3b. The distinction between univocal and equivocal speech

8 ARISTOTLE: Categories, CH 1 [1a1-12] 5a / Interpretation, CH 1 [16a4-8] 25a / Topics, BK VI, CH 10 [148a23-b4] 202b-c / Metaphysics, BK I, CH 9 [990b33-991a8] 509a-b; BK XI, ch 3 [1060b31-36] 589a

19 AQUINAS: Summa Theologica, PART I, Q 1, A 10, REP 1 9c-10c; Q 13, A 5 66b-67d; A 10 72c-73c; Q 29, A 4, ANS and REP 4 165c-167a

30 BACON: Advancement of Learning, 60b-c

31 SPINOZA: Ethics, PART I, PROP 17, SCHOL 362c-363c

35 LOCKE: Human Understanding, BK II, CH IV, SECT 5, 131a; CH XXIX, SECT 9 235c-d; BK III, CH IX, SECT 15-16 288d-289c; CH X, SECT 5 292d-293a; CH XI, SECT 3-7 300b-301c; BK IV, CH VII, SECT 15 343d-344a; CH VIII, SECT 11 348b-c

35 HUME: Human Understanding, SECT VIII, DIV 62-63 478b-d

36 STERNE: Tristram Shandy, 307b-308b

42 KANT: Science of Right, 400d

53 JAMES, Psychology, 875b-876a

8 ARISTOTLE: *Categories,* CH 1 [1ª1-12] 5a / *Interpretation,* CH 1 [16ª4-8] 25a / *Topics,* BK VI, CH 10 [148ª23-ᵇ4] 202b-c / *Metaphysics,* BK I, CH 9 [990ᵇ33-991ª8] 509a-b; BK XI, ch 3 [1060ᵇ31-36] 589a

Categories, CH 1 [1ª1-12] 5a

1ª Things are said to be named 'equivocally' when, though they have a common name, the definition corresponding with the name differs for each. Thus, a real man and a figure in a picture can both lay claim to the name 'animal'; yet these are equivocally so named, for, though they have a common name, the definition corresponding with the name differs for each. For should any one define in what sense each is an animal, his definition in the one case will be appropriate to that case only.

On the other hand, things are said to be named 'univocally' which have both the name and the definition answering to the name in common. A man and an ox are both 'animal', and these are univocally so named, inasmuch as not only the name, but also the definition, is the same in both cases: for if a man should state in what sense each is an animal, the statement in the one case would be identical with that in the other.

Interpretation, CH 1 [16ª4-8] 25a

Spoken words are the symbols of mental experience and written words are the symbols of spoken words. Just as all men have not the same writing, so all men have not the same speech sounds, but the mental experiences, which these directly symbolize, are the same for all, as also are those things of which our experiences are the images. This matter has, however, been discussed in my treatise about the soul, for it belongs to an investigation distinct from that which lies before us.

Topics, BK VI, CH 10 [148ª23-ᵇ4] 202b-c

Further, see if he has rendered a single common definition of terms that are used ambiguously. For terms whose definition corresponding to their common name is one and the same, are *synonymous;* if, then, the definition applied in a like manner to the whole range of the *ambiguous* term, it is not true of any one of the objects described by the term. This is, moreover, what happens to Dionysius' definition of 'life' when stated as 'a movement of a creature sustained by nutriment, congenitally present with it': for this is found in plants as much as in animals, whereas 'life' is generally understood to mean not one kind of thing only, but to be one thing in animals and another in plants. It is possible to hold the view that life is a synonymous term and is always used to describe one thing only, and therefore to render the definition in this way on purpose: or it may quite

well happen that a man may see the ambiguous character of the word, and wish to render the definition of the one sense only, and yet fail to see that he has rendered a definition common to both senses instead of one peculiar to the sense he intends. In either case, whichever course he pursues, he is equally at fault. Since ambiguous terms sometimes pass unobserved, it is best in questioning **148**^{b} to treat such terms as though they were synonymous (for the definition of the one sense will not apply to the other, so that the answerer will be generally thought not to have defined it correctly, for to a synonymous term the definition should apply in its full range), whereas in answering you should yourself distinguish between the senses.

Metaphysics, BK I, CH 9 [990^{b}33-991^{a}8] 509a-b

For they are not shared in incidentally, but a thing must share in its Form as in something not predicated of a subject (by 'being shared in incidentally' I mean that e.g. if a thing shares in 'double itself', it shares also in 'eternal', but incidentally; for 'eternal' happens to be predicable of the 'double'). Therefore the Forms will be substance; but the same terms indicate substance in this and in the ideal **991**^{a} world (or what will be the meaning of saying that there is something apart from the particulars—the one over many?). And if the Ideas and the particulars that share in them have the same form, there will be something common to these; for why should '2' be one and the same in the perishable 2's or in those which are many but eternal, and not the same in the '2' itself' as in the particular 2? But if they have not the same form, they must have only the name in common, and it is as if one were to call both Callias and a wooden image a 'man', without observing any community between them.

Metaphysics, BK XI, ch 3 [1060^{b}31-36] 589a

Since the science of the philosopher treats of being *qua* being universally and not in respect of a part of it, and 'being' has many senses and is not used in one only, it follows that if the word is used equivocally and in virtue of nothing common to its various uses, being does not fall under one science (for the meanings of an equivocal term do not form one genus); but if the word is used in virtue of something common, being will fall under one science. The term seems to be used in the way we have mentioned, like 'medical' and 'healthy'. For each of these also we use in many senses.

19 AQUINAS: *Summa Theologica*, PART I, Q 1, A 10, REP 1 9c-10c; Q 13, A 5 66b-67d; A 10 72c-73c; Q 29, A 4, ANS and REP 4 165c-167a

Summa Theologica, PART I, Q 1, A 10, REP 1 9c-10c

Article 10. *Whether in Holy Scripture a Word May Have Several Senses?*

We proceed thus to the Tenth Article: It seems that in Holy Writ a word cannot have several senses, historical or literal, allegorical, tropological or moral, and anagogical.

Objection 1. For many different senses in one text produce confusion and deception and destroy all force of argument. Hence no proof, but only fallacies, can be deduced from a multiplicity of propositions. But Holy Writ ought to be able to state the truth without any fallacy. Therefore there cannot be several senses to a word in Holy Writ.

Obj. 2. Further, Augustine says (*De util. cred.* iii)[1] that "the Old Testament has a fourfold division namely, according to history, etiology, analogy, and allegory." Now these four seem altogether different from the four divisions mentioned in the first objection. Therefore it does not seem fitting to explain the same word of Holy Writ according to the four different senses mentioned above.

Obj. 3. Further, besides these senses, there is the parabolical, which is not one of these four.

On the contrary, Gregory says (*Moral,* XX, I):[2] "Holy Writ by the manner of its speech transcends every science, because in one and the same sentence, while it describes a fact, it reveals a mystery."

I answer that, The author of Holy Writ is God, in whose power it is to signify His meaning not by words only (as man also can do), but also by things themselves. So, whereas in every other science things are signified by words, this science has the property that the things signified by the words have themselves also a meaning. Therefore that first meaning whereby words signify things belongs to the first sense, the historical or literal. That meaning whereby things signified by words have themselves also a meaning is called the spiritual sense, which is based on the literal, and presupposes it.

Now this spiritual sense has a threefold division. For as the Apostle says (Heb. 10. 1) the Old Law is a figure of the New Law, and Dionysius says[3] the New Law itself is a figure of future glory. Again, in the New Law, whatever our Head has done is a type of what we ought to do. Therefore, so far as the things of the Old Law signify the things of the New Law, there is the allegorical sense. But so far as the things done in Christ, or so far as the

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[1] PL 42, 68.
[2] PL 76, 135.
[3] *De Eccl. Hier.,* V, 2 (PG 3, 501).

things which signify Christ, are types of what we ought to do, there is the moral sense. But so far as they signify what relates to eternal glory, there is the anagogical sense.

Since the literal sense is that which the author intends, and since the author of Holy Writ is God, Who by one act comprehends all things by His intellect, it is not unfitting, as Augustine says[4] if, even according to the literal sense, one word in Holy Writ should have several senses.

Reply Obj. 1. The multiplicity of these senses does not produce equivocation or any other kind of multiplicity, seeing that these senses are not multiplied because one word signifies several things, but because the things signified by the words can be themselves types of other things. Thus in Holy Writ no confusion results, for all the senses are founded on one—the literal—from which alone can any argument be drawn, and not from those intended in allegory, as Augustine says (*Epist*. xciii).[5] Nevertheless, nothing of Holy Scripture perishes on account of this, since nothing necessary to faith is contained under the spiritual sense which is not elsewhere put forward by the Scripture in its literal sense.

Reply Obj. 2. These three—history, etiology, analogy—are grouped under the literal sense. For it is called history, as Augustine expounds[6] whenever anything is simply related; it is called etiology when its cause is assigned, as when Our Lord gave the reason why Moses allowed the putting away of wives—namely, on account of the hardness of men's hearts (Matt. 19. 8); it is called analogy whenever the truth of one text of Scripture is shown not to contradict the truth of another. Of these four, allegory alone stands for the three spiritual senses. Thus Hugh of S. Victor (*Sacram*. 1, 4)[7] includes the anagogical under the allegorical sense, laying down three senses only—the historical, the allegorical, and the tropological.

Reply Obj. 3. The parabolical sense is contained in the literal, for by words things are signified properly and figuratively. Nor is the figure itself, but that which is figured, the literal sense. When Scripture speaks of God's arm, the literal sense is not that God has such a member, but only what is signified by this member, namely, operative power. Hence it is plain that nothing false can ever underlie the literal sense of Holy Writ.

Summa Theologica, PART I, Q 13, A 5 66b-67d

Article 5. *Whether What Is Said of God and of Creatures Is Univocally Predicated of Them?*

We proceed thus to the Fifth Article: It seems that what is said of God and creatures is said of them univocally.

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[4] *Confessions*, XII, 42 (PL 32, 844).
[5] Chap. 8 (PL 33, 334).
[6] *De Util. Cred.,* 3 (PL 42, 68).
[7] PL 176, 184; Cf. *De Scriptur. et Scriptor. Sacris.,* III (PL 175, II).

Objection 1. For every equivocal term is reduced to the univocal, as many are reduced to one; for if the name dog be said equivocally of the barking dog, and of the dogfish, it must be said of some univocally—namely, of all barking dogs; otherwise we proceed to infinity. Now there are some univocal agents which agree with their effects in name and definition, as man generates man; and there are some agents which are equivocal, as the sun which causes heat, although the sun is hot only in an equivocal sense. Therefore it seems that the first agent to which all other agents are reduced is an univocal agent; and thus what is said of God and creatures is predicated univocally.

Obj. 2. Further, there is no likeness among equivocal things. Therefore as creatures have a certain likeness to God, according to the word of Genesis (1. 26), *Let us make man to our image and likeness,* it seems that something can be said of God and creatures univocally.

Obj. 3. Further, "measure is homogeneous" with the thing measured as is said in the *Metaphysics*.[8] But God is the first measure of all beings, as it says in the same place. Therefore God is homogeneous with creatures, and thus a word may be applied univocally to God and to creatures.

On the contrary, Whatever is predicated of various things under the same name but not in the same meaning is predicated equivocally. But no name belongs to God in the same meaning that it belongs to creatures; for instance, wisdom in creatures is a quality, but not in God. Now a different genus changes a nature, since the genus is part of the definition; and the same applies to other things. Therefore whatever is said of God and of creatures is predicated equivocally.

2. *Further*, God is more distant from creatures than any creatures are from each other. But the distance of some creatures makes any univocal predication of them impossible, as in the case of those things which are not in the same genus. Therefore much less can anything be predicated univocally of God and creatures. And so only equivocal predication can be applied to them.

I answer that, Univocal predication is impossible between God and creatures. The reason of this is that every effect which is not an adequate result of the power of the efficient cause receives the likeness of the agent not in its full degree, but in a measure that falls short, so that what is divided and multiplied in the effects resides in the agent simply, and in the same manner; as for example the sun by the exercise of its one power produces manifold and various forms in all inferior things. In the same way, as said in the preceding article, all perfections of things which exist in creatures divided and multiplied pre-exist in God unitedly. Thus, when any term expressing perfection is applied to a creature, it signifies that

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[8] Aristotle, X, I (1053^{a}24).

perfection distinct in idea from other perfections; as, for instance, by this term wise applied to a man, we signify some perfection distinct from a man's essence, and distinct from his power and being, and from all similar things; whereas when we apply it to God, we do not mean to signify anything distinct from His essence, or power, or being. Thus also this term wise applied to man in some degree circumscribes and comprehends the thing signified; but this is not the case when it is applied to God, but it leaves the thing signified as incomprehended, and as exceeding the signification of the name. Hence it is evident that this term wise is not applied in the same aspect to God and to man. The same rule applies to other terms. Hence no name is predicated univocally of God and of creatures.

Neither, on the other hand, are names applied to God and creatures in a purely equivocal sense, as some have said.[9] Because if that were so, it follows that from creatures nothing could be known or demonstrated about God at all, for the reasoning would always fall into the fallacy of equivocation. Such a view is as much against philosophy which proves many things about God as it is against what the Apostle says: *The invisible things of God are clearly seen being understood by the things that are made* (Rom. 1. 20).

Therefore it must be said that these names are said of God and creatures according to analogy, that is, according to proportion. Now names are thus used in two ways: either according as many things are proportionate to one, as for example healthy is predicated of medicine and urine in so far as each has an order and proportion to the health of the animal, of which the latter is the sign and the former the cause, or according as one thing is proportionate to another; thus healthy is said of medicine and animal, since medicine is the cause of health in the animal. And in this way some things are said of God and creatures analogically, and not in a purely equivocal nor in a purely univocal sense. For we can name God only from creatures (A. 1). Thus whatever is said of God and creatures, is said according to the relation of a creature to God as its principle and cause, wherein all perfections of things pre-exist excellently.

Now this mode of community is a mean between pure equivocation and simple univocation. For in those things which are spoken of analogically neither is there one notion, as there is in univocal things, nor totally diverse notions as in equivocal things; but a term which is thus used in a multiple sense signifies different proportions to some one thing; thus healthy applied to urine signifies the sign of animal health, and applied to medicine signifies the cause of the same health.

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[9] Maimonides, *Guide*, I, 59 (FR 84); Averroes, *In Meta.,* XII, comm. 51 (VIII, 337B).

Reply Obj. 1. Although in predication the equivocal must be reduced to the univocal, still in actions the non-univocal agent must precede the univocal agent. For the non-univocal agent is the universal cause of the whole species, as for instance the sun is the cause of the generation of all men. But the univocal agent is not the universal efficient cause of the whole species (otherwise it would be the cause of itself, since it is contained in the species), but is a particular cause of this individual which it places under the species by way of participation. Therefore the universal cause of the whole species is not an univocal agent, and the universal cause comes before the particular cause. But this universal agent while it is not univocal, nevertheless is not altogether equivocal, otherwise it could not produce its own likeness; but it can be called an analogical agent, just as in predications all univocal terms are reduced to one first non-univocal analogical term, which is being.
Reply Obj. 2. The likeness of the creature to God is imperfect, for it does not represent one and the same generic thing (Q. IV, A. 3).
Reply Obj. 3. God is not the measure proportioned to things measured; hence it is not necessary that God and creatures should be in the same genus.
The arguments adduced *in the contrary,* prove indeed that these names are not predicated univocally of God and creatures, yet they do not prove that they are predicated equivocally.

Summa Theologica, PART I, Q 13, A 10 72c-73c

Article 10. *Whether This Name God Is Applied to God Univocally, by Nature, by Participation, and According to Opinion?*

We proceed thus to the Tenth Article: It seems that this name God is applied to God univocally by nature, by participation, and according to opinion.
Objection 1. For where a diverse signification exists, there is no contradiction of affirmation and negation; for equivocation prevents contradiction. But a Catholic who says: “An idol is not God,” contradicts a pagan who says: “An idol is God.” Therefore God in both senses is spoken of univocally.
Obj. 2. Further, as an idol is God in opinion, and not in truth, so the enjoyment of carnal pleasures is called happiness in opinion, and not in truth. But this name happiness is applied univocally to this supposed happiness, and also to true happiness. Therefore also this name God is applied univocally to the true God, and to God also in opinion.
Obj. 3. Further, names are called univocal because they contain one idea. Now when a Catholic says: "There is one God," he understands by the name God an omnipotent being, and one venerated above all; while the heathen

understands the same when he says: "An idol is God." Therefore this name God is applied univocally to both.

On the contrary, That which is in the intellect is the likeness of what is in the thing as is said in *Interpretation.*[10] But the word animal applied to a true animal and to a picture of one is equivocal. Therefore this name God applied to the true God and to God in opinion is applied equivocally.

Further, No one can signify what he does not know. But the heathen does not know the divine nature. So when he says an idol is God, he does not signify the true Deity. On the other hand, a Catholic signifies the true Deity when he says that there is one God. Therefore this name God is not applied univocally, but equivocally to the true God, and to God according to opinion.

I answer that, This name God in the three above significations is taken neither univocally nor equivocally, but analogically. This is apparent from this reason. Univocal terms mean absolutely the same thing, but equivocal terms absolutely different things; but in analogical terms a word taken in one signification must be placed in the definition of the same word taken in other senses; as, for instance, being which is applied to substance is placed in the definition of being as applied to accident; and healthy applied to animal is placed in the definition of healthy as applied to urine and medicine. For urine is the sign of health in the animal, and medicine is the cause of health.

The same applies to the question at issue. For this name God, as signifying the true God, includes the idea of God when it is used to denote God in opinion, or participation. For when we name anyone god by participation, we understand by the name of god some likeness of the true God. Likewise, when we call an idol god, by this name god we understand and signify something which men think is God; thus it is manifest that the name has different meanings, but that one of them is comprised in the other significations. Hence it is manifestly said analogically.

Reply Obj. 1. The multiplication of names does not depend on the predication of the name, but on the signification: for this name man, of whomsoever it is predicated, whether truly or falsely, is predicated in one sense. But it would be multiplied if by the name man we meant to signify different things; for instance, if one meant to signify by this name man what man really is, and another meant to signify by the same name a stone, or something else. Hence it is evident that a Catholic saying that an idol is not God contradicts the pagan asserting that it is God; because each of them uses this name God to signify the true God. For when the pagan says an idol is God, he does not use this name as meaning God in opinion, for he would then speak the truth, as also Catholics sometimes use the name in

[10] Aristotle, I (16^{a}5).

the sense, as in the Psalm, *All the gods of the Gentiles are demons* (Ps. 95:5).
The same remark applies to the *second and third Objections*. For those reasons proceed from the different predication of the name, and not from its various significations.
Reply Obj. 4. The term animal applied to a true and a pictured animal is not purely equivocal; for the Philosopher[11] takes equivocal names in a large sense, including analogous names; because also being, which is predicated analogically, is sometimes said to be predicated equivocally of different predicaments.
Reply Obj. 5. Neither a Catholic nor a pagan knows the very nature of God as it is in itself, but each one knows it according to some idea of causality, or excellence, or remotion (Q XII, A 12). So the Gentile can take this name God in the same way when he says an idol is God as the Catholic does in saying an idol is not God. But if anyone should be quite ignorant of God altogether, he could not even name Him, unless, perhaps, as we use names the meaning of which we know not.

Summa Theologica, PART I, Q 29, A 4, ANS and REP 4 165c-167a

Article 4. *Whether This Word "Person" Signifies Relation?*

We proceed thus to the Fourth Article: It would seem that this word person, as applied to God, does not signify relation, but substance.
Objection 1. For Augustine says (*De Trin,* vii, 6):[12] "When we speak of the person of the Father, we mean nothing else but the substance, for person is said in regard to Himself, and not in regard to the Son."
Obj. 2. Further, the interrogation "What?" refers to the essence. But, as Augustine says:[13] When we say there are three who bear witness in heaven, the Father, the Word, and the Holy Ghost, and it is asked, Three what? the answer is, Three persons. Therefore person signifies essence.
Obj. 3. According to the Philosopher[14] the meaning of a word is its definition. But the definition of person is this: "The individual substance of the rational nature," as above stated (A. 1). Therefore person signifies substance.
Obj. 4. Further, person in men and angels does not signify relation, but something absolute. Therefore, if in God it signified relation, it would bear an equivocal meaning in God, in man, and in angels.
On the contrary, Boëthius says (*De Trin*.)[15] that "every word that refers to the persons signifies relation." But no word belongs to person more strictly than the very word person itself. Therefore this word person signifies relation.

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[11] *Categories,* I (1ª1).
[12] PL 42, 943.
[13] *De Trin.,* VII, 4 (PL 42, 940).
[14] *Metaphysics,* IV, 7 (1012ª23).
[15] Chap. 6 (PL 64, 1254).

I answer that, A difficulty arises concerning the meaning of this word person in God[16] from the fact that it is predicated plurally of the Three in contrast to the nature of the names belonging to the essence; nor does it in itself refer to another, as do the words which express relation.
Hence some[17] have thought that this word person of itself expresses absolutely the divine essence, as this name God and this word Wise, but that to meet heretical attack, it was ordained by conciliar decree that it was to be taken in a relative sense, and especially in the plural, or with the addition of a distinguishing adjective; as when we say, "Three persons," or, "one is the person of the Father, another of the Son," etc. Used, however, in the singular, it may be either absolute or relative. But this does not seem to be a satisfactory explanation; for, if this word person by force of its own signification expresses the divine essence only, it follows that since we speak of three persons, so far from the heretics being silenced, they had still more reason to argue. Seeing this, others[18] maintained that this word person in God signifies both the essence and the relation. Some of these said[19] that it signifies directly the essence, and relation indirectly, forasmuch as *person* means as it were *by itself one (per se una*); and unity belongs to the essence. And what is *by itself* implies relation indirectly; for the Father is understood to exist *by Himself,* as by relation distinct from the Son. Others, however, said,[20] on the contrary, that it signifies relation directly, and essence indirectly, because in the definition of "person" the term nature is mentioned indirectly; and these come nearer to the truth.
To determine the question, we must consider that something may be included in the meaning of a less common term which is not included in the more common term; as rational is included in the meaning of man, and not in the meaning of animal. So that it is one thing to ask the meaning of the word animal, and another to ask its meaning when the animal in question is a man. Also, it is one thing to ask the meaning of this word person in general, and another to ask the meaning of person as applied to God. For person in general signifies the individual substance of a rational nature as we have said (A. 1). The individual is what in itself is undivided, but is distinct from others. Therefore person in any nature signifies what is distinct in that nature; thus in human nature it signifies this flesh, these bones, and this soul, which are the individuating principles of a man, and which though not belonging to the meaning of person, nevertheless do belong to the meaning of a human person.

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[16] Cf. Richard Fishacre, *In Sent.,* I, d. 25, in Bergeron, EHLD II, p. 149.
[17] Augustine, *De Trin.,* VII, 5 (PL 42, 943); *Summa Sent.,* (anon.), tr. I, chap. 9 (PL 176, 56).
[18] Peter Lombard, *Sent.,* I, d. 25, chap. 2 (QR 1, 159).
[19] Simon of Tournai, *Sent.,* in Schmaus, RTAM (1932) p. 62.
[20] William of Auxerre, *Summa Aurea,* Pt. I, tr. 6, chap. 3 (fol. IIa).

Now distinction in God is only by relation of origin, as stated above (Q. XXVIII, A. 3), while relation in God is not as an accident in a subject, but is the divine essence itself, and so it is subsistent, for the divine essence subsists. Therefore, as the Godhead is God, so the divine paternity is God the Father, Who is a divine person. Therefore a divine person signifies a relation as subsisting.

And this is to signify relation by way of substance, and such a relation is a hypostasis subsisting in the divine nature, although that which subsists in the divine nature is the divine nature itself. Thus it is true to say that the name person signifies relation directly, and the essence indirectly; not, however, the relation as such, but as expressed by way of a hypostasis. So likewise it signifies directly the essence, and indirectly the relation, since the essence is the same as the hypostasis; but in God the hypostasis is expressed as distinct by the relation, and thus relation, as such, enters into the notion of the person indirectly.

Thus we can say that this signification of the word person was not clearly perceived before it was attacked by heretics. Hence, this word person was used just as any other absolute term. But afterwards it was applied to express relation, as it lent itself to that signification, so that this word person means relation not only by use and custom, according to the first opinion, but also by force of its own signification.

Reply Obj. 1. This word person is said in respect to itself, not to another, since it signifies relation not as such, but by way of a substance—which is a hypostasis. In that sense Augustine says that it signifies the essence, since in God essence is the same as the hypostasis, because in God what He is, and that by which He is are the same.

Reply Obj. 2. The term “what” refers sometimes to the nature expressed by the definition, as when we ask, What is man? and we answer, A mortal rational animal. Sometimes it refer to the suppositum, as when we ask, What swims in the sea? and answer, A fish. So to those who ask, Three what? we answer, Three persons.

Reply Obj. 3. In God the individual—that is, distinct and incommunicable substance—includes the idea of relation, as above explained.

Reply Obj. 4. The different sense of the less common term does not produce equivocation in the more common. Although a horse and an ass have their own proper definitions, nevertheless they agree univocally in animal, because the common definition of animal applies to both. So it does not follow that although relation is contained in the signification of divine person but not in that of an angelic or of a human person, that the word person is used in an equivocal sense. Though neither is it applied univocally, since nothing can be said univocally of God and creatures (Q XIII, A. 5).

30 BACON: *Advancement of Learning*, 60b-c

6. This part concerning *elenches* is excellently handled by Aristotle in precept, but more excellently by Plato in example; not only in the persons of the Sophists, but even in Socrates himself,[21] who, professing to affirm nothing, but to infirm that which was affirmed by another, hath exactly expressed all the forms of objection, fallace, and redargution. And although we have said that the use of this doctrine is for redargution, yet it is manifest the degenerate and corrupt use is for caption and contradiction, which passeth for a great faculty, and no doubt is of very great advantage: though the difference be good which was made between orators and sophisters, that the one is as the greyhound, which hath his advantage in the race, and the other as the hare, which hath her advantage in the turn, so as it is the advantage of the weaker creature.

7. But yet further, this doctrine of *elenches* hath a more ample latitude and extent than is perceived; namely, unto divers parts of knowledge; whereof some are laboured and other omitted. For first, I conceive (though it may seem at first somewhat strange) that that part which is variably referred, sometimes to logic, sometimes to metaphysic, touching the common adjuncts of essences, is but an *elenche.* For the great sophism of all sophisms being equivocation or ambiguity of words and phrase, specially of such words as are most general and intervene in every inquiry, it seemeth to me that the true and fruitful use (leaving vain subtilities and speculations) of the inquiry of majority, minority, priority, posteriority, identity, diversity, possibility, act, totality, parts, existence, privation, and the like, are but wise cautions against ambiguities of speech. So again the distribution of things into certain tribes, which we call categories or predicaments, are but cautions against the confusion of definitions and divisions.

8. Secondly, there is a seducement that worketh by the strength of the impression, and not by the subtilty of the illaqueation; not so much perplexing the reason, as overruling it by power of the imagination. But this part I think more proper to handle when I shall speak of rhetoric.

31 SPINOZA: *Ethics*, PART I, PROP 17, SCHOL 362c-363c

Schol. There are some who think that God is a free cause because He can, as they think, bring about that those things which we have said follow from His nature—that is to say, those things which are in His power—should not be, or should not be produced by Him. But this is simply saying that God could bring about that it should not follow from the nature of a triangle that its three angles should be equal to two right angles, or that from a

[21] See the opening of the *Theatetus*.

given cause an effect should not follow, which is absurd. But I shall show farther on, without the help of this proposition, that neither intellect nor will pertain to the nature of God.

I know, indeed, that there are many who think themselves able to demonstrate that intellect of the highest order and freedom of will both pertain to the nature of God, for they say that they know nothing more perfect which they can attribute to Him than that which is the chief perfection in ourselves. But although they conceive God as actually possessing the highest intellect, they nevertheless do not believe that He can bring about that all those things should exist which are actually in His intellect, for they think that by such a supposition they would destroy His power. If He had created, they say, all things which are in His intellect, He could have created nothing more, and this, they believe, does not accord with God's omnipotence so then they prefer to consider God as indifferent to all things, and creating nothing excepting that which He has decreed to create by a certain absolute will. But I think that I have shown with sufficient clearness (Prop. 16) that from the supreme power of God, or from His infinite nature, infinite things in infinite ways, that is to say, all things, have necessarily flowed, or continually follow by the same necessity, in the same way as it follows from the nature of a triangle, from eternity and to eternity, that its three angles are equal to two right angles. The omnipotence of God has therefore been actual from eternity, and in the same actuality will remain to eternity. In this way the omnipotence of God, in my opinion, is far more firmly established. My adversaries, indeed (if I may be permitted to speak plainly), seem to deny the omnipotence of God, inasmuch as they are forced to admit that He has in His mind an infinite number of things which might be created, but which, nevertheless, He will never be able to create, for if He were to create all things which He has in His mind, He would, according to them, exhaust His omnipotence and make Himself imperfect. Therefore, in order to make a perfect God, they are compelled to make Him incapable of doing all those things to which His power extends, and anything more absurd than this, or more opposed to God's omnipotence, I do not think can be imagined. Moreover—to say a word, too, here about the intellect and will which we commonly attribute to God—if intellect and will pertain to His eternal essence, these attributes cannot be understood in the sense in which men generally use them, for the intellect and will which could constitute His essence would have to differ entirely from our intellect and will, and could resemble ours in nothing except in name. There could be no further likeness than that between the celestial constellation of the Dog and the animal which barks. This I will demonstrate as follows. If intellect pertains to the divine nature, it cannot, like our intellect, follow the things which are its object (as many suppose), nor can it be simultaneous in its nature with them, since God is

prior to all things in causality (Corol. 1, Prop. 16); but, on the contrary, the truth and formal essence of things is what it is, because as such it exists objectively in God's intellect. Therefore the intellect of God, in so far as it is conceived to constitute His essence, is in truth the cause of things, both of their essence and of their existence,—a truth which seems to have been understood by those who have maintained that God's intellect, will, and power are one and the same thing. Since, therefore, God's intellect is the sole cause of things, both of their essence and of their existence (as we have already shown), it must necessarily differ from them with regard both to its essence and existence; for an effect differs from its cause precisely in that which it has from its cause. For example, one man is the cause of the existence but not of the essence of another, for the essence is an eternal truth; and therefore with regard to essence the two men may exactly resemble one another, but with regard to existence they must differ. Consequently if the existence of one should perish, that of the other will not therefore perish; but if the essence of one could be destroyed and become false, the essence of the other would be likewise destroyed. Therefore a thing which is the cause both of the essence and of the existence of any effect must differ from that effect both with regard to its essence and with regard to its existence. But the intellect of God is the cause both of the essence and existence of our intellect; therefore the intellect of God, so far as it is conceived to constitute the divine essence, differs from our intellect both with regard to its essence and its existence, nor can it coincide with our intellect in anything except the name, which is what we essayed to prove. The same demonstration may be applied to the will, as anyone may easily see for himself.

35 LOCKE: *Human Understanding*, BK II, CH IV, SECT 5, 131a; CH XXIX, SECT 9 235c-d; BK III, CH IX, SECT 15-16 288d-289c; CH X, SECT 5 292d-293a; CH XI, SECT 3-7 300b-301c; BK IV, CH VII, SECT 15 343d-344a; CH VIII, SECT 11 348b-c

Human Understanding, BK II, CH IV, SECT 5, 131a

If there be others that have not these two ideas distinct, but confound them, and make but one of them, I know not how men, who have the same idea under different names, or different ideas under the same name, can in that case talk with one another; any more than a man who, not being blind or deaf, has distinct ideas of the colour of scarlet and the sound of a trumpet, could discourse concerning scarlet colour with the blind man I mentioned in another place, who fancied that the idea of scarlet was like the sound of a trumpet.

Human Understanding, BK II, CH XXIX, SECT 9 235c-d

9. *Their simple ones mutable and undetermined.* Thirdly, A third defect that frequently gives the name of confused to our ideas, is, when any one of them is uncertain and undetermined. Thus we may observe men who, not forbearing to use the ordinary words of their language till they have learned their precise signification, change the idea they make this or that term stand for, almost as often as they use it. He that does this out of uncertainty of what he should leave out, or put into his idea of *church*, or *idolatry*, every time he thinks of either, and holds not steady to any one precise combination of ideas that makes it up, is said to have a confused idea of idolatry or the church: though this be still for the same reason as the former, viz. because a mutable idea (if we will allow it to be one idea) cannot belong to one name rather than another, and so loses the distinction that distinct names are designed for.[22]

Human Understanding, BK III, CH IX, SECT 15-16 288d-289c

15. *With this imperfection, they may serve for civil, but not well for philosophical use*. It is true, as to civil and common conversation, the general names of substances, regulated in their ordinary signification by some obvious qualities, (as by the shape and figure in things of known seminal propagation, and in other substances, for the most part by colour, joined with some other sensible qualities), do well enough to design the things men would be understood to speak of: and so they usually conceive well enough the substances meant by the word gold or apple, to distinguish the one from the other. But in *philosophical* inquiries and debates, where general truths are to be established, and consequences drawn from positions laid down, there the precise signification of the names of substances will be found not only not to be well established, but also very hard to be so. For example: he that shall make malleability, or a certain degree of fixedness, a part of his complex idea of gold, may make propositions concerning gold, and draw consequences from them, that will truly and clearly follow from gold, taken in such a signification: but yet such as another man can never be forced to admit, nor be convinced of their truth, who makes not malleableness, or the same degree of fixedness, part of that complex idea that the name gold, in his use of it, stands for.

16. *Instance, liquor.* This is a natural and almost unavoidable imperfection in almost all the names of substances, in all languages whatsoever, which men will easily find when, once passing from confused or loose notions, they come to more strict and close inquiries. For then they will be convinced how doubtful and obscure those words are in their signification, which in ordinary use appeared very clear and determined. I was once in a

[22] Cf. ch. xxii. § 7; also Bk. III. ch. x. §§ 3, 4.

meeting of very learned and ingenious physicians, where by chance there arose a question, whether any liquor passed through the filaments of the nerves. The debate having been managed a good while, by variety of arguments on both sides, I (who had been used to suspect, that the greatest part of disputes were more about the signification of words than a real difference in the conception of things) desired, that, before they went any further on in this dispute, they would first examine and establish amongst them, what the word *liquor* signified. They at first were a little surprised at the proposal; and had they been persons less ingenious, they might perhaps have taken it for a very frivolous or extravagant one: since there was no one there that thought not himself to understand very perfectly what the word liquor stood for; which I think, too, none of the most perplexed names of substances. However, they were pleased to comply with my motion; and upon examination found that the signification of that word was not so settled or certain as they had all imagined; but that each of them made it a sign of a different complex idea. This made them perceive that the main of their dispute was about the signification of that term; and that they differed very little in their opinions concerning *some* fluid and subtle matter, passing through the conduits of the nerves; though it was not so easy to agree whether it was to be called *liquor* or no, a thing, which, when considered, they thought it not worth the contending about.

Human Understanding, BK III, CH X, SECT 5 292d-293a

5. *Unsteady application of them. Secondly,* Another great abuse of words is *inconstancy* in the use of them. It is hard to find a discourse written on any subject, especially of controversy, wherein one shall not observe, if he read with attention, the same words (and those commonly the most material in the discourse, and upon which the argument turns) used something for one collection of simple ideas, and sometimes for another; which is a perfect abuse of language. Words being intended for signs of my ideas, to make them known to others, not by any natural signification, but by a voluntary imposition, it is plain cheat and abuse, when I make them stand sometimes for one thing and sometimes for another; the wilful doing whereof can be imputed to nothing but great folly, or greater dishonesty. And a man, in his accounts with another may, with as much fairness make the characters of numbers stand sometimes for one and sometimes for another collection of units: v. g. this character 3, stand sometimes for three, sometimes for four, and sometimes for eight, as in his discourse or reasoning make the same words stand for different collections of simple ideas. If men should do so in their reckonings, I wonder who would have to do with them? One who would speak thus in the affairs and business of the world, and call 8 sometimes seven, and sometimes nine, as best served his advantage, would presently have clapped upon him, one of the two names men are commonly

disgusted with. And yet in arguings and learned contests, the same sort of proceedings passes commonly for wit and learning; but to me it appears a greater dishonesty than the misplacing of counters in the casting up a debt; and the cheat the greater, by how much truth is of greater concernment and value than money.

Human Understanding, BK III, CH XI, SECT 3-7 300b-301c

3. *But yet necessary to those who search after truth.* But though the market and exchange must be left to their own ways of talking, and gossipings not be robbed of their ancient privilege: though the schools, and men of argument would perhaps take it amiss to have anything offered, to abate the length or lessen the number of their disputes; yet methinks those who pretend seriously to search after or maintain truth, should think themselves obliged to study how they might deliver themselves without obscurity, doubtfulness, or equivocation, to which men's words are naturally liable, if care be not taken.

4. *Misuse of words the great cause of errors.* For he that shall well consider the errors and obscurity, the mistakes and confusion, that are spread in the world by an ill use of words, will find some reason to doubt whether language, as it has been employed, has contributed more to the improvement or hindrance of knowledge amongst mankind. How many are there, that, when they would think on things, fix their thoughts only on words, especially when they would apply their minds to moral matters? And who then can wonder if the result of such contemplations and reasonings, about little more than sounds, whilst the ideas they annex to them are very confused and very unsteady, or perhaps none at all; who can wonder, I say, that such thoughts and reasonings end in nothing but obscurity and mistake, without any clear judgment or knowledge?

5. *Has made men more conceited and obstinate.* This inconvenience, in an ill use of words, men suffer in their own private meditations: but much more manifest are the disorders which follow from it, in conversation, discourse, and arguings with others. For language being the great conduit, whereby men convey their discoveries, reasonings, and knowledge, from one to another, he that makes an ill use of it, though he does not corrupt the fountains of knowledge, which are in things themselves, yet he does, as much as in him lies, break or stop the pipes whereby it is distributed to the public use and advantage of mankind. He that uses words without any clear and steady meaning, what does he but lead himself and others into errors? And he that designedly does it, ought to be looked on as an enemy to truth and knowledge. And yet who can wonder that all the sciences and parts of knowledge have been so overcharged with obscure and equivocal terms, and insignificant and doubtful expressions, capable to make the most attentive or quick-sighted very little, or not at all, the more knowing or

orthodox: since subtlety, in those who make profession to teach or defend truth, hath passed so much for a virtue: a virtue, indeed, which, consisting for the most part in nothing but the fallacious and illusory use of obscure or deceitful terms, is only fit to make men more conceited in their ignorance, and more obstinate in their errors.

6. *Addicted to wrangling about sounds.* Let us look into the books of controversy of any kind, there we shall see that the effect of obscure, unsteady, or equivocal terms is nothing but noise and wrangling about sounds, without convincing or bettering a man's understanding. For if the idea be not agreed on, betwixt the speaker and hearer, for which the words stand, the argument is not about things, but names. As often as such a word whose signification is not ascertained betwixt them, comes in use, their understandings have no other object wherein they agree, but barely the sound; the things that they think on at that time, as expressed by that word, being quite different.

7. *Instance, bat and bird.* Whether a *bat* be a *bird* or no, is not a question, Whether a bat be another thing than indeed it is, or have other qualities than indeed it has; for that would be extremely absurd to doubt of. But the question is, (1) Either between those that acknowledged themselves to have but imperfect ideas of one or both of this sort of things, for which these names are supposed to stand. And then it is a real inquiry concerning the *nature* of a bird or a bat, to make their yet imperfect ideas of it more complete; by examining whether all the simple ideas to which, combined together, they both give the name bird, be all to be found in a bat: but this is a question only of inquirers (not disputers) who neither affirm nor deny, but examine: Or, (2) It is a question between disputants; whereof the one affirms, and the other denies that a bat is a bird. And then the question is barely about the signification of one or both these *words*; in that they not having both the same complex ideas to which they give these two names, one holds and the other denies, that these two names may be affirmed one of another. Were they agreed in the signification of these two names, it were impossible they should dispute about them. For they would presently and clearly see (were that adjusted between them), whether all the simple ideas of the more general name bird were found in the complex idea of a bat or no; and so there could be no doubt whether a bat were a bird or no. And here I desire it may be considered, and carefully examined, whether the greatest part of the disputes in the world are not merely verbal, and about the signification of words; and whether, if the terms they are made in were defined, and reduced in their signification (as they must be where they signify anything) to determined collections of the simple ideas they do or should stand for, those disputes would not end of themselves, and immediately vanish. I leave it then to be considered, what the learning of disputation is, and how well they are employed for the advantage of

themselves or others, whose business is only the vain ostentation of sounds; i.e. those who spend their lives in disputes and controversies. When I shall see any of those combatants strip all his terms of ambiguity and obscurity, (which every one may do in the words he uses himself), I shall think him a champion for knowledge, truth, and peace, and not the slave of vain-glory, ambition, or a party.

Human Understanding, BK IV, CH VII, SECT 15 343d-344a

15. *They cannot add to our knowledge of substances, and their application to complex ideas is dangerous.* But let them be of what use they will in verbal propositions, they cannot discover or prove to us the least knowledge of the nature of substances, as they are found and exist without us, any further than grounded on experience. And though the consequence of these two propositions, called principles, be very clear, and their use not dangerous or hurtful, in the probation of such things wherein there is no need at all of them for proof, but such as are clear by themselves without them, viz. where our ideas are [determined] and known by the names that stand for them: yet when these principles, viz. *what is, is,* and *it is impossible for the same thing to be and not to be,* are made use of in the probation of propositions wherein are words standing for complex ideas, v.g. man, horse, gold, virtue; there they are of infinite danger, and most commonly make men receive and retain falsehood for manifest truth, and uncertainty for demonstration: upon which follow error, obstinacy, and all the mischiefs that can happen from wrong reasoning. The reason whereof is not, that these principles are less true or of less force in proving propositions made of terms standing for complex ideas, than where the propositions are about simple ideas. But because men mistake generally,—thinking that where the same terms are preserved, the propositions are about the same things, though the ideas they stand for are in truth different, therefore these maxims are made use of to support those which in sound and appearance are contradictory propositions; and is clear in the demonstrations above mentioned about a vacuum. So that whilst men take words for things, as usually they do, these maxims may and do commonly serve to prove contradictory propositions; as shall yet be further made manifest.

Human Understanding, BK IV, CH VIII, SECT 11 348b-c

11. *Thirdly, using words variously is trifling with them.* Though yet concerning most words used in discourses, equally argumentative and controversial, there is this more to be complained of, which is the worst sort of trifling, and which sets us yet further from the certainty of knowledge we hope to attain by them, or find in them; viz. that most writers are so far from instructing us in the nature and knowledge of things, that they use their

words loosely and uncertainly, and do not, by using them constantly and steadily in the same significations, make plain and clear deductions of words one from another, and make their discourses coherent and clear, (how little soever they were instructive); which were not difficult to do, did they not find it convenient to shelter their ignorance or obstinacy under the obscurity and perplexedness of their terms: to which, perhaps, inadvertency and ill custom do in many men much contribute.

35 HUME: *Human Understanding,* SECT VIII, DIV 62-63 478b-d

62. It might reasonably be expected in questions which have been canvassed and disputed with great eagerness, since the first origin of science and philosophy, that the meaning of all the terms, at least, should have been agreed upon among the disputants; and our enquiries, in the course of two thousand years, been able to pass from words to the true and real subject of the controversy. For how easy may it seem to give exact definitions of the terms employed in reasoning, and make these definitions, not the mere sound of words, the object of future scrutiny and examination? But if we consider the matter more narrowly, we shall be apt to draw a quite opposite conclusion. From this circumstance alone, that a controversy has been long kept on foot, and remains still undecided, we may presume that there is some ambiguity in the expression, and that the disputants affix different ideas to the terms employed in the controversy. For as the faculties of the mind are supposed to be naturally alike in every individual; otherwise nothing could be more fruitless than to reason or dispute together; it were impossible, if men affix the same ideas to their terms, that they could so long form different opinions of the same subject; especially when they communicate their views, and each party turn themselves on all sides, in search of arguments which may give them the victory over their antagonists. It is true, if men attempt the discussion of questions which lie entirely beyond the reach of human capacity, such as those concerning the origin of worlds, or the economy of the intellectual system or region of spirits, they may long beat the air in their fruitless contests, and never arrive at any determinate conclusion. But if the question regard any subject of common life and experience, nothing, one would think, could preserve the dispute so long undecided but some ambiguous expressions, which keep the antagonists still at a distance, and hinder them from grappling with each other.
63. This has been the case in the long disputed question concerning liberty and necessity; and to so remarkable a degree that, if I be not much mistaken, we shall find, that all mankind, both learned and ignorant, have always been of the same opinion with regard to this subject, and that a few intelligible definitions would immediately have put an end to the whole

controversy. I own that this dispute has been so much canvassed on all hands, and has led philosophers into such a labyrinth of obscure sophistry, that it is no wonder, if a sensible reader indulge his ease so far as to turn a deaf ear to the proposal of such a question, from which he can expect neither instruction or entertainment. But the state of the argument here proposed may, perhaps, serve to renew his attention; as it has more novelty, promises at least some decision of the controversy, and will not much disturb his ease by any intricate or obscure reasoning.
I hope, therefore, to make it appear that all men have ever agreed in the doctrine both of necessity and of liberty, according to any reasonable sense, which can be put on these terms; and that the whole controversy has hitherto turned merely upon words. We shall begin with examining the doctrine of necessity.

36 STERNE: *Tristram Shandy*, 307b-308b

Chapter 30

——“All is not gain that is got into the purse.”——So that not with standing my father had the happiness of reading the oldest books in the universe, and had moreover, in himself, the oddest way of thinking that ever man in it was blessed with, yet it had this drawback upon him after all—that it laid him open to some of the oddest and most whimsical distresses; of which this particular one, which he sunk under at present, is as strong an example as can be given.
No doubt, the breaking down of the bridge of a child’s nose, by the edge of a pair of forceps—however scientifically applied—would vex any man in the world, who was at so much pains in begetting a child, as my father was—yet it will not account for the extravagance of his affliction, nor will it justify the unchristian manner he abandoned and surrendered himself up to.
To explain this, I must leave him upon the bed for half an hour—and my uncle Toby in his old fringe chair sitting beside him.

Chapter 31

——I think it a very unreasonable demand—cried my great-grandfather, twisting up the paper, and throwing it upon the table.——By this account, madam, you have but two thousand pounds fortune, and not a shilling more—and you insist upon having three hundred pounds a year jointure for it.——
——“Because,” replied my great-grandmother, “you have little or no nose, Sir.”——

Now before I venture to make use of the word Nose a second time—to avoid all confusion in what will be said upon it, in this interesting part of my story, it may not be amiss to explain my own meaning, and define, with all possible exactness and precision, what I would willingly be understood to mean by the term: being of opinion, that ’tis owing to the negligence and perverseness of writers in despising this precaution, and to nothing else—that all the polemical writings in divinity are not as clear and demonstrative as those upon a Will o’ the Wisp, or any other sound part of philosophy, and nature pursuit; in order to which, what have you to do, before you set out, unless you intend to go puzzling on to the day of judgment—but to give the world a good definition, and stand to it, of the main word you have most occasion for—changing it, Sir, as you would a guinea, into small coin?—which done— let the father of confusion puzzle you, if he can; or put a different idea either into your head, or your reader’s head, if he knows how.

In books of strict morality and close reasoning, such as this I am engaged in—the neglect is inexcusable; and Heaven is witness, how the world has revenged itself upon me for leaving so many openings to equivocal strictures—and for depending so much as I have done, all along, upon the cleanliness of my readers’ imaginations.

——Here are two senses, cried Eugenius, as we walked along, pointing with the fore finger of his right hand to the word Crevice, in the one hundred and seventy-eighth page of the first volume of this book of books;—here are two senses—quoth he—And here are two roads, replied I, turning short upon him—a dirty and a clean one—which shall we take?——The clean, by all means, replied Eugenius. Eugenius, said I, stepping before him, and laying my hand upon his breast—to define—is to distrust.—Thus I triumphed over Eugenius; but I triumphed over him as I always do, like a fool.——’Tis my comfort, however, I am not an obstinate one: therefore

I define a nose as follows—intreating only beforehand, and beseeching my readers, both male and female, of what age, complexion, and condition soever, for the love of God and their own souls, to guard against the temptations and suggestions of the devil, and suffer him by no art or wile to put any other ideas into their minds, than what I put into my definition—For by the word Nose, throughout all this long chapter of noses, and in every other part of my work, where the word Nose occurs—I declare, by that word I mean a nose, and nothing more, or less.

Chapter 32

——“Because,” quoth my great-grandmother, repeating the words again—“you have little or no nose, Sir.”——

’Sdeath! cried my great-grandfather, clapping his hand upon his nose,—’tis not so small as that comes to;—’tis a full inch longer than my father’s.——Now, my great-grandfather’s nose was for all the world like unto the noses of all the men, women, and children, whom Pantagruel found dwelling upon the island of Ennasin.——By the way, if you would know the strange way of getting a-kin amongst so flat-nosed a people—you must read the book;—find it out yourself, you never can.——

42 KANT: *Science of Right*, 400d

The *dictum* of the right of necessity is put in these terms: “Necessity has no law” (*Necessitas non habet legem*). And yet there cannot be a necessity that could make what is wrong lawful.
It is apparent, then, that in judgements relating both to “equity” and “the right of necessity,” the *equivocations* involved arise from an interchange of the objective and subjective grounds that enter into the application of the principles of right, when viewed respectively by reason or by a judicial tribunal. What one may have good grounds for recognising as right, in itself, may not find confirmation in a court of justice; and what he must consider to be wrong, in itself, may obtain recognition in such a court. And the reason of this is that the conception of right is not taken in the two cases in one and the same sense.

53 JAMES, *Psychology,* 875b-876a

This is as clear a restatement as I can make of Mill’s doctrine.[23] And its failure is written upon its front. Woe to arithmetic, were such the only grounds for its validity! The same real things are countable in numberless ways, and pass from one numerical form, not only to its equivalent (as Mill implies), but to its other, as the sport of physical accidents or of our mode of attending may decide. How could our notion that one and one are eternally and necessarily two ever maintain itself in a world where every time we add one drop of water to another we get not two but one again? in a world where every time we add a drop to a crumb of quicklime we get a dozen or more?—had it no better warrant than such experiences? At most we could then say that one and one are *usually* two. Our arithmetical propositions would never have the confident tone which they now possess. That confident tone is due to the fact that they deal with abstract and ideal numbers exclusively. *What we mean* by one plus one *is* two; we *make* two out of it; and it would mean two still even in a world where *physically* (according to a conceit of Mill’s) a third thing was engendered every time

[23] For the original statements, *cf.* J. S. Mill: *Logic,* bk. II, chap. VI, §§ 2, 3; and bk. III, chap. XXIV, § 5.

one thing came together with another. We are masters of our meanings, and discriminate between the things we mean and our ways of taking them, between our strokes of numeration themselves, and our bundlings and separatings thereof.

Mill ought not only to have said, “All things are numbered.” He ought, in order to prove his point, to have shown that they are *unequivocally* numbered, which they notoriously are not. Only the abstract numbers themselves are unequivocal, only those which we create mentally and hold fast to as ideal objects always the same. A concrete natural thing can always be numbered in a great variety of ways. “We need only conceive a thing divided into four equal parts (and all things may be conceived as so divided),” as Mill is himself compelled to say, to find the number four in it, and so on.

The relation of numbers to experience is just like that of “kinds” in logic. So long as an experience will keep its kind we can handle it by logic. So long as it will keep its number we can deal with it by arithmetic. *Sensibly,* however, things are constantly changing their numbers, just as they are changing their kinds. They are forever breaking apart and fusing. Compounds and their elements are never numerically identical, for the elements are sensibly many and the compounds sensibly one. Unless our arithmetic is to remain without application to life, we must somehow *make* more numerical continuity than we spontaneously find. Accordingly Lavoisier discovers his weight-units which remain the same in compounds and elements, though volume-units and quality-units all have changed. A great discovery! And modern science outdoes it by denying that compounds exist at all. There is no such thing as “water” for “science”; that is only a handy name for H_2 and O when they have got into the position H-O-H, and then affect our senses in a novel way. The modern theories of atoms, of heat, and of gases are, in fact, only intensely artificial devices for gaining that constancy in the numbers of things which sensible experience will not show. “Sensible things are not the things for me,” says Science, “because in their changes they will not keep their numbers the same. Sensible qualities are not the qualities for me, because they can with difficulty be numbered at all. These hypothetic atoms, however, are the things, these hypothetic masses and velocities are the qualities for me; they will stay numbered all the time.”

By such elaborate inventions, and at such a cost to the imagination, do men succeed in making for themselves a world in which real things shall be coerced *per fas aut nefas* under arithmetical law.