ascents in the line of predication from the lowest species to the highest genus. [An example of a word with many 'ascents' might be 'man': from it we can ascend to 'animal', to 'organism', to 'complex physical thing', to 'physical thing'.] This is because the lowest species is just one simple idea, so that nothing can be left out of it so as to get something more general ·in the way that something is left out of *man* to get the more general *animal*·. For example, there is nothing that can be left out of the ideas of *white* and of *red* to make them agree in one common appearance and so have one general name; as *rationality* being left out of the complex idea of *man* makes it fall under the more general idea and name of 'animal'. When men want for brevity's sake to bring white and red and several other such simple ideas under one general name, they do it with a word that denotes ·not something common to the natures of these different ideas, but· only the way they get into the mind. For when white, red, and yellow are brought together under the genus or name 'colour', *all* that this means is that such ideas *are produced in the mind only by the sight and get in only through the eyes*.

And when men want to develop a still more general term, to cover colours and sounds and the like simple ideas, they do it with a word (·namely, 'quality'·) that signifies *all ideas that come into the mind by only one sense*. And so the general term 'quality' in its common meaning applies to colours, sounds, tastes, smells, and tangible qualities, as distinct from extension, number, motion, pleasure, and pain, which make impressions on the mind, and introduce their ideas, by more senses than one.

17. Sixthly, the names of simple ideas, substances, and mixed modes differ also in the following way. Names of •mixed modes stand for ideas that are perfectly arbitrary; those of •substances are not perfectly arbitrary, but refer to a pattern, though they have some latitude ·in how the patterning is done·; and those of •simple ideas are perfectly taken from the existence of things, and are not arbitrary at all. In the following chapters we shall see what difference this makes in the significations of their names. The names of simple modes are pretty much like the names of simple ideas.

Chapter v: The names of mixed modes and relations

1. The names of mixed modes being *general*, they stand for *sorts* or *species* of things, each of which has its own special essence. The essences of these species are nothing but the abstract ideas in the mind, to which the name is attached. Up to here, the names and essences of mixed modes have nothing that they don't share with all other ideas; but if we

look more closely we'll find that they have peculiarities of their own that may be worth studying.

2. The first peculiarity I shall note is that the abstract ideas (or, if you like, the essences) of the various species of mixed modes are *made by the understanding*. In this they are

unlike those of [= the ideas of?] simple ideas. The mind has no power to make any one of the latter, but only accepts what comes to it through the operations on it of the real existence of things.

3. In the next place, these essences of the species of •mixed modes are *very arbitrarily* made by the mind, without patterns or any reference to any real existence. [See note at end of iii.2.] In this they differ from those of •substances, which carry with them the supposition of some real thing from which they are taken and which they fit. In its complex ideas of mixed modes, the mind permits itself not to follow the existence of things exactly. It unites and retains certain collections, each as a specific complex idea, while other collections that are just as common in nature and just as plainly suggested by outward things are neglected and not given special names. When we examine a complex idea of a •kind of• *substance*, we have recourse to the real existence of things—that is, to the stuff itself; but we don't proceed like that with *mixed modes*, checking them against patterns containing such complexes in nature. If you want to know whether your idea of adultery or incest is right, will you check it out against existing things? . . . No. All that is needed is for men to have put together such a collection into one complex idea; *that* is the archetype [= 'thing that is copied'], whether or not any such action •as incest or adultery• has ever actually been performed.

4. To understand this correctly, we must think about what the mind does in making such complex ideas. It •selects some of the •simpler• ideas it already has, then •connects them so as to turn them into one idea, and finally •ties them together by a name. If we examine how the mind goes about these three activities, and what freedom of choice it we shall easily see how these essences of the species of mixed modes

are the workmanship of the mind, and thus that the species themselves are of men's making.

5. To become sure that these ideas of mixed modes are made by a voluntary collection of ideas put together in the mind, independently of any original patterns in nature, think about the fact that any such idea can be made, abstracted, and named—so that a species is constituted—before any individual of that species exists. Obviously the ideas of *sacrilege* and *adultery* could have been framed in the minds of men and have names given to them—thus constituting these species of mixed modes—before either of them was ever committed. They could have been talked and reasoned about, and truths discovered concerning them, just as well •back when they existed only in the understanding as •now when they are all too common in the real world. We cannot doubt that law-makers have often made laws about sorts of actions that were only the creatures of their own understandings, having no existence outside their own minds. And nobody can deny that *resurrection* was a species of mixed modes in the mind before it really existed.

[In section **6** Locke seeks to show 'how arbitrarily these essences of mixed modes are made by the mind' by looking at examples. It is *we* who choose to pick out *killing one's father* and not *killing a sheep*, and so on. The section concludes:] I don't say that these choices are made without reason (more about this later); but I do say that we have here are the free choice of the mind, pursuing its own ends; and that therefore *these species of mixed modes are artifacts of the understanding*. And it is utterly evident that when the mind forms these ideas it seldom looks for its patterns in nature, or checks the ideas it makes against the real existence of things. Rather, it puts together such •collections of simple ideas• as may best serve its own purposes, without tying

itself to a precise imitation of anything that really exists.

7. But, although these complex ideas (or essences) of mixed modes depend on the mind and are made by it with great freedom, they are not made at random and jumbled together for no reason. They are always suited to the purpose for which abstract ideas are made. Their constituent ideas have no more union with one another than various others which the mind never combines into one complex idea, but they are always made for the convenience of *communication*, which is what language is mainly for. What language does is to enable the speaker to express general conceptions quickly and easily, through short sounds; and such a general conception not only covers a great many particulars but also involves a great variety of independent ideas collected into one complex one. In making species of mixed modes, therefore, men have attended only to such combinations as they have wanted to mention one to another. [The section continues with examples, and an explanation of why the ideas *daughter* and *mother* are both ingredients in the idea of a heinous kind of sexual intercourse (*incest*) though only *mother* is an ingredient in *parricide*, the idea of a heinous kind of killing.]

[Section **8** develops the point that a language may contain words that have no exact equivalent in another language, offering this as evidence for Locke's thesis that the ideas and names of mixed modes are answerable only to human interests and needs. The section concludes:] We shall find this much more so with the names of more abstract and compounded ideas, such as most of those that make up moral discourses. If you look carefully into how those words compare with the ones they are customarily translated into in other languages, you will find that very few of them exactly correspond across the whole extent of their meanings.

9. The reason why I emphasize this thesis so strongly is to prevent us from being mistaken about *genera* and *species* and their essences, as if they were things regularly and constantly made by nature and had a real existence in things—that is, as though enquiring into the essence of the species *sacrilege* were like enquiring into the essence of the species *iron*. . . . The suspect meaning of the word 'species' may make my statement 'The species of mixed modes are made by the understanding' grate in your ears; but you can't deny that the mind makes those abstract complex ideas to which specific names are given; and it is also true that the mind makes the patterns for sorting and naming of things. Well, then, think about it: who makes the boundaries of the sort or species? (For me 'species' and 'sort' are equivalent, one Latin and the other English.)

10. For further evidence of the close inter-relations amongst a species, an essence, and its general name (at least with mixed modes), notice that it is the *name* that seems to preserve those *essences* and give them their lasting duration. The loose parts of those complex ideas aren't held together by any particular foundation in nature; so they would lose their connection and scatter if something weren't holding them together. The mind *makes* the collection, but the name is the knot (so to speak) that *ties them together*. [The remainder of this section elaborates this point, with an example, and aims a parting shot at 'those who look on essences and species as real established things in nature'.]

11. So we find that when men speak of mixed modes, they seldom think of any species of them other than those that have been named. And we can see why this should be so. . . . To what purpose should the memory burden itself with such complexes other than to make them general by abstraction? And why would it do *that* if not so as to

have general names for the convenience of discourse and communication? [The section goes on with examples of differences in the 'collections' made by people in different cultures.]

12. My account of the essences of the species of mixed modes is further confirmed by the fact that their names lead our thoughts *to the mind and no further*. When we speak of 'justice' or 'gratitude' we have no thought of any existing thing; our thoughts terminate in the abstract ideas of those virtues, and look no further. We *do* look further when we speak of a 'horse' or 'iron', whose specific ideas we think of not as merely •in the mind but as •in *things* that are the original patterns of those ideas. But with mixed modes—or at least the most important subset of them, namely the *moral* ones—we regard the original patterns as being •in the mind. . . . I think this is why these essences of the species of mixed modes are called 'notions', as pertaining in a special way to the understanding. [Here and in some other places, 'moral' means little more than 'pertaining to human conduct'.]

13. From this we can also learn why the complex ideas of •mixed modes are commonly more compounded—•more complex—than those •of natural substances. Ideas of mixed modes are made by the understanding for convenience in expressing through short sounds the ideas it wants to make known to others; and in thus pursuing its own purposes it exercises great freedom, often uniting into a single abstract idea things that don't in their own nature go together, and so under one name bundle together a great variety of. . . .ideas. Think about the word 'procession': what a great mixture of independent ideas of persons, clothes, candles, orders, motions, and sounds have been arbitrarily put together by the mind of man to be expressed by that one word! Whereas the complex ideas of sorts of substances are usually made

up of only a few simple ideas; and when it comes to the species of animals, the whole nominal essence often consists of nothing but shape and voice.

14. Another thing we can see from what I've said is that the names of mixed modes always signify the *real essences* of their species. These abstract ideas are the workmanship of the mind, and aren't referred to the real existence of things, so there is no supposition of anything's being signified by that name beyond the complex idea the mind has formed. And all the properties of the species depend on and flow from that idea alone. Thus, in these •species• the real and nominal essences are the same. We shall see later what bearing this has on secure knowledge of general truths.

15. This may also show us why the names of mixed modes are usually learned before the ideas they stand for are perfectly known. It is convenient if not outright necessary to know the names before one tries to form these complex ideas, because usually we don't attend to the ones that don't have names (and all of them—it should be remembered—are arbitrary mental constructs). The alternative is for a man to fill his head with a horde of abstract complex ideas •of mixed modes• which others have no *names* for and thus he has no *use* for, except to set them aside and forget them again! I agree that in the beginning of languages it was necessary to have the idea before one gave it the name; and so it is still when someone makes a new complex idea, gives it a new name, and thereby makes a new word. But. . . .in language as a going concern, isn't it usual for children to learn the names of mixed modes before acquiring the ideas of them? Does one child in a thousand form the abstract ideas of *glory* and *ambition* before hearing their names? With •simple ideas and •substances it is otherwise. Those ideas have a real existence and union in nature, and in their case it's a

matter of chance which comes first, the idea or the name.

16. What I have said here about mixed modes can be applied with very little difference to relations as well; and I needn't go on about this, because everyone can see it for himself. One reason for cutting that short is that my treatment of words in this third Book may strike some as excessively long for such a slight topic. I agree that it could have been briefer; but I was willing to take my reader through an argument that appears to me new, and a little out of the way (it certainly hadn't occurred to me when I began to write). My hope has been that if I explore it to the bottom, and turn it on every side, each reader may find in it something that fits with his own thoughts and leads him—however careless or disinclined he may be—to give some thought to a general blunder that has hardly been noticed before although it is of great consequence. When you think what a fuss is made about essences, and how greatly all sorts of knowledge, discourse, and conversation are bedevilled and disordered by the careless and confused use of words, you may think it worthwhile set all this out thoroughly. A reason why I think my views on this matter need to be inculcated (and this is an

excuse for going on so long about them) is that the faults they expose don't just *hinder* true knowledge—they are positively admired and thought of as *being* true knowledge! If only men would look beyond fashionable sounds, and observe what ideas are or are not conveyed by the words that they are so armed with at all points, and that they so confidently wield in battle, they would see what a vanishingly small pittance of reason and truth is mixed in with those puffed-up opinions they are swelled up with. I shall think I have done some service to truth, peace, and learning if I can, through an extended discussion of this subject, •make men reflect on their own use of language, and •give them reason to suspect that they may sometimes have very good and approved words in their mouths and writings with meanings that are uncertain, skimpy, or non-existent. ·They will acknowledge that· others are frequently guilty of this, so might not *they* be guilty too? If they see this, it will be reasonable for them to become wary about their own performances, and willing to submit themselves to examination by others. With this purpose in mind, therefore, I shall continue with the rest of what I have to say about this matter.

Chapter vi: The names of substances

1. The common names of substances, as well as other general terms, stand for *sorts*—which simply means that they are used as signs of complex ideas in which several particular substances do or might agree, by virtue of which they can be brought under one common conception and

referred to by one name. I say 'do or might agree' for the following reason. There is only one *sun* in the world, but the idea of it is an abstract one, so that more substances *could* agree in it; *sun* is as much a *sort* as it would be if there were as many suns as there are stars. There are reasons for

thinking that indeed there are, and that each fixed star when seen from a suitable distance would fit the idea the name 'sun' stands for. That, incidentally, illustrates how much the sorts of things—or, if you like, the *genera* and *species* of things (for those Latin terms mean the same to me as the English word *sort*)—depend on what collections of ideas men have made, and not on the real nature of things; since what is a sun to one person may be a star to someone else.

2. The measure and boundary of each sort or species, by which it is constituted as that particular sort and distinguished from others, is what we call its *essence*. This is nothing but the abstract idea to which the name is attached; so that everything contained in the idea is *essential* to that sort. Although this is the only essence of natural substances that we know, and the only one by which we can distinguish them into sorts, I give it the special name '*nominal essence*', to distinguish it from the •real constitution of substances. [See note at end of iii. 15.] The latter is •the *source of* the nominal essence and of all the properties of that sort ·or species·; and so it can be called 'the *real essence*' of the sort. For example, the nominal essence of *gold* is the complex idea that the word 'gold' stands for—something like *a body that is yellow, of a certain weight, malleable, fusible, and fixed*. But the real essence is the constitution of the imperceptible parts of that body, on which those qualities and all the other properties of gold depend. Although both of these are called 'essence', you can see at a glance how different they are.

3. The complex idea to which I and others attach the name 'man', making that the nominal essence of the species *man*, is the idea of *voluntary motion, with sense and reason, joined to a body of a certain shape*. Nobody will say that this complex idea is the •real essence and source of all those operations that are to be found in any individual of that sort, ·that is,

in any man·. The •foundation of all those qualities that are the ingredients of our complex idea of *man* is something quite different. Angels may, and God certainly does, have a full knowledge of the •constitution of man from which his faculties of moving, sensing, reasoning, and other powers flow; if we had it too, we would have a quite different idea of man's essence from what is now contained in our definition of our species. In that case, our idea of any *individual* man would be very different from what it is now; just as that the idea of the famous clock at Strasbourg possessed by someone who knows all its springs and wheels and other contrivances differs from the idea of it possessed by a gazing peasant, who merely sees the hands move and hears the clock strike.

4. Here is evidence that *essence* in the ordinary sense of the word relates to sorts, and is applicable to particular things only to the extent that they are grouped into sorts. If you take away the abstract ideas by which we sort individuals and rank them under common names, then the thought of anything essential to any of them instantly vanishes. We have no notion of one (·that is, of *essential property*·) without the other (·that is, of a sort or species·), and that plainly shows how they are related. It is necessary for me to be as I am; God and nature have made me so. But nothing that I have is essential to me. An accident or disease may greatly alter my colour or shape; a fever or fall may take away my reason or memory, or both; an apoplexy may leave me with neither sense nor understanding—indeed, with no life. Other creatures of my shape may be made with more and better, or fewer and worse, faculties than I have; and others may have reason and sense in a shape and body very different from mine. None of these are essential to the one, or the other, or to any individual whatever, till the mind refers it

to some sort or species of things. The moment that is done, something is found to be essential according to the abstract idea of that sort. Examine your own thoughts, and you will find that as soon as you suppose or speak of some quality as 'essential', the thought of some species, or the complex idea signified by some general name, comes into your mind; and it is in reference to *that* that the quality in question is said to be essential. Is it essential to me, or any other particular corporeal being, to have reason? No. Just as it isn't essential to this white thing I write on to have words on it. But if the particular thing is counted as being of the sort *man*, and has the name 'man' given to it, then reason is essential to it (assuming reason to be a part of the complex idea the name 'man' stands for). Similarly, it is essential to this thing I write on to contain words, if I give it the name 'treatise' and put it into that species. Thus, 'essential' and 'not essential' relate only to our abstract ideas and the names attached to them. . . .

5. Thus, if for some people the idea of *body* is bare extension or space, then for them solidity is *not* essential to body. If others give the name 'body' to the idea of solidity and extension, then for them solidity is essential to body. Whatever makes a part of the complex idea the name of a sort stands for is essential to the sort, and nothing else is. If we found some matter that had all the qualities of iron except that it wasn't affected by a magnet, would anyone raise the question of whether it lacked anything essential? It would be absurd to ask whether a really existing thing lacked something essential to it! Nor would it make sense to ask whether the unusual feature of this matter created an essential or specific difference [= 'put the stuff into a different species'] or not, for our only criterion for what is essential or specific is given by our abstract ideas. To talk of specific differences in

nature, without reference to general ideas and names, is to talk unintelligibly. What is sufficient to make an essential difference in nature between any two particular things, considered just in themselves, and without reference to any abstract idea looked upon as the essence and standard of a species? When all such patterns and standards are laid aside, particular things considered barely in themselves will be found to have all their qualities equally essential: in each individual, *all* the qualities will be essential, or—more accurately—*none* of them will be so. It may be reasonable to ask whether obeying the magnet is essential to iron, but it is very improper and insignificant to ask whether it is essential to the particular bit of matter that I sharpen my pen with, without considering it under the name 'iron' or as belonging to a certain species. . . .

6. I have often mentioned a 'real essence' that is distinct in substances from those abstract ideas of them that I call their 'nominal essence'. By this real essence I mean the real constitution of a thing, which is the foundation of all those properties that are combined in and constantly found to co-exist with the nominal essence; that particular constitution that every thing has within itself, without reference to anything else. But 'essence', even in this sense, relates to a *sort* and presupposes a *species*. It is that real constitution on which the *properties* depend, so it necessarily presupposes a *sort* of things, because properties belong only to species and not to individuals. [Here, and on some later occasions and perhaps on a few earlier ones, Locke uses 'property' in an old technical sense according to which 'a property of iron' means 'a quality or attribute that has to be possessed by all specimens of iron'; it is supposed to follow from the essence of iron without actually being part of that essence. In this sense of the word, 'a property of *this*'—said by someone who is pointing to a piece of iron—is meaningless.] For example, supposing

the nominal essence of gold to be *a body of such and such a special colour and weight, with malleability and fusibility*, the real essence is that constitution of the parts of matter on which these qualities and their union depend; and this is also the foundation of its solubility in aqua regia and other *properties* accompanying that complex idea. Here are essences and properties, but all on the supposition of a sort or general abstract idea. The latter is considered as immutable, but there is no individual bit of matter to which any of these qualities are attached in such a way as to be essential to *it* or inseparable from *it*. Indeed, we don't know precisely what any real essence *is*; but we suppose that it is *there* and is the cause of the nominal essence; and that supposed link with the nominal essence is all that ties the real essence to the species.

7. Which of those essences is it by which substances are determined into sorts or species? Obviously, the nominal essence, for it alone is what the name of the species signifies. Nothing could possibly determine the sorts of things that we rank under a given general name except the idea which that name is designed as a mark for—namely, the nominal essence. Why do we say 'This is a horse', 'That is a mule', if not because the thing fits the abstract idea that the name is attached to? . . .

8. Here is more evidence that the species of things are nothing to us but a grouping of them under distinct names according to complex ideas *in us*, and not according to precise, distinct, real essences *in them*. We find that many of the individuals we group into one sort, call by one common name, and so accept as members of one species, are in some respects as much unlike one another as they are unlike things that are regarded as belonging to different species. . . . Chemists especially are often by sad experience convinced of

this when, having found certain qualities in one portion of sulphur, antimony or vitriol, they have looked for it in vain in other portions. . . . If things were distinguished into species according to their real essences, it would be as impossible to find different properties in any •two individual substances of the same species as it is to find different properties in •two circles or •two equilateral triangles. . . .

9. We don't know the real essences of things, and so we *can't* use real essences as the basis on which to rank and sort things and so to name them (for what sorting is *for* is naming). The nearest our faculties will let us get to knowing and distinguishing substances is a collection of the perceptible ideas [here = 'qualities'] that we observe in them. And even if we collect these as carefully and precisely as we possibly can, that collection won't be anywhere near to the true internal constitution from which those qualities flow. . . . There is no plant or animal, however lowly and insignificant, that doesn't baffle the most enlarged understanding. Though our familiar dealing with things around us stops us from wondering about them, it doesn't cure our ignorance. When we come to examine the stones we tread on or the iron we handle, we immediately find that we don't know how they are constructed, and can give no reason for the different qualities we find in them. What is the texture of parts, the real essence, that makes lead and antimony fusible, wood and stones not? What makes lead and iron malleable, antimony and stones not? •We haven't the slightest idea•. And we all know how vastly *less* difficult and complex the constitutions of these substances are than the fine contrivances and inconceivable real essences of plants and animals. The •workmanship of the all-wise and powerful God in making the great fabric of the universe and every part of it outstrips the •capacity and comprehension of the most enquiring and intelligent man,

by more than the •best contrivance of the most ingenious man outstrips the •conceptions of the most ignorant. So it is in vain for us to claim to put things into sorts and classes, under names, on the basis of their real essences that we are so far from knowing or understanding. A blind man may as soon sort things by their colours! [In section **10** Locke dismisses, as heading in the wrong direction and also as unintelligible, the theory that species and genera depend on the 'substantial forms' of things.]

11. Consider our ideas of •unembodied• *spirits*. The mind through reflection on itself gets simple ideas of *perfections*—that is, qualities that it is better to have than to lack—and its only notion of a spirit is one •made out of those simple ideas and •thought of as applying in higher degree to a sort of beings without matter's coming into it. Even our most advanced notion of *God* comes from attributing to him in an unlimited degree the same simple ideas of the same perfections. By reflecting on ourselves we get the ideas of existence, knowledge, power, and pleasure, each of which we find it better to have than to lack, and the more we have of each the better; and by joining all these together, with infinity added to each, we get the complex idea of an eternal, omniscient, omnipotent, infinitely wise and happy Being. We are told that there are different species of angels; but we don't know how to form distinct specific [here = 'detailed'] ideas of them; not because •we fancy ourselves as the only kind of spirit there can be, but because •the only simple ideas we do or can have to apply to them are ones taken through reflection from ourselves. only way of thinking about other species of spirits is by attributing to them various perfections in higher or lower degree; and it seems to me that we think of God as different from them not in *what* simple ideas are applicable to each but only in the *degree* to which they

are applicable—with all the perfections being thought of as possessed by God to an infinite degree, to angels with a lesser degree than that. . . .

12. It isn't inconceivable or impossible that there should be many species of spirits that are marked off from one another by distinct properties of which we have no ideas, just as the species of perceptible things are distinguished from one another by qualities that we know and observe in them. I think it probable that there indeed *are more species of thinking creatures above us than there are of sentient and material creatures below us*. Here is why. In all the visible physical world we see no chasms or gaps. All the way down from us the descent goes by easy steps, and a continued series of things that at each step differ very little from the ones just above. [The section continues with remarks about fish with wings, birds that swim, amphibians, sea-going mammals; non-human animals 'that seem to have as much knowledge and reason as some that are called men'; the almost invisible line between the lowest animals and the highest plants, and so on. Locke continues:] When we consider God's infinite power and wisdom, we have reason to think that it is suitable to the magnificent harmony of the universe, and the great design and infinite goodness of its architect, that the species of creatures should also by gentle degrees ascend *upward* from us towards his infinite perfection, as we see they gradually descend from us *downwards*. This would give us reason to be convinced that there are far more species of creatures above us than there are beneath, because our own level of perfection is •less than half-way up, i.e. it is• much more remote from the infinite being of God than it is from the lowest kind of thing. And yet of all those different species we have, for the reasons I have given, no clear distinct ideas.

13. Let us return to the species of material substances. Are ice and water two distinct species of things? Most people would answer Yes, and rightly so; but an Englishman who grew up in Jamaica, had not experienced ice and did not know the word 'ice', might upon coming to England and finding the water in his basin had frozen overnight call it 'hardened water'. He would *not* be treating ice as a new species, different from water, any more than . . . we think of liquid gold in the furnace as a distinct species from hard gold in the hands of a workman. This makes it clear that our different species are nothing but different complex ideas with different names attached to them. It is true that every substance that exists has its particular constitution which is the source of the perceptible qualities and the powers we observe in it; but the grouping of things into species—which is simply sorting them under different titles—is something we do on the basis of the ideas that we have of them. This is enough for us for us to pick them out verbally so that we can talk about them in their absence; but anyone who thinks we do it by their real internal constitutions, and that the verbal distinctions we make amongst species correspond to real-essence distinctions made by nature, is liable to make great mistakes, as I now show.

14. For •us to distinguish substantial beings into species according to the usual supposition that there are certain precise essences or forms of things by which •nature sorts all existing individuals into species, these •four• things would be necessary.

15. First, we would have to be assured that when nature produces things it always designs •or intends• them to have certain regulated established essences, which are to be the models of all things to be produced. We can't assent to this until it is presented more clearly than it usually is.

16. Secondly, we would need to know whether nature always *attains* the essence that it *designs* in the production of things. The irregular and monstrous births that have been observed in various sorts of animals will always give us reason to doubt one or both of these—that is, that an essence is intended, and/or that the intention is always fulfilled.

17. Thirdly, we would need to have settled whether the creatures we call 'monsters'—congenitally deformed plants or animals—are really of a separate species, according to the scholastic notion of the word 'species'. Everything that exists has its particular constitution •and so has a 'real essence' in the reasonable sense of that phrase•, but we find that some of these monstrous productions have few if any of the qualities that are supposed to result from and accompany the essence of that species to which they seem—judging by their descent—to belong.

18. Fourthly, the real essences of the things that we sort into species and give names to would need to be known—that is, we would need to have ideas of them. But since we are ignorant in these four points •that I have raised in sections 15–18•, the supposed real essences of things won't serve us as a basis for distinguishing substances into species.

19. There remains only one fall-back position: perhaps we could form perfect complex ideas of the *properties* of things that flow from their different real essences, and could distinguish them into species on that basis. [See note explaining 'property' in section 6.] But this can't be done either. Because we don't know the real essence itself, we can't know what all the properties are that flow from it and are tied to it so tightly that if any one of *them* were absent we could conclude that *the essence* was not there and thus that the thing wasn't of that species. To know what is the precise list of properties that depend on the real essence of gold (so that if any one of

them were lacking, the real essence of gold would be lacking, and so the stuff wouldn't be gold), we would have to know what the real essence of gold is; and we do not. (By the word 'gold' here I must be understood to designate a particular piece of matter—e.g. the last guinea that was coined or the portion of matter circling my finger. For if in *this* context I used the word in its ordinary meaning, as signifying that complex idea that we call the idea of gold—that is, for the nominal essence of gold—the result would be a meaningless babble, because I would be discussing 'the *real* essence and properties of gold' with the word 'gold' understood in terms of the *nominal* essence of gold; and that would produce a conceptual mix-up, using one kind of essence in a discussion of the other kind. So I ask you to understand me as discussing 'the real essence and properties of *this*'—and then I *point* to a particular piece of gold without calling it 'gold'. You see how hard it is to exhibit the meanings and the imperfections of words—in words!)

20. All this material in sections 14–19 shows clearly that we don't distinguish substances into named species on the basis of their real essences; nor can we claim to put them exactly into species on the basis of internal essential differences.

21. Needing general words, and not knowing the real essences of things, all we can do is to make complex ideas out of collections of simple ideas that we find united together in existing things. This idea, though not the real essence of any substance that exists, is the specific essence to which the name belongs, and is interchangeable with that name. That gives us a test for the truth of claims about these nominal essences. For example, some say that *the essence of body is extension*. If that is right, we can never go wrong through putting one for the other—the essence for the thing itself. Try

substituting 'extension' for 'body': instead of saying 'Body moves' say 'Extension moves'—how does that look? Someone who said 'When one extension bumps into another extension, it makes it move' would by his mere form of words show the absurdity of such a notion. The essence of anything (for us) is the *whole* complex idea marked by that name; and for substances that 'whole' includes not only various simple ideas but also the confused idea of *substance*, or of an unknown support and cause of the union of the qualities corresponding to the simple ideas. Thus, the essence of body is not bare *extension*, but rather *an extended solid thing*. It is just as good to say 'When one extended solid thing bumps into another, it makes it move' as to say 'When a body moves' etc. Similarly, it is all right to say 'A rational animal is capable of conversation', for this doesn't really differ from 'A man is capable etc.'. But nobody will say 'Rationality is capable of conversation', because 'rationality' doesn't make the whole essence to which we give the name 'man'.

[In sections **22–3** Locke discusses problems of classification in the animal kingdom, highlighting abnormal births producing creatures that are not easy to classify. His main point is that we must approach these questions in terms of nominal essences, so that it is for us to *decide* how to answer them; there is no hidden fact of the matter. He mentions the possibility of classifying purely on the basis of parentage, and raises three objections to it. •It could work only for organisms; other problems about classification would remain. •It fails in the face of the offspring of copulation across species lines ('If history doesn't lie, women have conceived by monkeys'), and •at the end of section 23:] If the species of animals and plants are to be distinguished only by propagation, does that mean that I can't know whether this is a *tiger* or that is *tea* unless I go to India to see the

parents of the one, and the plant from which the other was produced?

24. Looking at the whole picture, it is evident that what men make to be the essences of the various sorts of substances are •perceptible qualities that they collect, and that the vast majority of men sort substances without reference to •their real internal structures. Much less were any ‘substantial forms’ ever thought of except by those who have in this one part of the world—western Europe—learned the language of the schools [see explanation in iii.9.] And yet ignorant men who make no claim to insight into real essences and give no thought to substantial forms, but are content with distinguishing things by their perceptible qualities, often do better than the learned quick-sighted men who look so deeply into things and talk so confidently of something hidden and essential. They do better in that they are often better acquainted with the differences amongst substances, make finer discriminations amongst them on the basis of their uses, and know more what to expect from each,

25. Even if the real essences of substances could be discovered by thorough scientific research, we couldn’t reasonably think that the ranking of things under general names is regulated by those internal real constitutions, or by anything else but their obvious appearances. Languages in all countries were established long before sciences. So the general names that are in use amongst the various nations of men haven’t been the work of scientists or logicians or men who troubled themselves about forms and essences. Rather, each language’s more or less comprehensive terms have been created and given meanings by ignorant and illiterate people who sorted and named things on the basis of the perceptible qualities they found in them. . . .

[In sections **26–7** Locke returns to the supposed facts about borderline cases, monstrous births, etc., drawing the same moral as before.]

28. But though these nominal essences of substances are made by the mind, they aren’t made as arbitrarily as are those of mixed modes. For the making of any nominal essence two things are necessary. First, that •the ideas of which it is composed be united in such a way as to constitute a single idea. Secondly, that •any instance of the complex idea •making the meaning of some word• be composed of exactly the same particular ideas •as any other idea making the meaning of that same word•, neither more nor less. •As regards the second requirement•: If two abstract complex ideas differ in how many simple ideas they contain or in which ones, they make two different essences, not just one. Regarding the first requirement: When the mind makes its complex ideas of substances, it only follows nature and puts none together that are not supposed to be united in nature. Nobody—unless he wants to fill his head with chimeras and his conversation with unintelligible words—joins the voice of a sheep with the shape of a horse, or the colour of lead with the weight and fixedness of gold, offering these as the complex ideas of real substances. Men may make what complex ideas they please, and give them what names they will; but if they want to be understood when they speak of really existing things, they must to some extent conform their ideas to the things they want to speak of. . . .

29. Although the mind of man, in making its complex ideas of substances, never puts any together that do not really or are not supposed to co-exist, exactly which ones it brings into the combination depends on the the individual person who is making the idea—on how careful he is, how hard he works, what his imagination is like. Men generally

content themselves with a few obvious perceptible qualities, and often if not always they omit others that are just as important and as firmly united to the rest as those that they take. Of the two sorts of perceptible substances, one consists of *organized bodies that are propagated by seed*; and with these we take the *shape* as the leading quality and most characteristic part that determines the species. For vegetables and animals, therefore, all we need usually is *an extended solid substance of such and such a shape*. [Locke adds a side-swipe at the definition of ‘man’ as ‘rational animal’—see II.xxvii.8.] Whereas in plants and animals it is the shape that we most fix on and are mainly led by, in most other bodies (ones not propagated by seed) it is the colour. Thus where we find the colour of gold we are apt to imagine that all the other qualities contained in our complex idea are there also. It is because we commonly take shape and colour to be our rules of thumb of various species that when we see a good picture we readily say ‘This is a lion’, ‘That is a rose’, ‘This is a gold goblet and that a silver one’, going purely by the different shapes and colours presented to the eye by the paint-brush.

30. But though this serves well enough for rough and ready ways of talking and thinking, men are still far from having agreed on exactly what simple ideas or qualities belong to any sort of thing signified by a given name. That isn’t surprising, because it’s not easy to find out what the simple ideas are that are constantly and inseparably united in nature and always to be found together in the same subject. To do this one must devote time, take trouble, have skill, and be persistent. [Locke goes on to say that most men can’t provide all that, and so instead they classify things by their obvious outward appearances. The paucity of ‘settled definitions’, he says, should warn us against becoming embroiled in

debates about species and genera, and invoking ‘forms’, and should make us think that ‘forms are only chimeras, which give us no light into the specific natures of things’. He continues:] It is true that many particular substances are so made by nature that they are like one another and so afford a basis for being grouped into sorts. But since our sorting of things—our making of determinate species—is done for the purpose of naming them and bringing them under general terms, I don’t see how it can properly be said that *nature* sets the boundaries of the species of things. Or if it does, *our* boundaries of species are not exactly nature’s. For we, needing general names that we can use *right now*, don’t wait for a perfect discovery of all the qualities that would best show us substances’ most important differences and likenesses. Rather, we ourselves divide them into species on the basis of certain obvious appearances, so that we can more easily communicate our thoughts about them under general names. . . .

[In section **31** Locke says that if we look into the more complete ideas that people have in the background of their rough and ready ones, we shall find considerable differences; and when two people have different definitions for the same general word, there is no fact of the matter about which of the two complex ideas is more right. This helps to confirm that different essences of gold are of human artifacts ‘and not of nature’s making’.]

32. [In this section Locke writes about larger classes (genera) which can be divided up into smaller ones (species). The ‘lowest species’ are just the classes that we don’t divide up into still smaller ones.] If the simple ideas making the nominal essences of •the lowest species. . . .depend on the how people choose to collect them together, it is even more obvious that this is so for •the nominal essences of •the more

comprehensive classes that the masters of logic call 'genera'. These are complex ideas that are *meant to be* incomplete: you can see at a glance that some of the qualities that are to be found in the things themselves are purposely left out of generic ideas. To make •general ideas that cover several particulars, the mind leaves out the ideas of time and place and any others that would stop the resultant idea from fitting more than one individual; and similarly, to make •ideas that are even more general and can cover •not just different *individuals* but •different *sorts*, the mind leaves out the qualities that distinguish the sorts from one another, and puts into its new collection only such ideas—or, more accurately, ideas of only such qualities—as are common to several sorts. The same reasons of convenience that made men bring various portions of yellow matter under one name, also led them to make a name that could cover both gold and silver and some other bodies of different sorts. This was done by leaving out the qualities that are special to each sort, and retaining in the complex idea only those that are common to them all. When the name 'metal' is assigned to this complex idea, there is a *genus* constituted; and its essence is a certain abstract idea that contains only •malleableness and •fusibility, along with •certain degrees of weight and fixedness that are shared by some bodies of various kinds, and it leaves out •the colour and •other qualities peculiar to gold or to silver or to other sorts comprehended under the name 'metal'. This shows plainly that when men make their general ideas of substances they don't follow exactly any patterns set for them by nature, for there is no body anywhere that has *only* malleableness and fusibility without other qualities that belong to it as inseparably as those two do. . . . So that in this whole business of *genera* and *species* •the genus is merely a partial conception of what is in •the species, and •the species is merely a partial idea of what is to

be found in each •individual. So if you think that a man, and a horse, and an animal, and a plant, etc. are distinguished by real essences made by nature, you must think nature to be very free-handed with these real essences, making one for *body*, another for *animal*, and a third for *horse*, and generously bestowing all these essences on Bucephalus! But the real story about what is done in all these genera and species (or sorts) is that no new *thing* is made, but only more or less comprehensive *signs* by means of which we can talk, using few words, about very many particular things that fit the more or less general conceptions *that we have formed for that purpose*. Notice that the •more general term is always the name of a •less complex idea, and that each •genus is merely a *partial* conception of the •species that fall under it. So the only sense in which any of these abstract general ideas can be *complete* is its containing everything that is generally understood to be meant by a certain name; it can't be complete in relation to what exists in nature.

[In sections **33–4** Locke expands his remarks about how we classify for our convenience, with examples, and a remark about the semantic richness of 'the monosyllable *man*'.]

35. What I have said makes it evident that men make *sorts* of things. They do it by *making* the abstract ideas, which *are* the nominal essences and therefore *make* the species or sort. If we found a body having all the qualities of gold except malleableness, we would discuss whether it was gold or not. This could be settled only by the abstract idea to which everyone attached the name 'gold'; so it would be gold to someone whose nominal essence for gold didn't include malleableness, and not gold to someone whose specific idea did include malleableness. And who would be making these two different species under the name 'gold'—who but *men*? . . .

36. This, briefly, is how things stand. Nature makes many particular things that are alike in many perceptible qualities, and probably also in their •internal structure and constitution. But it isn't this •real essence that separates them into species; it is men who do that. On the basis of the qualities they find to be possessed in common by various individuals, men group things into *sorts*, so that they can talk about them conveniently. When men do this they employ comprehensive signs under which individual things come to be ranked, according to which abstract ideas they fit—like soldiers under regimental flags.

This soldier belongs to the blue regiment, that to the red one.

This is a man, that is a monkey.

In this, I think, consists the whole business of genus and species.

37. I don't deny that nature, in its constant production of particular things, doesn't always produce completely new kinds of things, but •often• makes them very similar to one another. Still I think it is true that the boundaries of the species whereby men sort them are made by men. . . .

38. One thing I am sure will seem very strange in this doctrine, namely the conclusion that each abstract idea, with a name attached to it, makes a separate species. But who can help it if truth will have it so? For so it must remain until somebody can show us that the species of things are distinguished by something else, and that general terms signify something other than our abstract ideas. I would like to know why a poodle and a hound are not of species as different as a spaniel and an elephant are. We have no more idea of the difference of essence between an elephant and a spaniel than we have of the difference of essence between a poodle and a hound, because all the essential difference

that we *know* in each case—the difference whereby we recognize each animal and distinguish it from the other—is just the difference in what collection of simple ideas we have associated with those different names.

39. In addition to the ice/water example that I gave in section 13, here is another. A silent watch and a striking one are •one species to those who have only one name for both; but they are of •different species for someone who has the name 'watch' for one and 'clock' for the other, with a different complex idea for each. It may be said that the difference in the inner workings of these two puts them into different species; but the watch-maker has a clear idea of that difference, yet they are plainly of only one species •even• for him if he has only one name for both. Why should inner workings suffice to make a new species? Some watches are made with four wheels, others with five: is this a specific difference to the watchmaker?. . . . Some have the balance loose, others have it regulated by a spiral spring and yet others by hogs' bristles. Is this enough to make a specific difference to the watchmaker who knows these and other differences in the internal constitutions of watches? Each creates a real difference from the rest, certainly; but whether it is an essential (specific) difference or not relates only to the complex idea to which the name 'watch' is given. [The section continues with remarks about the choices one has in creating ever smaller species, illustrated with *watch* and with *man*.]

[In section **40** Locke remarks, partly on the basis of the preceding discussion, that 'with the species of artificial things there is generally less confusion and uncertainty than with natural ones'. In section **41** he defends his view that there are species of artifacts as well as of 'natural substances' such as organisms.]

42. Of all the things to which we apply our various sorts of ideas, only substances have *proper names*, by which one particular thing is signified. Where simple ideas, modes, and relations are concerned, it seldom happens that someone has occasion to mention this or that particular one in its absence. Also, the greatest part of mixed modes are *actions*, which perish in their birth; so they aren't capable of a lasting duration in the way that substances (the actors) are. . . .

43. Forgive me for having dwelt so long on this subject. Perhaps some of my discussion has been obscure, and I apologize for that too. But think about how difficult it is to lead someone by *words* into thoughts about *things considered in themselves, things stripped of those specific differences we give them*. If I don't name the things I don't say anything; and if I do name them I thereby classify them in some way, bringing to your mind the usual abstract idea of the species associated with the name I use, which is contrary to my purpose. The proposal:

Let's talk about a man while setting aside the ordinary meaning of the name 'man', which is the complex idea we usually attach to it; let's consider man as he is in himself, and as he is really distinguished from others in his internal constitution or real essence, i.e. by something we don't know

seems silly. But that is what must be done by someone who wants to speak of the supposed real essences and species of things as thought to be made by nature, even if he only wants to say that no such real essences are signified by the general names that substances are called by! Because it is difficult to do this by known familiar names, let me introduce an example through which I hope to make clearer the mind's different handlings of specific names and ideas, and to show how the complex ideas of modes are sometimes

copied from archetypes in the minds of other thinking beings (that is, to the common meanings of their accepted names), and sometimes from no archetypes at all. I plan also to show how the mind always copies its ideas of substances either from the substances themselves or from the meanings of their names. . . .

[In sections **44–5** Locke presents a fiction in which Adam invents words meaning 'suspicion' and 'disloyalty' in advance of encountering instances of either; he sketches a possible history of the gradual entry of these words into common use.]

[In section **46** he gives a fiction about Adam being brought a piece of gold and thereupon inventing a word for it; and in **47** a possible subsequent history of that word—a history in which *every* newly discovered quality of the stuff is added to the complex idea that is to mark off the species. This, Locke says, would mean that the archetype for the idea is *every discoverable property of the stuff*; and that would condemn men's actual idea of gold to being for ever 'inadequate' (see II.xxxi.13). In section **48** he adds that this procedure would also lead to people's having different ideas of gold because their varying experiences of it lead to differences in what properties they know it to have.]

49. To avoid this, therefore, people have supposed that every species has a real essence from which its properties all flow, and they want their name of the species to stand for that. But they have no idea of that real essence; and their words can signify nothing but their ideas; so all that they achieve by this attempt to stabilize the meaning of the species name by tying it to a real essence is to put *the name* in the place of *the thing having that real essence*, without knowing what the real essence is. That is what men do when they speak of species of things as though they were made by nature and

distinguished from one another by real essences.

50. Consider what is happening when we affirm *All gold is fixed*. We could mean •that fixedness is a part of the definition, part of the nominal essence the word ‘gold’ stands for; in which case our affirmation contains nothing but the meaning of the term ‘gold’. Or else we mean •that fixedness, though not part of the definition of the word ‘gold’, is a property of *that substance itself*: in which case we are plainly using the word ‘gold’ to stand in the place of a substance having the real made-by-nature essence of a species of things. Substituting for ‘gold’ in this way gives it a confused and uncertain meaning. So much so that, although with ‘gold’ thus understood the proposition *Gold is fixed* is an affirmation of something real, it is a truth that we shall never be able to apply in particular cases, and so isn’t something we can use or be certain of. However true it is that *whatever has the real essence of gold is fixed*, what use can we make of this when we don’t know what is and

what is not ‘gold’ in this sense? If we don’t know the real essence of gold, we can’t possibly know which bits of matter have that essence or, therefore, which bits are truly gold ·in the sense of ‘gold’ now being examined·.

51. To conclude: Adam’s initial freedom to make complex ideas of mixed modes on the pattern of nothing but his own thoughts is a freedom that all men have had ever since. And his need to conform his ideas of substances to things outside him, as to archetypes made by nature, is a need that all men have had ever since. His liberty to give any new name he liked to any idea is one that we still have (especially when we are *inventing* a language, if we can imagine such a thing happening now), except that in a society with an already-established language the meanings of words should be altered only cautiously and sparingly. [The section concludes with a statement of the fairly obvious reason for this.]