

Introduction to Philosophy

E. F. Haven

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Table of Contents

The Existence of God.....	4
1. The Birth and Death of God.....	5
'Good and Evil', 'Good and Bad'.....	5
The Death of God.....	8
2. The Cosmological Argument.....	10
Whether God Exists?.....	10
3. The Ontological Argument.....	12
The Argument.....	12
Response by Gaunilo.....	13
Anslem's Response.....	15
4. The Teleological Argument.....	16
State of the Argument.....	16
Application of the Argument.....	18
Critique by David Hume.....	19
5. Pascal's Wager.....	23
Knowledge.....	25
6. The Problem of Induction.....	26
7. Justified True Belief.....	33
8. A Priori Knowledge.....	39
9. A Posteriori Knowledge.....	46
Reality.....	54
10. Mind and Body.....	55
11. Reality is Mind Dependent.....	58
12. Reality is Mind Independent.....	67
13. Universal Forms.....	71
The Divided Line.....	73
Allegory of the Cave.....	74
14. Particular Parts.....	77
Freewill.....	81
15. Determinism.....	82
Ethics.....	89
16. Utilitarianism.....	90
What is Utilitarianism.....	90
Of What Sort of Proof the Principle of Utility Is Susceptible.....	94
17. The Categorical Imperative.....	96
18. Virtue Ethics.....	104

Part I

The Existence of God

1. The Birth and Death of God

By Frederich Nietzsche

'Good and Evil', 'Good and Bad'

2. All honor, then, to the noble spirits who would fain dominate these historians of morality. But it is certainly a pity that they lack the *historical sense itself*, that they themselves are quite deserted by all the beneficent spirits of history. The whole train of their thought runs, as was always the way of old-fashioned philosophers, on *thoroughly* unhistorical lines: there is no doubt on this point. The crass ineptitude of their genealogy of morals is immediately apparent when the question arises of ascertaining the origin of the idea and judgment of "good." "Man had originally," so speaks their decree, "praised and called 'good' altruistic acts from the standpoint of those on whom they were conferred, that is. those to whom they were *useful*; subsequently the origin of this praise was *forgotten*, and altruistic acts, simply because, as a sheer matter of habit, they were praised as good, came also to be felt as good — as though they contained in themselves some intrinsic goodness." The thing is obvious: — this initial derivation contains already all the typical and

idiosyncratic traits of the English psychologists — we have "utility," "forgetting," "habit," and finally "error," the whole assemblage forming the basis of a system of values, on which the higher man has up to the present prided himself as though it were a kind of privilege of man in general. This pride must be brought low. this system of values must lose its values: is that attained?

Now the first argument that comes ready to my hand is that the real homestead of the concept "good" is sought and located in the wrong place: the judgment "good" did not originate among those to whom goodness was shown. Much rather has it been the good themselves, that is, the aristocratic, the powerful, the high-stationed, the high-minded, who have felt that they themselves were good, and that their actions were good, that to say of the first order, in contradistinction to all the low, the low-minded, the vulgar, and the plebeian. It was out of this pathos of distance that they first arrogated the right to create values for their own profit, and to coin the names of such values: what had they to do with utility? The standpoint of utility is as alien ... The pathos of nobility and distance, as I have said, the

chronic and despotic *esprit de corps* and fundamental instinct of a higher dominant race coming into association with a meaner race, an "under race," this is the origin of the antithesis of good and bad.

...It is because of this origin that the word "good" is far from having any necessary connection with altruistic acts, in accordance with the superstitious belief of these moral philosophers. On the contrary, it is on the occasion of the decay of aristocratic values, that the antitheses between "egoistic" and "altruistic" presses more and more heavily on the human conscience— it is, to use my own language, the herd instinct which finds in this antithesis an expression in many ways. ...

9. "But why do you talk of nobler ideals? Let us submit to the facts; that the people have triumphed — or the slaves, or the populace, or the herd, or whatever name you care to give them — if this has happened through the Jews, so be it! In that case no nation ever had a greater mission in the world's history. The 'masters' have been done away with; the morality of the vulgar man has triumphed. This triumph may also be called a blood-poisoning (it has mutually fused the races) — I do not dispute it; but there is no doubt but that this intoxication has succeeded. The 'redemption' of the human race (that is, from the masters) is progressing; swimmingly; everything is obviously becoming Judaized, or Christianised, or vulgarised (what is there in the words?). It seems impossible to stop the course of this poisoning through the whole body politic of mankind — but its tempo and pace may from the present time be slower, more delicate, quieter, more discreet — there is time enough. In view of this context has the Church nowadays any necessary purpose? Has it, in fact, a right to live? Or could man get on without it? Quocritur. It seems that it fetters and retards this tendency, instead of accelerating it. Well, even that might be its utility. The Church certainly is a crude and boorish institution, that is repugnant to an intelligence with any pretence at delicacy, to a really modern taste. Should it not at any rate learn to be somewhat more subtle? It alienates nowadays, more than it allures. Which of us would, for- sooth, be a freethinker if there were no Church? It is the Church which repels us, not its poison — apart from the Church we like the poison." This is the epilogue of a freethinker to my discourse, of an honorable animal (as he has given abundant proof), and a democrat to boot; he had up to that time listened to me, and could not endure my silence, but for me, indeed, with regard to this topic there is much on which to be silent.

10. The revolt of the slaves in morals begins in the very principle of *resentment* becoming creative and giving birth to

values — a resentment experienced by creatures who, deprived as they are of the proper outlet of action, are forced to find their compensation in an imaginary revenge. While every aristocratic morality springs from a triumphant affirmation of its own demands, the slave morality says "no" from the very outset to what is "out-side itself," "different from itself," and "not itself: and this "no" is its creative deed. This volte-face of the valuing standpoint — this inevitable gravitation to the objective instead of back to the subjective — is typical of resentment": the slave-morality requires as the condition of its existence an external and objective world, to employ physiological terminology, it requires objective stimuli to be capable of action at all — its action is fundamentally a reaction. The contrary is the case when we come to the aristocrat's system of values: it acts and grows spontaneously, it merely seeks its antithesis in order to pronounce a more grateful and exultant "yes" to its own self; — its negative conception, "low," "vulgar." "bad," is merely a pale late-born foil in comparison with its positive and fundamental conception (saturated as it is with life and passion), of "we aristocrats, we good ones, we beautiful ones, we happy ones."

Attention should be paid to the almost benevolent stances which, for instance, the Greek nobility imports into all the words by which it distinguishes the common people from itself; note how continuously a kind of pity, care, and consideration imparts its honeyed flavor, until at last almost all the words which are applied to the vulgar man survive finally as expressions for "unhappy," "worthy of pity" (the latter really denoting the vulgar man as labour-slave and beast of burden) — and how, conversely, "bad," "low," "unhappy" have never ceased to ring in the Greek ear ... The "well-born" simply felt themselves the "happy"; they did not have to manufacture their happiness artificially through looking at their enemies, or in cases to talk and lie themselves into happiness (as is the custom with all resentful men) ; and similarly, complete men as they were, exuberant with strength, and consequently necessarily energetic, they were too wise to dissociate happiness from action — activity becomes in their minds necessarily counted as happiness — all in sharp contrast to the "happiness" of the weak and the oppressed, with their festering venom and malignity, among whom happiness appears essentially as a narcotic, a deadening, a quietude, a peace, a "Sabbath," an enervation of the mind and relaxation of the limbs, — in short, a purely *passive* phenomenon. While the aristocratic man lived in confidence and openness with himself, the resentful man, on the other hand, is neither sincere nor naif, nor honest and candid with himself. His soul squints; his mind loves hidden crannies, tortuous paths and back-doors, everything secret appeals to him as his world, his safety, his balm; he is past master in silence, in not for- getting, in waiting, in provisional self-depreciation and self-

abasement.... When the resentment of the aristocratic man manifests itself, it fulfills and exhausts itself in an immediate reaction, and consequently instills no venom: on the other hand, it never manifests itself at all in countless instances, when in the case of the feeble and weak it would be inevitable. An inability to take seriously for any length of time their enemies, their disasters, their misdeeds— that is the sign of the full strong natures who possess a superfluity of molding plastic force, that heals completely and produces forgetfulness: a good example of this in the modern world is Mirabeau, who had no memory for any insults and meannesses which were practiced on him, and who was only incapable of forgiving because he forgot. Such a man indeed shakes off with a shrug many a worm which would have buried itself in another; it is only in characters like these that we see the possibility (supposing, of course, that there is such a possibility in the world) of the real "love of one's enemies." What respect for his enemies is found, forsooth, in an aristocratic man— and such a reverence is already a bridge to love! He insists on having his enemy to himself as his distinction. He tolerates no other enemy but a man in whose character there is nothing to despise and much to honor! On the other hand, imagine the "enemy" as the resentful man conceives him — and it is here exactly that we see his work, his creativeness; he has conceived "the evil enemy," the "evil one," and indeed that is the root idea from which he now evolves as a contrasting and corresponding figure a "good one," himself — his very self!

16. Let us come to a conclusion. The two opposing values, "good and bad," "good and evil," have fought a dreadful, thousand-year fight in the world, and though indubitably the second value has been for a long time in the preponderance, there are not wanting places where the fortune of the fight is still indecisive. It can almost be said that in the meanwhile the fight reaches a higher and higher level, and that in the meanwhile it has become more and more intense, and always more and more psychological; so that nowadays there is perhaps no more decisive mark of the higher nature, of the more psychological nature, than to be in that sense self-contradictory, and to be actually still a battleground for those two opposites. The symbol of this fight, written in a writing which has remained worthy of perusal throughout the course of history up to the present time, is called "Rome against Judaea, Judaea against Rome." Hitherto there has been no greater event than that fight, the putting of that question, that deadly antagonism. Rome found in the Jew the incarnation of the unnatural, as though it were its diametrically opposed monstrosity, and in Rome the Jew was held to be convicted of hatred of the whole human race: and rightly so, in so far as it is right to link the well-being and the future of the

human race to the unconditional mastery of the aristocratic values, of the Roman values. ...The Romans were the strong and aristocratic; a nation stronger and more aristocratic has never existed in the world, has never even been dreamed of; every relic of them, every inscription enraptures, granted that one can divine what it is that writes the inscription. The Jews, conversely, were that priestly nation of resentment par excellence, possessed by a unique genius for popular morals: just compare with the Jews the nations with analogous gifts, such as the Chinese or the Germans, so as to realize afterwards what is first rate, and what is fifth rate.

Which of them has been provisionally victorious. Rome or Judaea? but there is not a shadow of doubt; just consider to whom in Rome itself nowadays you bow down, as though before the quintessence of all the highest values — and not only in Rome, but almost over half the world, everywhere where man has been tamed or is about to be tamed — to three Jews, as we know, and one Jewess (to Jesus of Nazareth, to Peter the fisher, to Paul the tent-maker, and to the mother of the aforesaid Jesus, named Mary). This is very remarkable: Rome is undoubtedly defeated. At any rate there took place in the Renaissance a brilliantly sinister revival of the classical ideal, of the aristocratic valuation of all things: Rome herself, like a man waking up from a trance, stirred beneath the burden of the new Judaized Rome that had been built over her, which presented the appearance of an ecumenical synagogue and was called the "Church": but immediately Judaea triumphed again, thanks to that fundamentally popular (German and English) movement of revenge, which is called the Reformation, and taking also into account its inevitable corollary, the restoration of the Church — the restoration also of the ancient graveyard peace of classical Rome. Judaea proved yet once more victorious over the classical ideal in the French Revolution, and in a sense which was even more crucial and even more profound: the last political aristocracy that existed in Europe, that of the French seventeenth and eighteenth centuries, broke into pieces beneath the instincts of a resentful populace — never had the world heard a greater jubilation, a more uproarious enthusiasm: indeed, there took place in the midst of it the most monstrous and unexpected phenomenon; the ancient ideal itself swept before the eyes and conscience of humanity with all its life and with unheard-of splendor, and in opposition to resentment's lying war-cry of the prerogative of the most, in opposition to the will to lowliness, abasement, and qualification, the will to a retrogression and twilight of humanity, there rang out once again, stronger, simpler, more penetrating than ever, the terrible and enchanting counter-war-cry of the prerogative of the few! Like a final signpost to other ways, there appeared Napoleon, the most unique and violent anachronism that ever existed, and in him the

incarnate problem of the aristocratic ideal in itself — consider well what a problem it is: — Napoleon, that synthesis of Monster and Superman.

The Death of God

124. In the Horizon of the Infinite. — We have left the land and have gone aboard ship ! We have broken down the bridge behind us, — nay, more, the land behind us! Well, little ship! look out! Beside thee is the ocean ; it is true it does not always roar, and sometimes it spreads out like silk and gold and a gentle reverie. But times will come when thou wilt feel that it is infinite, and that there is nothing more frightful than infinity. Oh, the poor bird that felt itself free, and now strikes against the walls of this cage ! Alas, if home- sickness for the land should attack thee, as if there had been more freedom there, — and there is no " land " any longer !

125. The Madman, — Have you ever heard of the madman who on a bright morning lighted a lantern and ran to the market-place calling out unceasingly : " I seek God ! I seek God ! " — As there were many people standing about who did not believe in God, he caused a great deal of amusement. Why ! is he lost? said one. Has he strayed away like a child? said another. Or does he keep himself hidden ? Is he afraid of us ? Has he taken a sea-voyage? Has he emigrated? — the people cried out laughingly, all in a hubbub. The insane man jumped into their midst and transfixed them with his glances. " Where is God gone ? " he called out. " I mean to tell you ! We have killed him, — you and I ! We are all his murderers ! But how have we done it? How were we able to drink up the sea ? Who gave us the sponge to wipe away the whole horizon ? What did we do when we loosened this earth from its sun? Whither does it now move? Whither do we move? Away from all suns? Do we not dash on unceasingly? Backwards, sideways, forwards, in all directions? Is there still an above and below ? Do we not stray, as through infinite nothingness ? Does not empty space breathe upon us ? Has it not become colder ? Does not night come on continually, darker and darker? Shall we not have to light lanterns in the morning? Do we not hear the noise of the grave-diggers who are burying God ? Do we not smell the divine putrefaction? — for even Gods putrefy ! God is dead ! God remains dead ! And we have killed him ! How shall we console ourselves, the most murderous of all murderers ? The holiest and the mightiest that the world has hitherto possessed, has bled to death under our knife, — who will wipe the blood from us? With what water could we cleanse ourselves ? What lustrums, what sacred games shall we have to devise? Is not the magnitude of this deed too

great for us ? Shall we not ourselves have to become Gods, merely to seem worthy of it ? There never was a greater event, — and on account of it, all who are born after us belong to a higher history than any history hitherto!" — Here the madman was silent and looked again at his hearers ; they also were silent and looked at him in surprise. At last he threw his lantern on the ground, so that it broke in pieces and was extinguished. " I come too early," he then said, " I am not yet at the right time. This prodigious event is still on its way, and is traveling, — it has not yet reached men's ears. Lightning and thunder need time, the light of the stars needs time, deeds need time, even after they are done, to be seen and heard. This deed is as yet further from them than the furthest star, — and yet they have done it!" — It is further stated that the madman made his way into different churches on the same day, and there intoned his Requiem aeternam deo. When led out and called to account, he always gave the reply : " What are these churches now, if they are not the tombs and monuments of God ? " —

343. *What our Cheerfulness Signifies.* — The most important of more recent events — that "God is dead," that the belief in the Christian God has become unworthy of belief — already begins to cast its first shadows over Europe. To the few at least whose eye, whose suspecting glance, is strong enough and subtle enough for this drama, some sun seems to have set, some old, profound confidence seems to have changed into doubt : our old world must seem to them daily more darksome, distrustful, strange and " old." In the main, however, one may say that the event itself is far too great, too remote, too much beyond most people's power of apprehension, for one to suppose that so much as the report of it could have reached them ; not to speak of many who already knew what had taken place, and what must all collapse now that this belief had been undermined, — because so much was built upon it, so much rested on it, and had become one with it : for example, our entire European morality. This lengthy, vast and uninterrupted process of crumbling, destruction, ruin and overthrow which is now imminent : who has realized it sufficiently to-day to have to stand up as the teacher and herald of such a tremendous logic of terror, as the prophet of a period of gloom and eclipse, the like of which has probably never taken place on earth before ? . . . Even we, the born riddle-readers, who wait as it were on the mountains posted 'twixt to-day and to-morrow, and engirt by their contradiction, we, the firstlings and premature children of the coming century, into whose sight especially the shadows which must forthwith envelop Europe should already have come — how is it that even we, with-out genuine sympathy for this period of gloom, contemplate its advent without any personal solicitude or fear? Are we still, perhaps, too much under the immediate effects of

the event — and are these effects, especially as regards ourselves, perhaps the reverse of what was to be expected — not at all sad and depressing, but rather like a new and indescribable variety of light, happiness, relief, enlivenment, encouragement, and dawning day? ... In fact, we philosophers and " free spirits " feel ourselves irradiated as by a new dawn by the report that the "old God is dead " ; our hearts overflow with gratitude,

astonishment, presentiment and expectation. At last the horizon seems open once more, granting even that it is not bright ; our ships can at last put out to sea in face of every danger ; every hazard is again permitted to the discerners ; the sea, our sea, again lies open before us ; perhaps never before did such an " open sea " exist. —

2. The Cosmological Argument

By Thomas Aquinas

Whether God Exists?

Objection 1: It seems that God does not exist; because if one of two contraries be infinite, the other would be altogether destroyed. But the word "God" means that He is infinite goodness. If, therefore, God existed, there would be no evil discoverable; but there is evil in the world. Therefore God does not exist.

Obj. 2: Further, it is superfluous to suppose that what can be accounted for by a few principles has been produced by many. But it seems that everything we see in the world can be accounted for by other principles, supposing God did not exist. For all natural things can be reduced to one principle which is nature; and all voluntary things can be reduced to one principle which is human reason, or will. Therefore there is no need to suppose God's existence.

On the contrary, It is said in the person of God: "I am Who am." (Ex. 3:14)

I answer that, The existence of God can be proved in five ways.

The first and more manifest way is the argument from motion. It is certain, and evident to our senses, that in the world some things are in motion. Now whatever is in motion is put in motion by another, for nothing can be in motion except it is in potentiality to that towards which it is in motion; whereas a thing moves inasmuch as it is in act. For motion is nothing else than the reduction of something from potentiality to actuality. But nothing can be reduced from potentiality to actuality, except by something in a state of actuality. Thus that which is actually hot, as fire, makes wood, which is potentially hot, to be actually hot, and thereby moves and changes it. Now it is not possible that the same thing should be at once in actuality and potentiality in the same respect, but only in different respects. For what is actually hot cannot simultaneously be potentially hot; but it is simultaneously potentially cold. It is therefore impossible that in the same respect and in the same way a thing should be both mover and moved, i.e. that it should move itself. Therefore, whatever is in motion must be put in motion by another. If that

by which it is put in motion be itself put in motion, then this also must needs be put in motion by another, and that by another again. But this cannot go on to infinity, because then there would be no first mover, and, consequently, no other mover; seeing that subsequent movers move only inasmuch as they are put in motion by the first mover; as the staff moves only because it is put in motion by the hand. Therefore it is necessary to arrive at a first mover, put in motion by no other; and this everyone understands to be God.

The second way is from the nature of the efficient cause. In the world of sense we find there is an order of efficient causes. There is no case known (neither is it, indeed, possible) in which a thing is found to be the efficient cause of itself; for so it would be prior to itself, which is impossible. Now in efficient causes it is not possible to go on to infinity, because in all efficient causes following in order, the first is the cause of the intermediate cause, and the intermediate is the cause of the ultimate cause, whether the intermediate cause be several, or only one. Now to take away the cause is to take away the effect. Therefore, if there be no first cause among efficient causes, there will be no ultimate, nor any intermediate cause. But if in efficient causes it is possible to go on to infinity, there will be no first efficient cause, neither will there be an ultimate effect, nor any intermediate efficient causes; all of which is plainly false. Therefore it is necessary to admit a first efficient cause, to which everyone gives the name of God.

The third way is taken from possibility and necessity, and runs thus. We find in nature things that are possible to be and not to be, since they are found to be generated, and to corrupt, and consequently, they are possible to be and not to be. But it is impossible for these always to exist, for that which is possible not to be at some time is not. Therefore, if everything is possible not to be, then at one time there could have been nothing in existence. Now if this were true, even now there would be nothing in existence, because that which does not exist only begins to exist by something already existing. Therefore, if at one time nothing was in existence, it would have been impossible for anything to have begun to exist; and thus even now nothing would be in existence--which is absurd. Therefore, not all beings are merely possible, but there must exist something the existence of which is necessary. But every necessary thing either has its necessity caused by another, or not. Now it is impossible to go on to infinity in necessary things which have their necessity caused by another, as has been already proved in regard to efficient causes. Therefore we cannot but postulate the existence of some being having of itself its own

necessity, and not receiving it from another, but rather causing in others their necessity. This all men speak of as God.

The fourth way is taken from the gradation to be found in things. Among beings there are some more and some less good, true, noble and the like. But *_more_* and *_less_* are predicated of different things, according as they resemble in their different ways something which is the maximum, as a thing is said to be hotter according as it more

nearly resembles that which is hottest; so that there is something which is truest, something best, something noblest and, consequently, something which is uttermost being; for those things that are greatest in truth are greatest in being, as it is written in *Metaph.* ii. Now the maximum in any genus is the cause of all in that genus; as fire, which is the maximum heat, is the cause of all hot things. Therefore there must also be something which is to all beings the cause of their being, goodness, and every other perfection; and this we call God.

The fifth way is taken from the governance of the world. We see that things which lack intelligence, such as natural bodies, act for an end, and this is evident from their acting always, or nearly always, in the same way, so as to obtain the best result. Hence it is plain that not fortuitously, but designedly, do they achieve their end. Now whatever lacks intelligence cannot move towards an end, unless it be directed by some being endowed with knowledge and intelligence; as the arrow is shot to its mark by the archer. Therefore some intelligent being exists by whom all natural things are directed to their end; and this being we call God.

Reply Obj. 1: As Augustine says (*Enchiridion* xi): "Since God is the highest good, He would not allow any evil to exist in His works, unless His omnipotence and goodness were such as to bring good even out of evil." This is part of the infinite goodness of God, that He should allow evil to exist, and out of it produce good.

Reply Obj. 2: Since nature works for a determinate end under the direction of a higher agent, whatever is done by nature must needs be traced back to God, as to its first cause. So also whatever is done voluntarily must also be traced back to some higher cause other than human reason or will, since these can change or fail; for all things that are changeable and capable of defect must be traced back to an immovable and self-necessary first principle, as was shown in the body of the Article.

3. The Ontological Argument

By St. Anselm

The Argument

Lord, I acknowledge and I thank thee that thou hast created me in this thine image, in order that I may be mindful of thee, may conceive of thee, and love thee ; but that image has been so consumed and wasted away by vices, and obscured by the smoke of wrong-doing, that it cannot achieve that for which it was made, except thou re- new it, and create it anew. I do not endeavor, O Lord, to penetrate thy sublimity, for in no wise do I compare my understanding with that ; but I long to understand in some degree thy truth, which my heart believes and loves. For I do not seek to understand that I may believe, but I believe in order to understand. For this also I believe, — that unless I believed, I should not understand ...

And so, Lord, do thou, who dost give understanding to faith, give me, so far as thou knowest it to be profitable, to understand that thou art as we believe ; and that thou art that which we believe. And, indeed, we believe that thou art a being than which nothing greater can be conceived. Or is there no such

nature, since the fool hath said in his heart, there is no God? (Psalms xiv. i). But, at any rate, this very fool, when he hears of this being of which I speak — a being than which nothing greater can be conceived — understands what he hears, and what he understands is in his understanding; although he does not understand it exist.

For, it is one thing for an object to be in the understanding, and another to understand that the object exists. When a painter first conceives of what he will afterwards perform, he has it in his understanding, but he does not yet understand it to be, because he has not yet performed it. But after he has made the painting, he both has it in his understanding, and he understands that it exists, because he has made it.

Hence, even the fool is convinced that something exists in the understanding, at least, than which nothing greater can be conceived. For, when he hears of this, he understands it. And whatever is understood, exists in the understanding. And assuredly that, than which nothing greater can be conceived,

cannot exist in the understanding alone. For, suppose it exists in the understanding alone : then it can be conceived to exist in reality; which is greater.

Therefore, if that, than which nothing greater can be conceived, exists in the understanding alone, the very being, than which nothing greater can be conceived, is one, than which a greater can be conceived. But obviously this is impossible. Hence, there is no doubt that there exists a being, than which nothing greater can be conceived, and it exists both in the understanding and in reality.

God cannot be conceived not to exist. — God is that, than which nothing greater can be conceived. — That which can be conceived not to exist is not God.

And it assuredly exists so truly, that it cannot be conceived not to exist. For, it is possible to conceive of a being which cannot be conceived not to exist ; and this is greater than one which can be conceived not to exist. Hence, if that, than which nothing greater can be conceived, can be conceived not to exist, it is not that, than which nothing greater can be conceived. But this is an irreconcilable contradiction. There is, then, so truly a being than which nothing greater can be conceived to exist, that it cannot even be conceived not to exist; and this being thou art, O Lord, our God.

So truly, therefore, dost thou exist, O Lord, my God, that thou canst not be conceived not to exist; and rightly. For, if a mind could conceive of a being better than thee, the creature would rise above the Creator; and this is most absurd. And, indeed, whatever else there is, except thee alone, can be conceived not to exist. To thee alone, therefore, it belongs to exist more truly than all other beings, and hence in a higher degree than all others. For, whatever else exists does not exist so truly, and hence in a less degree it belongs to it to exist. Why, then, has the fool said in his heart, there is no God (Psalms xiv. i), since it is so evident, to a rational mind, that thou dost exist in the highest degree of all? Why, except that he is dull and a fool?

How the fool has said in his heart what cannot be conceived. — A thing may be conceived in two ways : (i) when the word signifying it is conceived ; (2) when the thing itself is understood As far as the word goes, God can be conceived not to exist; in reality he cannot.

But how has the fool said in his heart what he could not conceive ; or how is it that he could not conceive what he said in his heart? since it is the same to say in the heart, and to conceive.

But, if really, nay, since really, he both conceived, because he said in his heart ; and did not say in his heart, because he could not conceive ; there is more than one way in

which a thing is said in the heart or conceived. For, in one sense, an object is conceived, when the word signifying it is conceived ; and in another, when the very entity, which the object is, is understood.

In the former sense, then, God can be conceived not to exist ; but in the latter, not at all. For no one who understands what fire and water are can conceive fire to be water, in accordance with the nature of the facts themselves, although this is possible according to the words. So, then, no one who understands what God is can conceive that God does not exist; although he says these words in his heart, either without any or with some foreign, signification. For, God is that than which a greater cannot be conceived. And he who thoroughly understands this, assuredly understands that this being so truly exists, that not even in concept can it be non-existent. Therefore, he who understands that God so exists, cannot conceive that he does not exist.

I thank thee, gracious Lord, I thank thee; because what I formerly believed by thy bounty, I now so understand by thine illumination, that if I were unwilling to believe that thou dost exist, I should not be able not to understand this to be true.

Response by Gaunilo

The fool might make this reply : This being is said to be in my understanding already, only because I understand what is said. Now could it not with equal justice be said that I have in my understanding all manner of unreal objects, having absolutely no existence in themselves, because I understand these things if one speaks of them , whatever they may be ?

Unless indeed it is shown that this being is of such a character that it cannot be held in concept like all unreal objects, or objects whose existence is uncertain: and hence I am not able to conceive of it when I hear of it, or to hold it in concept; but I must understand it and have it in my understanding; because, it seems, I cannot conceive of it in any other way than by understanding it, that is, by comprehending in my knowledge its existence in reality.

But if this is the case, in the first place there will be no distinction between what has precedence in time — namely, the having of an object in the understanding — and what is subsequent in time — namely, the understanding that an object exists; as in the example of the picture, which exists first in the mind of the painter, and afterwards in his work.

Moreover, the following assertion can hardly be accepted : that this being, when it is spoken of and heard of, cannot be conceived not to exist in the way in which even God

can be conceived not to exist. For if this is impossible, what was the object of this argument against one who doubts or denies the existence of such a being ?

Finally, that this being so exists that it cannot be perceived by an understanding convinced of its own indubitable existence, unless this being is afterwards conceived of — this should be proved to me by an indisputable argument, but not by that which you have advanced: namely, that what I understand, when I hear it, already is in my understanding. For thus in my understanding, as I still think, could be all sorts of things whose existence is uncertain, or which do not exist at all, if some one whose words I should understand mentioned them. And so much the more if I should be deceived, as often happens, and believe in them : though I do not yet believe in the being whose existence you would prove.

Hence, your example of the painter who already has in his understanding what he is to paint cannot agree with this argument. For the picture, before it is made, is contained in the artificer's art itself ; and any such thing, existing in the art of an artificer, is nothing but a part of his understanding itself. A joiner, St. Augustine says, when he is about to make a box in fact, first has it in his art. The box which is made in fact is not life ; but the box which exists in his art is life. For the artificer's soul lives, in which all these things are, before they are produced. Why, then, are these things life in the living soul of the artificer, unless because they are nothing else than the knowledge or understanding of the soul itself?

With the exception, however, of those facts which are known to pertain to the mental nature, whatever, on being heard and thought out by the understanding, is perceived to be real, undoubtedly that real object is one thing, and the understanding itself, by which the object is grasped, is another. Hence, even if it were true that there is a being than which a greater is inconceivable: yet to this being, when heard of and understood, the not yet created picture in the mind of the painter is not analogous.

Let us notice also the point touched on above, with regard to this being which is greater than all which can be conceived, and which, it is said, can be none other than God himself. I, so far as actual knowledge of the object, either from its specific or general character, is concerned, am as little able to conceive of this being when I hear of it, or to have it in my understanding, as I am to conceive of or understand God himself: whom, indeed, for this very reason I can conceive not to exist. For I do not know that reality itself which God is, nor can I form a conjecture of that reality from some other like reality. For you yourself assert that that reality is such that there can be nothing else like it.

For, suppose that I should hear something said of a man absolutely unknown to me, of whose very existence I was unaware. Through that special or general knowledge by which I know what man is, or what men are, I could conceive of him also, according to the reality itself, which man is. And yet it would be possible, if the person who told me of him deceived me, that the man himself, of whom I conceived, did not exist ; since that reality according to which I conceived of him, though a no less indisputable fact, was not that man, but any man.

Hence, I am not able, in the way in which I should have this unreal being in concept or in understanding, to have that being of which you speak in concept or in understanding, when I hear the word God or the words, a being greater than all other beings. For I can conceive of the man according to a fact that is real and familiar to me : but of God, or a being greater than all others, I could not conceive at all, except merely according to the word. And an object can hardly or never be conceived according to the word alone.

For when it is so conceived, it is not so much the word itself (which is, indeed, a real thing — that is, the sound of the letters and syllables) as the signification of the word, when heard, that is conceived. But it is not conceived as by one who knows what is generally signified by the word; by whom, that is, it is conceived according to a reality and in true conception alone. It is conceived as by a man who does not know the object, and conceives of it only in accordance with the movement of his mind produced by hearing the word, the mind attempting to image for itself the signification of the word that is heard. And it would be surprising if in the reality of fact it could ever attain to this.

Thus, it appears, and in no other way, this being is also in my understanding, when I hear and understand a person who says that there is a being greater than all conceivable beings. So much for the assertion that this supreme nature already is in my understanding.

But that this being must exist, not only in the understanding but also in reality, is thus proved to me : If it did not so exist, whatever exists in reality would be greater than it. And so the being which has been already proved to exist in my understanding, will not be greater than all other beings.

I still answer: if it should be said that a being which cannot be even conceived in terms of any fact, I is in the understanding, I do not deny that this being is, accordingly, in my understanding. But since through this fact it can in no wise attain to real existence also, I do not yet concede to it that existence at all, until some certain proof of it shall be given.

For he who says that this being exists, because otherwise the being which is greater than all will not be greater than all, does not attend strictly enough to what he is saying. For I do not yet say, no, I even deny or doubt that this being is greater than any real object. Nor do I concede to it any other existence than this (if it should be called existence) which it has when the mind, according to a word merely heard, tries to form the image of an object absolutely unknown to it.

How, then, is the veritable existence of that being proved to me from the assumption, by hypothesis, that it is greater than all other beings? For I should still deny this, or doubt your demonstration of it, to this extent, that I should not admit that this being is in my understanding and concept even in the way in which many objects whose real existence is uncertain and doubtful, are in my understanding and concept. For it should be proved first that this being itself really exists somewhere ; and then, from the fact that it is greater than all, we shall not hesitate to infer that it also subsists in itself.

For example : it is said that somewhere in the ocean is an island, which, because of the difficulty, or rather the impossibility, of discovering what does not exist, is called the lost island. And they say that this island has an inestimable wealth of all manner of riches and delicacies in greater abundance than is told of the Islands of the Blest ; and that having no owner or inhabitant, it is more excellent than all other countries, which are inhabited by mankind, in the abundance with which it is stored.

Now if some one should tell me that there is such an island, I should easily understand his words, in which there is no difficulty. But suppose that he went on to say, as if by a logical inference: "You can no longer doubt that this island which is more excellent than all lands exists somewhere, since you have no doubt that it is in your understanding. And since it is more excellent not to be in the understanding alone, but to exist both in the understanding and in reality, for this reason it must exist. For if it does not exist, any land which really exists will be more excellent than it ; and so the island already understood by you to be more excellent will not be more excellent. "

If a man should try to prove to me by such reasoning that this island truly exists, and that its existence should no longer be doubted, either I should believe that he was jesting, or I know not which I ought to regard as the greater fool : myself, supposing that I should allow this proof ; or him, if he should suppose that he had established with any certainty the existence of this island. For he ought to show first that the hypothetical

excellence of this island exists as a real and indubitable fact, and in no wise as any unreal object, or one whose existence is uncertain, in my understanding.

Anslem's Response

A criticism of Gaunilo's example, in which he tries to show that in this way the real existence of a lost island might be inferred from the fact of its being conceived.

But, you say, it is as if one should suppose an island in the ocean, which surpasses all lands in its fertility, and which, because of the difficulty, or rather the impossibility, of discovering what does not exist, is called a lost island ; and should say that there can be no doubt that this island truly exists in reality, for this reason, that one who hears it described easily understands what he hears.

Now I promise confidently that if any man shall devise anything existing either in reality or in concept alone (except that than which , a greater cannot be conceived) to which he can adapt the sequence of my reasoning, I will discover that thing, and will give him his lost island, not to be lost again.

But it now appears that this being than which a greater is inconceivable cannot be conceived not to be, because it exists on so assured a ground of truth ; for otherwise it would not exist at all.

Hence, if any one says that he conceives this being not to exist, I say that at the time when he conceives of this either he conceives of a being than -which a greater is inconceivable, or he does not conceive at all. If he does not conceive, he does not conceive of the non-existence of that of which he does not conceive. But if he does conceive, he certainly conceives of a being which cannot be even conceived not to exist. For if it could be conceived not to exist, it could be conceived to have a beginning and an end. But this is impossible.

He, then, who conceives of this being conceives of a being which cannot be even conceived not to exist ; but he who conceives of this being does not conceive that it does not exist ; else he conceives what is inconceivable. The non-existence, then, of that than which a greater cannot be conceived is inconceivable.

4. The Teleological Argument

By William Paley

State of the Argument

In crossing a heath, suppose I pitched my foot against a stone, and were asked how the stone came to be there, I might possibly answer, that for any thing I knew to the contrary it had lain there for ever ; nor would it, perhaps, be very easy to show the absurdity of this answer. But suppose I had found a watch upon the ground, and it should be inquired how the watch happened to be in that place, I should hardly think of the answer which I had before given, that for any thing I knew the watch might have always been there. Yet why should not this answer serve for the watch as well as for the stone ; why is it not as admissible in the second case as in the first ? For this reason, and for no other, namely, that when we come to inspect the watch we perceive — what we could not discover in the stone — that its several parts are framed and put together for a purpose, e. g. that they are so formed and adjusted as to produce motion, and that motion so regulated as to point out the hour of the day ; that if the different parts had been differently shaped from what they are, or placed after any other manner or in any other order than

that in which they are placed, either no motion at all would have been carried on in the machine, or none which would have answered the use that is now served by it. To reckon up a few of the plainest of these parts and of their offices, all tending to one result: We see a cylindrical box containing a coiled elastic spring, which, by its endeavor to relax itself, turns round the box. "We next observe a flexible chain — artificially wrought for the sake of flexure — communicating the action of the spring from the box to the fusee. We then find a series of wheels, the teeth of which catch in and apply to each other, conducting the motion from the fusee to the balance and from the balance to the pointer, and at the same time, by the size and shape of those wheels, so regulating that motion as to terminate in causing an index, by an equable and measured progression, to pass over a given space in a given time. We take notice that the wheels are made of brass, in order to keep them from rust ; the springs of steel, no other metal being so elastic ; that over the face of the watch there is placed a glass, a material employed in no other part of the work, but in the room of which, if there had been any other than a transparent substance, the hour could not be seen

without opening the case. This mechanism being observed — it requires indeed an examination of the - instrument, and perhaps some previous knowledge of the subject, to perceive and understand it ; but being once, as we have said, observed and understood, the inference we think is inevitable, that the watch must have had a maker — that there must have existed, at some time and at some place or other, an artificer or artificers who formed it for the purpose which we find it actually to answer, who comprehended its -construction and designed its use.

I. Nor would it, I apprehend, weaken the conclusion, that we had never seen a watch made — that we had never known an artist capable of making one — that we were altogether incapable of executing such a piece of workmanship ourselves, or of understanding in what manner it was per- formed ; all this being no more than what is true of some exquisite remains of ancient art, of some lost arts, and, to the generality of mankind, of the more curious productions of modern manufacture. Does one man in a million know how oval frames are turned ? Ignorance of this kind exalt our opinion of the unseen and unknown artist's skill, if he be unseen and unknown, but raises no doubt in our minds of the existence and agency of such an artist, at some former time and in some place or other. Nor can I perceive that it varies at all the inference, whether the question arise concerning a human agent or concerning an agent of a different species, or an agent possessing in some respects a different nature.

II. Neither, secondly, would it invalidate our conclusion, that the watch sometimes went wrong, or that it seldom went exactly right. The purpose of the machinery, the design, and the designer might be evident, and in the case supposed, would be evident, in whatever way we accounted for the irregularity of the movement, or whether we could account for it or not- It is not necessary that a machine be perfect, in order to show with what design it was made : still less necessary, where the only question is whether it were made with any design at all.

III. Nor, thirdly, would it bring any uncertainty into the argument, if there were a few parts of the watch, concerning which we could not discover or had not yet discovered in what manner they conduced to the general effect ; or even some parts, concerning which we could not ascertain whether they conduced to that effect in any manner whatever. For, as to the first branch of the case, if by the loss, or disorder, or decay of the parts in question, the movement of the watch were found in fact to be stopped, or disturbed, or retarded, no doubt would remain in our minds as to the utility or intention of these parts, although we should be unable to investigate the manner according to which, or the connection by which, the ultimate effect depended upon their action or assistance ; and the more complex the machine, the more likely is this obscurity to arise. Then, as to the second

thing supposed, namely, that there were parts which might be spared without prejudice to the movement of the watch, and that we had proved this by experiment, these superfluous parts, even if we were completely assured that they were such, would not vacate the reasoning which we had instituted concerning other parts. The indication of contrivance remained, with respect to them, nearly as it was before.

IV. Nor, fourthly, would any man in his senses think the existence of the watch with its various machinery account- ed for, by being told that it was one out of possible combinations of material forms ; that whatever he had found in the place where he found the watch, must have contained some internal configuration or other ; and that this configuration might be the structure now exhibited, namely, of the works of a watch, as well as a different structure.

V. Nor, fifthly, would it yield his inquiry more satisfaction, to be answered that there existed in things a principle of order, which had disposed the parts of the watch into their present form and situation. He never knew a watch made by the principle of order ; nor can he even form to himself an idea of what is meant by a principle of order, distinct from the intelligence of the watchmaker.

VI. Sixthly, he would be surprised to hear that the mechanism of the watch was no proof of contrivance, only a motive to induce the mind to think so :

VII. And not less surprised to be informed, that the watch in his hand was nothing more than the result of the laws of *metallic* nature. It is a perversion of language to assign any law as the efficient, operative cause of any thing. A law presupposes an agent ; for it is only the mode according to which an agent proceeds : it implies a power ; for it is the order according to which that power acts. Without this agent, without this power, which are both distinct from itself, the *law* does nothing, is nothing. The expression, " the law of metallic nature," may sound strange and harsh to a philosophic ear ; but it seems quite as justifiable as some others which are more familiar to him, such as " the law of vegetable nature," "the law of animal nature," or, indeed, as " the law of nature" in general, when assigned as the cause of phenomena, in exclusion of agency and power, or when it is substituted into the place of these?.

VIII. Neither, lastly, would our observer be driven out of his conclusion or from his confidence in its truth, by being told that he knew nothing at all about the matter. He knows enough for his argument ; he knows the utility of the end ; he knows the subserviency and adaptation of the means to the end. These points being known, his ignorance of other points, his doubts concerning other points, affect not the certainty of his reasoning.

The consciousness of knowing little need not beget a distrust of that which he does know.

Application of the Argument

... For every indication of contrivance, every manifestation of design which existed in the watch, exists in the works of nature, with the difference on the side of nature of being greater and more, and that in a degree which exceeds all computation. I mean, that the contrivances of nature surpass the contrivances of art, in the complexity, subtlety, and curiosity of the mechanism ; and still more, if possible, do they go beyond them in number and variety ; yet, in a multitude of cases, are not less evidently mechanical, not less evidently contrivances, not less evidently accommodated to their end or suited to their office, than are the most perfect productions of human ingenuity.

I know no better method of introducing so large a subject, than that of comparing a single thing with a single thing : an eye, for example, with a telescope. As far as the examination of the instrument goes, there is precisely the same proof that the eye was made for vision, as there is that the telescope was made for assisting it. They are made upon the same principles ; both being adjusted to the laws by which the transmission and refraction of rays of light are regulated. I speak not of the origin of the laws themselves ; but such laws being fixed, the construction in both cases is adapted to them. For instance, these laws require, in order to produce the same effect, that the rays of light, in passing from water into the eye, should be refracted by a more convex surface than when it passes out of air into the eye. Accordingly we find that the eye of a fish, in that part of it called the crystalline lens, is much rounder than the eye of terrestrial animals. What plainer manifestation of design can there be than this difference ? What could a mathematical instrument maker have done more to show his knowledge of his principle, his application of that knowledge, his suiting of his means to his end — I will not say to display the compass or excellence of his skill and art, for in these all comparison is indecorous, but to testify counsel, choice, consideration, purpose?

To some it may appear a difference sufficient to destroy all similitude between the eye and the telescope, that the one is a perceiving organ, the other an unperceiving instrument. The fact is that they are both instruments. And as to the mechanism, at least as to mechanism being employed, and even as to the kind of it, this circumstance varies not the analogy at all. For observe what the constitution of the eye is. It is necessary, in order to produce distinct vision, that an image or picture of the object be

formed at the bottom of the eye. Whence this necessity arises, or how the picture is connected with the sensation or contributes to it, it may be difficult, nay, we will confess, if you please, impossible for us to search out. But the present question is not concerned in the inquiry. It may be true, that in this and in other instances we trace mechanical contrivance a certain way, and that then we come to something which is not mechanical, or which is inscrutable. But this affects not the certainty of our investigation, as far as we have gone. The difference between an animal and an automatic statue consists in this, that in the animal we trace the mechanism to a certain point, and then we are stopped ; either the mechanism being too subtle for our discernment, or something else ... besides the known laws of mechanism taking place ; whereas, in the automaton, for the comparatively few motions of which it is capable, we trace the mechanism throughout. But, up to the limit, the reasoning is as clear and certain in the one case as in the other. In the example before us it is a matter of certainty, because it is a matter which experience and observation demonstrate, that the formation of an image at the bottom of the eye is necessary to perfect vision. The image itself can be shown. Whatever affects the distinctness of the image, affects the distinctness of the vision. The formation then of such an image being necessary — no matter how — to the sense of sight and to the exercise of that sense, the apparatus by which it is formed is constructed and put together not only with infinitely more art, but upon the selfsame principles of art, as in the telescope or the camera-obscura. The perception arising from the image may be laid out of the question ; for the production of the image, these are instruments of the same kind. The end is the same ; the means are the same. The purpose in both is alike ; the contrivance for accomplishing that purpose is in both alike. The lenses of the telescopes and the humors of the eye bear a complete resemblance to one another, in their figure, their position, and in their power over the rays of light, namely, in bringing each pencil to a point at the right distance from the lens ; namely, in the eye, at the exact place where the membrane is spread to receive it. How is it possible, under circumstances of such close affinity, and under the operation of equal evidence, to exclude contrivance from the one, yet to acknowledge the proof of contrivance having been employed, as the plainest and clearest of all propositions, in the other ?

The resemblance between the two cases is still more accurate, and obtains in more points than we have yet represented, or than we are, on the first view of the subject, aware of. ...

Every observation which was made in our first chapter concerning the watch, may be repeated with strict propriety concerning the eye; concerning animals; concerning plants; concerning all the organized parts of the works of nature.

When we are inquiring simply after the existence of an intelligent Creator, imperfection, inaccuracy, liability to disorder, occasional irregularities, may subsist in a considerable degree without inducing any doubt into the question ; just as a watch may frequently go wrong, seldom perhaps exactly right, may be faulty in some parts, defective in some, without the smallest ground of suspicion from thence arising that it was not a watch, not made, or not made for the purpose ascribed to it. When faults are pointed out, and when a question is started concerning the skill of the artist, or the dexterity with which the work is executed, then, indeed, in order to defend These qualities from accusation, we must be able, either to expose some intractableness and imperfection in the materials, or point out some invincible difficulty in the execution, into which imperfection and difficulty the matter of complaint may be resolved ; or, if we cannot do this, we must adduce such specimens of consummate art and contrivance proceeding from the same hand as may convince the inquirer of the existence, in the case before him, of impediments like those which we have mentioned, although, what from the nature of the case is very likely to happen, they be unknown and unperceived by him. This we must do in order to vindicate the artist's skill, or at least the perfection of it ; as we must also judge of his intention, and of the provisions employed in fulfilling that intention, not from an instance in which they fail, but from the great plurality of instances in which they succeed. But, after all, these are different questions from the question of the artist's existence ; or, which is the same, whether the thing before us be a work of art or not ; and the questions ought always to be kept separate in the mind. So likewise it is in the works of nature Irregularities and imperfections are of little or no weight in the consideration, when that consideration relates simply to the existence of a Creator. When the argument respects his attributes, they are of weight ; but are then to be taken in conjunction — the attention is not to rest upon them, but they are to be taken in conjunction, with the unexceptionable evidences which we possess of skill, power, and benevolence displayed in other instances ; which evidences may, in strength, number, and variety, be such, and may so overpower apparent blemishes, as to induce us, upon the most reasonable ground, to believe that these last ought to be referred to some cause, though we be ignorant of it, other than defect of knowledge or of benevolence in the author.

Critique by David Hume

Part 2

... I shall briefly explain how I conceive this matter. Look round the world: contemplate the whole and every part of it: You will find it to be nothing but one great machine,

subdivided into an infinite number of lesser machines, which again admit of subdivisions to a degree beyond what human senses and faculties can trace and explain. All these various machines, and even their most minute parts, are adjusted to each other with an accuracy which ravishes into admiration all men who have ever contemplated them. The curious adapting of means to ends, throughout all nature, resembles exactly, though it much exceeds, the productions of human contrivance; of human designs, thought, wisdom, and intelligence. Since, therefore, the effects resemble each other, we are led to infer, by all the rules of analogy, that the causes also resemble; and that the Author of Nature is somewhat similar to the mind of man, though possessed of much larger faculties, proportioned to the grandeur of the work which he has executed. By this argument a posteriori, and by this argument alone, do we prove at once the existence of a Deity, and his similarity to human mind and intelligence. ...

What I chiefly scruple in this subject, said PHILO, is not so much that all religious arguments are by CLEANTHES reduced to experience, as that they appear not to be even the most certain and irrefutable of that inferior kind. That a stone will fall, that fire will burn, that the earth has solidity, we have observed a thousand and a thousand times; and when any new instance of this nature is presented, we draw without hesitation the accustomed inference. The exact similarity of the cases gives us a perfect assurance of a similar event; and a stronger evidence is never desired nor sought after. But wherever you depart, in the least, from the similarity of the cases, you diminish proportionably the evidence; and may at last bring it to a very weak analogy, which is confessedly liable to error and uncertainty. After having experienced the circulation of the blood in human creatures, we make no doubt that it takes place in TITIVS and MAEVIUS. But from its circulation in frogs and fishes, it is only a presumption, though a strong one, from analogy, that it takes place in men and other animals. The analogical reasoning is much weaker, when we infer the circulation of the sap in vegetables from our experience that the blood circulates in animals; and those, who hastily followed that imperfect analogy, are found, by more accurate experiments, to have been mistaken.

If we see a house, CLEANTHES, we conclude, with the greatest certainty, that it had an architect or builder; because this is precisely that species of effect which we have experienced to proceed from that species of cause. But surely you will not affirm, that the universe bears such a resemblance to a house, that we can with the same certainty infer a similar cause, or that the analogy is here entire and perfect. The dissimilitude is so striking, that the utmost you can here pretend to is a guess, a conjecture, a presumption concerning a similar cause; and how

that pretension will be received in the world, I leave you to consider.

It would surely be very ill received, replied CLEANTHES; and I should be deservedly blamed and detested, did I allow, that the proofs of a Deity amounted to no more than a guess or conjecture. But is the whole adjustment of means to ends in a house and in the universe so slight a resemblance? The economy of final causes? The order, proportion, and arrangement of every part? Steps of a stair are plainly contrived, that human legs may use them in mounting; and this inference is certain and infallible. Human legs are also contrived for walking and mounting; and this inference, I allow, is not altogether so certain, because of the dissimilarity which you remark; but does it, therefore, deserve the name only of presumption or conjecture?

Now, according to this method of reasoning, [said PHILO] it follows, (and is, indeed, tacitly allowed by CLEANTHES himself,) that order, arrangement, or the adjustment of final causes, is not of itself any proof of design; but only so far as it has been experienced to proceed from that principle. For aught we can know a priori, matter may contain the source or spring of order originally within itself, as well as mind does; and there is no more difficulty in conceiving, that the several elements, from an internal unknown cause, may fall into the most exquisite arrangement, than to conceive that their ideas, in the great universal mind, from a like internal unknown cause, fall into that arrangement. The equal possibility of both these suppositions is allowed. But, by experience, we find, (according to CLEANTHES), that there is a difference between them. Throw several pieces of steel together, without shape or form; they will never arrange themselves so as to compose a watch. Stone, and mortar, and wood, without an architect, never erect a house. But the ideas in a human mind, we see, by an unknown, inexplicable economy, arrange themselves so as to form the plan of a watch or house. Experience, therefore, proves, that there is an original principle of order in mind, not in matter. From similar effects we infer similar causes. The adjustment of means to ends is alike in the universe, as in a machine of human contrivance. The causes, therefore, must be resembling. ...

That all inferences, CLEANTHES, concerning fact, are founded on experience; and that all experimental reasonings are founded on the supposition that similar causes prove similar effects, and similar effects similar causes; I shall not at present much dispute with you. But observe, I entreat you, with what extreme caution all just reasoners proceed in the transferring of experiments to similar cases. Unless the cases be exactly similar, they repose no perfect confidence in applying their past observation to any particular phenomenon. Every alteration of

circumstances occasions a doubt concerning the event; and it requires new experiments to prove certainly, that the new circumstances are of no moment or importance. A change in bulk, situation, arrangement, age, disposition of the air, or surrounding bodies; any of these particulars may be attended with the most unexpected consequences: And unless the objects be quite familiar to us, it is the highest temerity to expect with assurance, after any of these changes, an event similar to that which before fell under our observation. The slow and deliberate steps of philosophers here, if any where, are distinguished from the precipitate march of the vulgar, who, hurried on by the smallest similitude, are incapable of all discernment or consideration.

But can you think, CLEANTHES, that your usual phlegm and philosophy have been preserved in so wide a step as you have taken, when you compared to the universe houses, ships, furniture, machines, and, from their similarity in some circumstances, inferred a similarity in their causes? Thought, design, intelligence, such as we discover in men and other animals, is no more than one of the springs and principles of the universe, as well as heat or cold, attraction or repulsion, and a hundred others, which fall under daily observation. It is an active cause, by which some particular parts of nature, we find, produce alterations on other parts. But can a conclusion, with any propriety, be transferred from parts to the whole? Does not the great disproportion bar all comparison and inference? From observing the growth of a hair, can we learn any thing concerning the generation of a man? Would the manner of a leaf's blowing, even though perfectly known, afford us any instruction concerning the vegetation of a tree?

But, allowing that we were to take the operations of one part of nature upon another, for the foundation of our judgement concerning the origin of the whole, (which never can be admitted,) yet why select so minute, so weak, so bounded a principle, as the reason and design of animals is found to be upon this planet? What peculiar privilege has this little agitation of the brain which we call thought, that we must thus make it the model of the whole universe? Our partiality in our own favour does indeed present it on all occasions; but sound philosophy ought carefully to guard against so natural an illusion.

So far from admitting, continued PHILO, that the operations of a part can afford us any just conclusion concerning the origin of the whole, I will not allow any one part to form a rule for another part, if the latter be very remote from the former. Is there any reasonable ground to conclude, that the inhabitants of other planets possess thought, intelligence, reason, or any thing similar to these faculties in men? When nature has so extremely diversified her manner of operation in this small

globe, can we imagine that she incessantly copies herself throughout so immense a universe? And if thought, as we may well suppose, be confined merely to this narrow corner, and has even there so limited a sphere of action, with what propriety can we assign it for the original cause of all things? The narrow views of a peasant, who makes his domestic economy the rule for the government of kingdoms, is in comparison a pardonable sophism.

But were we ever so much assured, that a thought and reason, resembling the human, were to be found throughout the whole universe, and were its activity elsewhere vastly greater and more commanding than it appears in this globe; yet I cannot see, why the operations of a world constituted, arranged, adjusted, can with any propriety be extended to a world which is in its embryo state, and is advancing towards that constitution and arrangement. By observation, we know somewhat of the economy, action, and nourishment of a finished animal; but we must transfer with great caution that observation to the growth of a fetus in the womb, and still more to the formation of an animalcule in the loins of its male parent. Nature, we find, even from our limited experience, possesses an infinite number of springs and principles, which incessantly discover themselves on every change of her position and situation. And what new and unknown principles would actuate her in so new and unknown a situation as that of the formation of a universe, we cannot, without the utmost temerity, pretend to determine.

A very small part of this great system, during a very short time, is very imperfectly discovered to us; and do we thence pronounce decisively concerning the origin of the whole?

Admirable conclusion! Stone, wood, brick, iron, brass, have not, at this time, in this minute globe of earth, an order or arrangement without human art and contrivance; therefore the universe could not originally attain its order and arrangement, without something similar to human art. But is a part of nature a rule for another part very wide of the former? Is it a rule for the whole? Is a very small part a rule for the universe? Is nature in one situation, a certain rule for nature in another situation vastly different from the former? ...

In this cautious proceeding of the astronomers, you may read your own condemnation, CLEANTHES; or rather may see, that the subject in which you are engaged exceeds all human reason and inquiry. Can you pretend to show any such similarity between the fabric of a house, and the generation of a universe? Have you ever seen nature in any such situation as resembles the first arrangement of the elements? Have worlds ever been formed under your eye; and have you had leisure to observe the whole progress of the phenomenon, from the first appearance of order to its final consummation? If you have, then cite your

experience, and deliver your theory. ...

Part V

Now, CLEANTHES, said PHILO, with an air of alacrity and triumph, mark the consequences. First, By this method of reasoning, you renounce all claim to infinity in any of the attributes of the Deity. For, as the cause ought only to be proportioned to the effect, and the effect, so far as it falls under our cognisance, is not infinite; what pretensions have we, upon your suppositions, to ascribe that attribute to the Divine Being? You will still insist, that, by removing him so much from all similarity to human creatures, we give in to the most arbitrary hypothesis, and at the same time weaken all proofs of his existence.

Secondly, You have no reason, on your theory, for ascribing perfection to the Deity, even in his finite capacity, or for supposing him free from every error, mistake, or incoherence, in his undertakings. There are many inexplicable difficulties in the works of Nature, which, if we allow a perfect author to be proved a priori, are easily solved, and become only seeming difficulties, from the narrow capacity of man, who cannot trace infinite relations. But according to your method of reasoning, these difficulties become all real; and perhaps will be insisted on, as new instances of likeness to human art and contrivance. At least, you must acknowledge, that it is impossible for us to tell, from our limited views, whether this system contains any great faults, or deserves any considerable praise, if compared to other possible, and even real systems. Could a peasant, if the Aeneid were read to him, pronounce that poem to be absolutely faultless, or even assign to it its proper rank among the productions of human wit, he, who had never seen any other production?

But were this world ever so perfect a production, it must still remain uncertain, whether all the excellences of the work can justly be ascribed to the workman. If we survey a ship, what an exalted idea must we form of the ingenuity of the carpenter who framed so complicated, useful, and beautiful a machine? And what surprise must we feel, when we find him a stupid mechanic, who imitated others, and copied an art, which, through a long succession of ages, after multiplied trials, mistakes, corrections, deliberations, and controversies, had been gradually improving? Many worlds might have been botched and bungled, throughout an eternity, ere this system was struck out; much labour lost, many fruitless trials made; and a slow, but continued improvement carried on during infinite ages in the art of world-making. In such subjects, who can determine, where the truth; nay, who can conjecture where the probability lies, amidst a great number of hypotheses which may be proposed, and a still greater which may be imagined?

And what shadow of an argument, continued PHILO, can you produce, from your hypothesis, to prove the unity of the Deity? A great number of men join in building a house or ship, in rearing a city, in framing a commonwealth; why may not several deities combine in contriving and framing a world? This is only so much greater similarity to human affairs. By sharing the work among several, we may so much further limit the

attributes of each, and get rid of that extensive power and knowledge, which must be supposed in one deity, and which, according to you, can only serve to weaken the proof of his existence. And if such foolish, such vicious creatures as man, can yet often unite in framing and executing one plan, how much more those deities or demons, whom we may suppose several degrees more perfect! ...

5. Pascal's Wager

By Blake Pascal

If there is a God, He is infinitely incomprehensible, since, having neither parts nor limits, He has no affinity to us. We are then incapable of knowing either what He is or if He is. This being so, who will dare to undertake the decision of the question? Not we, who have no affinity to Him.

Who then will blame Christians for not being able to give a reason for their belief, since they profess a religion for which they cannot give a reason? They declare, in expounding it to the world, that it is a foolishness, *stultitiam*; and then you complain that they do not prove it! If they proved it, they would not keep their word; it is in lacking proofs, that they are not lacking in sense. "Yes, but although this excuses those who offer it as such, and takes away from them the blame of putting it forward without reason, it does not excuse those who receive it." Let us then examine this point, and say, "God is, or He is not." But to which side shall we incline? Reason can decide nothing here. There is an infinite chaos which separated us. A game is being played at the extremity of this infinite distance where heads or tails will turn up. What will you wager? According to reason, you can do neither the one thing nor the other; according to reason, you can defend neither of the propositions.

Do not then reprove for error those who have made a choice; for you know nothing about it. "No, but I blame them for having made, not this choice, but a choice; for again both he who chooses heads and he who chooses tails are equally at fault, they are both in the wrong. The true course is not to wager at all."

Yes; but you must wager. It is not optional. You are embarked. Which will you choose then? Let us see. Since you must choose, let us see which interests you least. You have two things to lose, the true and the good; and two things to stake,[Pg 67] your reason and your will, your knowledge and your happiness; and your nature has two things to shun, error and misery. Your reason is no more shocked in choosing one rather than the other, since you must of necessity choose. This is one point settled. But your happiness? Let us weigh the gain and the loss in wagering that God is. Let us estimate these two chances. If you gain, you gain all; if you lose, you lose nothing. Wager, then, without hesitation that He is.—"That is very fine. Yes, I must wager; but I may perhaps wager too much."—Let us see. Since there is an equal risk of gain and of loss, if you had only to gain two lives, instead of one, you might still wager. But if there

were three lives to gain, you would have to play (since you are under the necessity of playing), and you would be imprudent, when you are forced to play, not to chance your life to gain three at a game where there is an equal risk of loss and gain. But there is an eternity of life and happiness. And this being so, if there were an infinity of chances, of which one only would be for you, you would still be right in wagering one to win two, and you would act stupidly, being obliged to play, by refusing to stake one life against three at a game in which out of an infinity of chances there is one for you, if there were an infinity of an infinitely happy life to gain. But there is here an infinity of an infinitely happy life to gain, a chance of gain against a finite number of chances of loss, and what you stake is finite. It is all divided; wherever the infinite is and there is not an infinity of chances of loss against that of gain, there is no time to hesitate, you must give all. And thus, when one is forced to play, he must renounce reason to preserve his life, rather than risk it for infinite gain, as likely to happen as the loss of nothingness.

For it is no use to say it is uncertain if we will gain, and it is certain that we risk, and that the infinite distance between the *certainty* of what is staked and the *uncertainty* of what will be gained, equals the finite good which is certainly staked against the uncertain infinite. It is not so, as every player stakes a certainty to gain an uncertainty, and yet he stakes a finite certainty to gain a finite uncertainty, without transgressing against reason. There is not an infinite distance between the certainty staked and the uncertainty of the gain; that is untrue. In truth, there is an infinity between the certainty of gain and the certainty of loss. But the uncertainty of the gain is proportioned to the certainty of the stake according to the [Pg 68] proportion of the chances of gain and loss. Hence it comes that, if there are as

many risks on one side as on the other, the course is to play even; and then the certainty of the stake is equal to the uncertainty of the gain, so far is it from fact that there is an infinite distance between them. And so our proposition is of infinite force, when there is the finite to stake in a game where there are equal risks of gain and of loss, and the infinite to gain. This is demonstrable; and if men are capable of any truths, this is one.

"I confess it, I admit it. But, still, is there no means of seeing the faces of the cards?"—Yes, Scripture and the rest, etc. "Yes, but I have my hands tied and my mouth closed; I am forced to wager, and am not free. I am not released, and am so made that I cannot believe. What, then, would you have me do?"

True. But at least learn your inability to believe, since reason brings you to this, and yet you cannot believe. Endeavor then to convince yourself, not by increase of proofs of God, but by the abatement of your passions. You would like to attain faith, and do not know the way; you would like to cure yourself of unbelief, and ask the remedy for it. Learn of those who have been bound like you, and who now stake all their possessions. These are people who know the way which you would follow, and who are cured of an ill of which you would be cured. Follow the way by which they began; by acting as if they believed, taking the holy water, having masses said, etc. Even this will naturally make you believe, and deaden your acuteness.—"But this is what I am afraid of."—And why? What have you to lose?

But to show you that this leads you there, it is this which will lessen the passions, which are your stumbling-blocks.

Part II

Knowledge

6. The Problem of Induction

By David Hume

II. Of The Origins of Ideas

11. Every one will readily allow, that there is a considerable difference between the perceptions of the mind, when a man feels the pain of excessive heat, or the pleasure of moderate warmth, and when he afterwards recalls to his memory this sensation, or anticipates it by his imagination. These faculties may mimic or copy the perceptions of the senses; but they never can entirely reach the force and vivacity of the original sentiment. The utmost we say of them, even when they operate with greatest vigor, is, that they represent their object in so lively a manner, that we could *_almost_* say we feel or see it: But, except the mind be disordered by disease or madness, they never can arrive at such a pitch of vivacity, as to render these perceptions altogether indistinguishable. All the colors of poetry, however splendid, can never paint natural objects in such a manner as to make the description be taken for a real landscape. The most lively thought is still inferior to the dullest sensation. ...

Here therefore we may divide all the perceptions of the

mind into two classes or species, which are distinguished by their different degrees of force and vivacity. The less forcible and lively are commonly denominated “Thoughts” or “Ideas”. The other species want a name in our language, and in most others; I suppose, because it was not requisite for any, but philosophical purposes, to rank them under a general term or appellation. Let us, therefore, use a little freedom, and call them “Impressions”; employing that word in a sense somewhat different from the usual. By the term “impression”, then, I mean all our more lively perceptions, when we hear, or see, or feel, or love, or hate, or desire, or will. And impressions are distinguished from ideas, which are the less lively perceptions, of which we are conscious, when we reflect on any of those sensations or movements above mentioned.

Nothing, at first view, may seem more unbounded than the thought of man, which not only escapes all human power and authority, but is not even restrained within the limits of nature and reality. To form monsters, and join incongruous shapes and appearances, costs the imagination no more trouble than to conceive the most natural and familiar objects. And while the

body is confined to one planet, along which it creeps with pain and difficulty; the thought can in an instant transport us into the most distant regions of the universe; or even beyond the universe, into the unbounded chaos, where nature is supposed to lie in total confusion. What never was seen, or heard of, may yet be conceived; nor is any thing beyond the power of thought, except what implies an absolute contradiction.

But though our thought seems to possess this unbounded liberty, we shall find, upon a nearer examination, that it is really confined within very narrow limits, and that all this creative power of the mind amounts to no more than the faculty of compounding, transposing, augmenting, or diminishing the materials afforded us by the senses and experience. When we think of a golden mountain, we only join two consistent ideas, *gold*, and *mountain*, with which we were formerly acquainted. A virtuous horse we can conceive; because, from our own feeling, we can conceive virtue; and this we may unite to the figure and shape of a horse, which is an animal familiar to us. In short, all the materials of thinking are derived either from our outward or inward sentiment: the mixture and composition of these belongs alone to the mind and will. Or, to express myself in philosophical language, all our ideas or more feeble perceptions are copies of our impressions or more lively ones.

To prove this, the two following arguments will, I hope, be sufficient. First, when we analyze our thoughts or ideas, however compounded or sublime, we always find that they resolve themselves into such simple ideas as were copied from a precedent feeling or sentiment. Even those ideas, which, at first view, seem the most wide of this origin, are found, upon a nearer scrutiny, to be derived from it. The idea of God, as meaning an infinitely intelligent, wise, and good Being, arises from reflecting on the operations of our own mind, and augmenting, without limit, those qualities of goodness and wisdom. We may prosecute this enquiry to what length we please; where we shall always find, that every idea which we examine is copied from a similar impression. Those who would assert that this position is not universally true nor without exception, have only one, and that an easy method of refuting it; by producing that idea, which, in their opinion, is not derived from this source. It will then be incumbent on us, if we would maintain our doctrine, to produce the impression, or lively perception, which corresponds to it.

Secondly. If it happen, from a defect of the organ, that a man is not susceptible of any species of sensation, we always find that he is as little susceptible of the correspondent ideas. A blind man can form no notion of colors; a deaf man of sounds. Restore either of them that sense in which he is deficient; by opening this new inlet for his sensations, you also open an inlet for the ideas; and he finds no difficulty in conceiving these

objects. The case is the same, if the object, proper for exciting any sensation, has never been applied to the organ. A Laplander or Negro has no notion of the relish of wine. And though there are few or no instances of a like deficiency in the mind, where a person has never felt or is wholly incapable of a sentiment or passion that belongs to his species; yet we find the same observation to take place in a less degree. A man of mild manners can form no idea of inveterate revenge or cruelty; nor can a selfish heart easily conceive the heights of friendship and generosity. It is readily allowed, that other beings may possess many senses of which we can have no conception; because the ideas of them have never been introduced to us in the only manner by which an idea can have access to the mind, to wit, by the actual feeling and sensation.

IV. Skeptical Doubts Concerning The Operations of the Understanding.

Part I.

All the objects of human reason or enquiry may naturally be divided into two kinds, to wit, *Relations of Ideas*, and *Matters of Fact*. Of the first kind are the sciences of Geometry, Algebra, and Arithmetic; and in short, every affirmation which is either intuitively or demonstratively certain. *That the square of the hypotenuse is equal to the square of the two sides*, is a proposition which expresses a relation between these figures. *That three times five is equal to the half of thirty*, expresses a relation between these numbers. Propositions of this kind are discoverable by the mere operation of thought, without dependence on what is anywhere existent in the universe. Though there never were a circle or triangle in nature, the truths demonstrated by Euclid would for ever retain their certainty and evidence.

Matters of fact, which are the second objects of human reason, are not ascertained in the same manner; nor is our evidence of their truth, however great, of a like nature with the foregoing. The contrary of every matter of fact is still possible; because it can never imply a contradiction, and is conceived by the mind with the same facility and distinctness, as if ever so conformable to reality. *That the sun will not rise to-morrow* is no less intelligible a proposition, and implies no more contradiction than the affirmation, *that it will rise*. We should in vain, therefore, attempt to demonstrate its falsehood. Were it demonstratively false, it would imply a contradiction, and could never be distinctly conceived by the mind.

It may, therefore, be a subject worthy of curiosity, to enquire what is the nature of that evidence which assures us of any real existence and matter of fact, beyond the present

testimony of our senses, or the records of our memory. This part of philosophy, it is observable, has been little cultivated, either by the ancients or moderns; and therefore our doubts and errors, in the prosecution of so important an enquiry, may be the more excusable; while we march through such difficult paths without any guide or direction. They may even prove useful, by exciting curiosity, and destroying that implicit faith and security, which is the bane of all reasoning and free enquiry. The discovery of defects in the common philosophy, if any such there be, will not, I presume, be a discouragement, but rather an incitement, as is usual, to attempt something more full and satisfactory than has yet been proposed to the public.

All reasonings concerning matter of fact seem to be founded on the relation of *Cause and Effect*. By means of that relation alone we can go beyond the evidence of our memory and senses. If you were to ask a man, why he believes any matter of fact, which is absent; for instance, that his friend is in the country, or in France; he would give you a reason; and this reason would be some other fact; as a letter received from him, or the knowledge of his former resolutions and promises. A man finding a watch or any other machine in a desert island, would conclude that there had once been men in that island. All our reasonings concerning fact are of the same nature. And here it is constantly supposed that there is a connexion between the present fact and that which is inferred from it. Were there nothing to bind them together, the inference would be entirely precarious. The hearing of an articulate voice and rational discourse in the dark assures us of the presence of some person: Why? because these are the effects of the human make and fabric, and closely connected with it. If we anatomize all the other reasonings of this nature, we shall find that they are founded on the relation of cause and effect, and that this relation is either near or remote, direct or collateral. Heat and light are collateral effects of fire, and the one effect may justly be inferred from the other.

If we would satisfy ourselves, therefore, concerning the nature of that evidence, which assures us of matters of fact, we must enquire how we arrive at the knowledge of cause and effect.

I shall venture to affirm, as a general proposition, which admits of no exception, that the knowledge of this relation is not, in any instance, attained by reasonings *a priori*; but arises entirely from experience, when we find that any particular objects are constantly conjoined with each other. Let an object be presented to a man of ever so strong natural reason and abilities; if that object be entirely new to him, he will not be able, by the most accurate examination of its sensible qualities, to discover any of its causes or effects. Adam, though his

rational faculties be supposed, at the very first, entirely perfect, could not have inferred from the fluidity and transparency of water that it would suffocate him, or from the light and warmth of fire that it would consume him. No object ever discovers, by the qualities which appear to the senses, either the causes which produced it, or the effects which will arise from it; nor can our reason, unassisted by experience, ever draw any inference concerning real existence and matter of fact.

This proposition, *that causes and effects are discoverable, not by reason but by experience*, will readily be admitted with regard to such objects, as we remember to have once been altogether unknown to us; since we must be conscious of the utter inability, which we then lay under, of foretelling what would arise from them. Present two smooth pieces of marble to a man who has no tincture of natural philosophy; he will never discover that they will adhere together in such a manner as to require great force to separate them in a direct line, while they make so small a resistance to a lateral pressure. Such events, as bear little analogy to the common course of nature, are also readily confessed to be known only by experience; nor does any man imagine that the explosion of gunpowder, or the attraction of a loadstone, could ever be discovered by arguments *a priori*. In like manner, when an effect is supposed to depend upon an intricate machinery or secret structure of parts, we make no difficulty in attributing all our knowledge of it to experience. Who will assert that he can give the ultimate reason, why milk or bread is proper nourishment for a man, not for a lion or a tiger?

But the same truth may not appear, at first sight, to have the same evidence with regard to events, which have become familiar to us from our first appearance in the world, which bear a close analogy to the whole course of nature, and which are supposed to depend on the simple qualities of objects, without any secret structure of parts. We are apt to imagine that we could discover these effects by the mere operation of our reason, without experience. We fancy, that were we brought on a sudden into this world, we could at first have inferred that one Billiard-ball would communicate motion to another upon impulse; and that we needed not to have waited for the event, in order to pronounce with certainty concerning it. Such is the influence of custom, that, where it is strongest, it not only covers our natural ignorance, but even conceals itself, and seems not to take place, merely because it is found in the highest degree.

But to convince us that all the laws of nature, and all the operations of bodies without exception, are known only by experience, the following reflections may, perhaps, suffice. Were any object presented to us, and were we required to pronounce concerning the effect, which will result from it, without consulting past observation; after what manner, I beseech you,

must the mind proceed in this operation? It must invent or imagine some event, which it ascribes to the object as its effect; and it is plain that this invention must be entirely arbitrary. The mind can never possibly find the effect in the supposed cause, by the most accurate scrutiny and examination. For the effect is totally different from the cause, and consequently can never be discovered in it. Motion in the second Billiard-ball is a quite distinct event from motion in the first; nor is there anything in the one to suggest the smallest hint of the other. A stone or piece of metal raised into the air, and left without any support, immediately falls: but to consider the matter *a priori*, is there anything we discover in this situation which can beget the idea of a downward, rather than an upward, or any other motion, in the stone or metal?

And as the first imagination or invention of a particular effect, in all natural operations, is arbitrary, where we consult not experience; so must we also esteem the supposed tie or connexion between the cause and effect, which binds them together, and renders it impossible that any other effect could result from the operation of that cause. When I see, for instance, a Billiard-ball moving in a straight line towards another; even suppose motion in the second ball should by accident be suggested to me, as the result of their contact or impulse; may I not conceive, that a hundred different events might as well follow from that cause? May not both these balls remain at absolute rest? May not the first ball return in a straight line, or leap off from the second in any line or direction? All these suppositions are consistent and conceivable. Why then should we give the preference to one, which is no more consistent or conceivable than the rest? All our reasonings *a priori* will never be able to show us any foundation for this preference.

In a word, then, every effect is a distinct event from its cause. It could not, therefore, be discovered in the cause, and the first invention or conception of it, *a priori*, must be entirely arbitrary. And even after it is suggested, the conjunction of it with the cause must appear equally arbitrary; since there are always many other effects, which, to reason, must seem fully as consistent and natural. In vain, therefore, should we pretend to determine any single event, or infer any cause or effect, without the assistance of observation and experience.

Hence we may discover the reason why no philosopher, who is rational and modest, has ever pretended to assign the ultimate cause of any natural operation, or to show distinctly the action of that power, which produces any single effect in the universe. It is confessed, that the utmost effort of human reason is to reduce the principles, productive of natural phenomena, to a greater simplicity, and to resolve the many particular effects into a few general causes, by means of reasonings from analogy,

experience, and observation. But as to the causes of these general causes, we should in vain attempt their discovery; nor shall we ever be able to satisfy ourselves, by any particular explication of them. These ultimate springs and principles are totally shut up from human curiosity and enquiry. Elasticity, gravity, cohesion of parts, communication of motion by impulse; these are probably the ultimate causes and principles which we shall ever discover in nature; and we may esteem ourselves sufficiently happy, if, by accurate enquiry and reasoning, we can trace up the particular phenomena to, or near to, these general principles. The most perfect philosophy of the natural kind only staves off our ignorance a little longer: as perhaps the most perfect philosophy of the moral or metaphysical kind serves only to discover larger portions of it. Thus the observation of human blindness and weakness is the result of all philosophy, and meets us at every turn, in spite of our endeavours to elude or avoid it. ...

Part II.

But we have not yet attained any tolerable satisfaction with regard to the question first proposed. Each solution still gives rise to a new question as difficult as the foregoing, and leads us on to farther enquiries. When it is asked, *What is the nature of all our reasonings concerning matter of fact?* the proper answer seems to be, that they are founded on the relation of cause and effect. When again it is asked, *What is the foundation of all our reasonings and conclusions concerning that relation?* it may be replied in one word, Experience. But if we still carry on our sifting humour, and ask, *What is the foundation of all conclusions from experience?* this implies a new question, which may be of more difficult solution and explication. Philosophers, that give themselves airs of superior wisdom and sufficiency, have a hard task when they encounter persons of inquisitive dispositions, who push them from every corner to which they retreat, and who are sure at last to bring them to some dangerous dilemma. The best expedient to prevent this confusion, is to be modest in our pretensions; and even to discover the difficulty ourselves before it is objected to us. By this means, we may make a kind of merit of our very ignorance.

I shall content myself, in this section, with an easy task, and shall pretend only to give a negative answer to the question here proposed. I say then, that, even after we have experience of the operations of cause and effect, our conclusions from that experience are *not* founded on reasoning, or any process of the understanding. This answer we must endeavour both to explain and to defend.

It must certainly be allowed, that nature has kept us at a great distance from all her secrets, and has afforded us only the knowledge of a few superficial qualities of objects; while she

conceals from us those powers and principles on which the influence of those objects entirely depends. Our senses inform us of the colour, weight, and consistence of bread; but neither sense nor reason can ever inform us of those qualities which fit it for the nourishment and support of a human body. Sight or feeling conveys an idea of the actual motion of bodies; but as to that wonderful force or power, which would carry on a moving body for ever in a continued change of place, and which bodies never lose but by communicating it to others; of this we cannot form the most distant conception. But notwithstanding this ignorance of natural powers[6] and principles, we always presume, when we see like sensible qualities, that they have like secret powers, and expect that effects, similar to those which we have experienced, will follow from them. If a body of like colour and consistence with that bread, which we have formerly eat, be presented to us, we make no scruple of repeating the experiment, and foresee, with certainty, like nourishment and support. Now this is a process of the mind or thought, of which I would willingly know the foundation. It is allowed on all hands that there is no known connexion between the sensible qualities and the secret powers; and consequently, that the mind is not led to form such a conclusion concerning their constant and regular conjunction, by anything which it knows of their nature. As to past *Experience*, it can be allowed to give *direct* and *certain* information of those precise objects only, and that precise period of time, which fell under its cognizance: but why this experience should be extended to future times, and to other objects, which for aught we know, may be only in appearance similar; this is the main question on which I would insist. The bread, which I formerly eat, nourished me; that is, a body of such sensible qualities was, at that time, endued with such secret powers: but does it follow, that other bread must also nourish me at another time, and that like sensible qualities must always be attended with like secret powers? The consequence seems nowise necessary. At least, it must be acknowledged that there is here a consequence drawn by the mind; that there is a certain step taken; a process of thought, and an inference, which wants to be explained. These two propositions are far from being the same, *_I have found that such an object has always been attended with such an effect_, and *_I foresee, that other objects, which are, in appearance, similar, will be attended with similar effects_*. I shall allow, if you please, that the one proposition may justly be inferred from the other: I know, in fact, that it always is inferred. But if you insist that the inference is made by a chain of reasoning, I desire you to produce that reasoning. The connexion between these propositions is not intuitive. There is required a medium, which may enable the mind to draw such an inference, if indeed it be drawn by reasoning and argument. What that medium is, I must confess, passes my comprehension; and it is incumbent on those to produce it, who assert that it really exists,*

and is the origin of all our conclusions concerning matter of fact.

This negative argument must certainly, in process of time, become altogether convincing, if many penetrating and able philosophers shall turn their enquiries this way and no one be ever able to discover any connecting proposition or intermediate step, which supports the understanding in this conclusion. But as the question is yet new, every reader may not trust so far to his own penetration, as to conclude, because an argument escapes his enquiry, that therefore it does not really exist. For this reason it may be requisite to venture upon a more difficult task; and enumerating all the branches of human knowledge, endeavour to show that none of them can afford such an argument.

All reasonings may be divided into two kinds, namely, demonstrative reasoning, or that concerning relations of ideas, and moral reasoning, or that concerning matter of fact and existence. That there are no demonstrative arguments in the case seems evident; since it implies no contradiction that the course of nature may change, and that an object, seemingly like those which we have experienced, may be attended with different or contrary effects. May I not clearly and distinctly conceive that a body, falling from the clouds, and which, in all other respects, resembles snow, has yet the taste of salt or feeling of fire? Is there any more intelligible proposition than to affirm, that all the trees will flourish in December and January, and decay in May and June? Now whatever is intelligible, and can be distinctly conceived, implies no contradiction, and can never be proved false by any demonstrative argument or abstract reasoning *à priori*.

If we be, therefore, engaged by arguments to put trust in past experience, and make it the standard of our future judgement, these arguments must be probable only, or such as regard matter of fact and real existence, according to the division above mentioned. But that there is no argument of this kind, must appear, if our explication of that species of reasoning be admitted as solid and satisfactory. We have said that all arguments concerning existence are founded on the relation of cause and effect; that our knowledge of that relation is derived entirely from experience; and that all our experimental conclusions proceed upon the supposition that the future will be conformable to the past. To endeavour, therefore, the proof of this last supposition by probable arguments, or arguments regarding existence, must be evidently going in a circle, and taking that for granted, which is the very point in question.

In reality, all arguments from experience are founded on the similarity which we discover among natural objects, and by which we are induced to expect effects similar to those which we have found to follow from such objects. And though none but a

fool or madman will ever pretend to dispute the authority of experience, or to reject that great guide of human life, it may surely be allowed a philosopher to have so much curiosity at least as to examine the principle of human nature, which gives this mighty authority to experience, and makes us draw advantage from that similarity which nature has placed among different objects. From causes which appear *similar* we expect similar effects. This is the sum of all our experimental conclusions. Now it seems evident that, if this conclusion were formed by reason, it would be as perfect at first, and upon one instance, as after ever so long a course of experience. But the case is far otherwise. Nothing so like as eggs; yet no one, on account of this appearing similarity, expects the same taste and relish in all of them. It is only after a long course of uniform experiments in any kind, that we attain a firm reliance and security with regard to a particular event. Now where is that process of reasoning which, from one instance, draws a conclusion, so different from that which it infers from a hundred instances that are nowise different from that single one? This question I propose as much for the sake of information, as with an intention of raising difficulties. I cannot find, I cannot imagine any such reasoning. But I keep my mind still open to instruction, if any one will vouchsafe to bestow it on me.

Should it be said that, from a number of uniform experiments, we *infer* a connexion between the sensible qualities and the secret powers; this, I must confess, seems the same difficulty, couched in different terms. The question still recurs, on what process of argument this *inference* is founded? Where is the medium, the interposing ideas, which join propositions so very wide of each other? It is confessed that the colour, consistence, and other sensible qualities of bread appear not, of themselves, to have any connexion with the secret powers of nourishment and support. For otherwise we could infer these secret powers from the first appearance of these sensible qualities, without the aid of experience; contrary to the sentiment of all philosophers, and contrary to plain matter of fact. Here, then, is our natural state of ignorance with regard to the powers and influence of all objects. How is this remedied by experience? It only shows us a number of uniform effects, resulting from certain objects, and teaches us that those particular objects, at that particular time, were endowed with such powers and forces. When a new object, endowed with similar sensible qualities, is produced, we expect similar powers and forces, and look for a like effect. From a body of like colour and consistence with bread we expect like nourishment and support. But this surely is a step or progress of the mind, which wants to be explained. When a man says, *I have found, in all past instances, such sensible qualities conjoined with such secret powers*: And when he says, *Similar sensible qualities will*

always be conjoined with similar secret powers, he is not guilty of a tautology, nor are these propositions in any respect the same. You say that the one proposition is an inference from the other. But you must confess that the inference is not intuitive; neither is it demonstrative: Of what nature is it, then? To say it is experimental, is begging the question. For all inferences from experience suppose, as their foundation, that the future will resemble the past, and that similar powers will be conjoined with similar sensible qualities. If there be any suspicion that the course of nature may change, and that the past may be no rule for the future, all experience becomes useless, and can give rise to no inference or conclusion. It is impossible, therefore, that any arguments from experience can prove this resemblance of the past to the future; since all these arguments are founded on the supposition of that resemblance. Let the course of things be allowed hitherto ever so regular; that alone, without some new argument or inference, proves not that, for the future, it will continue so. In vain do you pretend to have learned the nature of bodies from your past experience. Their secret nature, and consequently all their effects and influence, may change, without any change in their sensible qualities. This happens sometimes, and with regard to some objects: Why may it not happen always, and with regard to all objects? What logic, what process of argument secures you against this supposition? My practice, you say, refutes my doubts. But you mistake the purport of my question. As an agent, I am quite satisfied in the point; but as a philosopher, who has some share of curiosity, I will not say scepticism, I want to learn the foundation of this inference. No reading, no enquiry has yet been able to remove my difficulty, or give me satisfaction in a matter of such importance. Can I do better than propose the difficulty to the public, even though, perhaps, I have small hopes of obtaining a solution? We shall at least, by this means, be sensible of our ignorance, if we do not augment our knowledge. ...

V. Skeptical Solutions of these Doubts

Part I.

... Nature will always maintain her rights, and prevail in the end over any abstract reasoning whatsoever. Though we should conclude, for instance, as in the foregoing section, that, in all reasonings from experience, there is a step taken by the mind which is not supported by any argument or process of the understanding; there is no danger that these reasonings, on which almost all knowledge depends, will ever be affected by such a discovery. If the mind be not engaged by argument to make this step, it must be induced by some other principle of equal weight and authority; and that principle will preserve its influence as long as human nature remains the same. What that

principle is may well be worth the pains of enquiry.

Suppose a person, though endowed with the strongest faculties of reason and reflection, to be brought on a sudden into this world; he would, indeed, immediately observe a continual succession of objects, and one event following another; but he would not be able to discover anything farther. He would not, at first, by any reasoning, be able to reach the idea of cause and effect; since the particular powers, by which all natural operations are performed, never appear to the senses; nor is it reasonable to conclude, merely because one event, in one instance, precedes another, that therefore the one is the cause, the other the effect. Their conjunction may be arbitrary and casual. There may be no reason to infer the existence of one from the appearance of the other. And in a word, such a person, without more experience, could never employ his conjecture or reasoning concerning any matter of fact, or be assured of anything beyond what was immediately present to his memory and senses.

Suppose, again, that he has acquired more experience, and has lived so long in the world as to have observed familiar objects or events to be constantly conjoined together; what is the consequence of this experience? He immediately infers the existence of one object from the appearance of the other. Yet he has not, by all his experience, acquired any idea or knowledge of the secret power by which the one object produces the other; nor is it, by any process of reasoning, he is engaged to draw this inference. But still he finds himself determined to draw it: And though he should be convinced that his understanding has no part in the operation, he would nevertheless continue in the same course of thinking. There is some other principle which determines him to form such a conclusion.

This principle is Custom or Habit. For wherever the repetition of any particular act or operation produces a propensity to renew the same act or operation, without being impelled by any reasoning or process of the understanding, we always say, that this propensity is the effect of *Custom*. By employing that word, we pretend not to have given the ultimate reason of such a propensity. We only point out a principle of human nature, which is universally acknowledged, and which is well known by its effects. Perhaps we can push our enquiries no farther, or pretend to give the cause of this cause; but must rest contented with it as the ultimate principle, which we can assign, of all our conclusions from experience. It is sufficient satisfaction, that we can go so far, without repining at the

narrowness of our faculties because they will carry us no farther. And it is certain we here advance a very intelligible proposition at least, if not a true one, when we assert that, after the constant conjunction of two objects--heat and flame, for instance, weight and solidity--we are determined by custom alone to expect the one from the appearance of the other. This hypothesis seems even the only one which explains the difficulty, why we draw, from a thousand instances, an inference which we are not able to draw from one instance, that is, in no respect, different from them. Reason is incapable of any such variation. The conclusions which it draws from considering one circle are the same which it would form upon surveying all the circles in the universe. But no man, having seen only one body move after being impelled by another, could infer that every other body will move after a like impulse. All inferences from experience, therefore, are effects of custom, not of reasoning.

Custom, then, is the great guide of human life. It is that principle alone which renders our experience useful to us, and makes us expect, for the future, a similar train of events with those which have appeared in the past.

Without the influence of custom, we should be entirely ignorant of every matter of fact beyond what is immediately present to the memory and senses. We should never know how to adjust means to ends, or to employ our natural powers in the production of any effect. There would be an end at once of all action, as well as of the chief part of speculation. ...

What, then, is the conclusion of the whole matter? A simple one; though, it must be confessed, pretty remote from the common theories of philosophy. All belief of matter of fact or real existence is derived merely from some object, present to the memory or senses, and a customary conjunction between that and some other object. Or in other words; having found, in many instances, that any two kinds of objects--flame and heat, snow and cold--have always been conjoined together; if flame or snow be presented anew to the senses, the mind is carried by custom to expect heat or cold, and to *believe* that such a quality does exist, and will discover itself upon a nearer approach. This belief is the necessary result of placing the mind in such circumstances. It is an operation of the soul, when we are so situated, as unavoidable as to feel the passion of love, when we receive benefits; or hatred, when we meet with injuries. All these operations are a species of natural instincts, which no reasoning or process of the thought and understanding is able either to produce or to prevent. ...

7. Justified True Belief

By Plato

SOCRATES: Yes, my boy, and so do I; and my desire is to learn of him, or of anybody who seems to understand these things. And I get on pretty well in general; but there is a little difficulty which I want you and the company to aid me in investigating. Will you answer me a question: 'Is not learning growing wiser about that which you learn?'

THEAETETUS: Of course.

SOCRATES: And by wisdom the wise are wise?

THEAETETUS: Yes.

SOCRATES: And is that different in any way from knowledge?

THEAETETUS: What?

SOCRATES: Wisdom; are not men wise in that which they know?

THEAETETUS: Certainly they are.

SOCRATES: Then wisdom and knowledge are the same?

THEAETETUS: Yes.

SOCRATES: Herein lies the difficulty which I can never solve to my satisfaction--What is knowledge? Can we answer that question? What say you? which of us will speak first? whoever misses shall sit down, as at a game of ball, and shall be donkey, as the boys say; he who lasts out his competitors in the game without missing, shall be our king, and shall have the right of putting to us any questions which he pleases...

THEAETETUS: I cannot say, Socrates, that all opinion is knowledge, because there may be a false opinion; but I will venture to assert, that knowledge is true opinion: let this then be my reply; and if this is hereafter disproved, I must try to find another.

SOCRATES: That is the way in which you ought to answer, Theaetetus, and not in your former hesitating strain, for if we are bold we shall gain one of two advantages; either we shall find what we seek, or we shall be less likely to think that we know what we do not know--in either case we shall be richly rewarded. And now, what are you saying?--Are there two sorts of opinion, one true and the other false; and do you define

knowledge to be the true?

THEAETETUS: Yes, according to my present view.

SOCRATES: Is it still worth our while to resume the discussion touching opinion?

THEAETETUS: To what are you alluding?

SOCRATES: There is a point which often troubles me, and is a great perplexity to me, both in regard to myself and others. I cannot make out the nature or origin of the mental experience to which I refer.

THEAETETUS: Pray what is it?

SOCRATES: How there can be false opinion--that difficulty still troubles the eye of my mind; and I am uncertain whether I shall leave the question, or begin over again in a new way.

THEAETETUS: Begin again, Socrates,--at least if you think that there is the slightest necessity for doing so. Were not you and Theodorus just now remarking very truly, that in discussions of this kind we may take our own time?

SOCRATES: You are quite right, and perhaps there will be no harm in retracing our steps and beginning again. Better a little which is well done, than a great deal imperfectly.

THEAETETUS: Certainly.

SOCRATES: Well, and what is the difficulty? Do we not speak of false opinion, and say that one man holds a false and another a true opinion, as though there were some natural distinction between them?

THEAETETUS: We certainly say so.

SOCRATES: All things and everything are either known or not known. I leave out of view the intermediate conceptions of learning and forgetting, because they have nothing to do with our present question.

THEAETETUS: There can be no doubt, Socrates, if you exclude these, that there is no other alternative but knowing or not knowing a thing.

SOCRATES: That point being now determined, must we not say that he who has an opinion, must have an opinion about something which he knows or does not know?

THEAETETUS: He must.

SOCRATES: He who knows, cannot but know; and he who does not know, cannot know?

THEAETETUS: Of course.

SOCRATES: What shall we say then? When a man has a false

opinion does he think that which he knows to be some other thing which he knows, and knowing both, is he at the same time ignorant of both?

THEAETETUS: That, Socrates, is impossible.

SOCRATES: But perhaps he thinks of something which he does not know as some other thing which he does not know; for example, he knows neither Theaetetus nor Socrates, and yet he fancies that Theaetetus is Socrates, or Socrates Theaetetus?

THEAETETUS: How can he?

SOCRATES: But surely he cannot suppose what he knows to be what he does not know, or what he does not know to be what he knows?

THEAETETUS: That would be monstrous.

SOCRATES: Where, then, is false opinion? For if all things are either known or unknown, there can be no opinion which is not comprehended under this alternative, and so false opinion is excluded.

THEAETETUS: Most true.

SOCRATES: Suppose that we remove the question out of the sphere of knowing or not knowing, into that of being and not-being.

THEAETETUS: What do you mean?

SOCRATES: May we not suspect the simple truth to be that he who thinks about anything, that which is not, will necessarily think what is false, whatever in other respects may be the state of his mind?

THEAETETUS: That, again, is not unlikely, Socrates.

SOCRATES: Then suppose some one to say to us, Theaetetus:-- Is it possible for any man to think that which is not, either as a self-existent substance or as a predicate of something else? And suppose that we answer, 'Yes, he can, when he thinks what is not true.'--That will be our answer?

THEAETETUS: Yes.

SOCRATES: But is there any parallel to this?

THEAETETUS: What do you mean?

SOCRATES: Can a man see something and yet see nothing?

THEAETETUS: Impossible.

SOCRATES: But if he sees any one thing, he sees something that exists. Do you suppose that what is one is ever to be found among non-existing things?

THEAETETUS: I do not.

SOCRATES: He then who sees some one thing, sees something which is?

THEAETETUS: Clearly.

SOCRATES: And he who hears anything, hears some one thing, and hears that which is?

THEAETETUS: Yes.

SOCRATES: And he who touches anything, touches something which is one and therefore is?

THEAETETUS: That again is true.

SOCRATES: And does not he who thinks, think some one thing?

THEAETETUS: Certainly.

SOCRATES: And does not he who thinks some one thing, think something which is?

THEAETETUS: I agree.

SOCRATES: Then he who thinks of that which is not, thinks of nothing?

THEAETETUS: Clearly.

SOCRATES: And he who thinks of nothing, does not think at all?

THEAETETUS: Obviously.

SOCRATES: Then no one can think that which is not, either as a self-existent substance or as a predicate of something else?

THEAETETUS: Clearly not.

SOCRATES: Then to think falsely is different from thinking that which is not?

THEAETETUS: It would seem so.

SOCRATES: Then false opinion has no existence in us, either in the sphere of being or of knowledge?

THEAETETUS: Certainly not.

SOCRATES: Then, once more, what shall we say that knowledge is?--for we are not going to lose heart as yet.

THEAETETUS: Certainly, I shall not lose heart, if you do not.

SOCRATES: What definition will be most consistent with our former views?

THEAETETUS: I cannot think of any but our old one, Socrates.

SOCRATES: What was it?

THEAETETUS: Knowledge was said by us to be true opinion; and true opinion is surely unerring, and the results which follow from it are all noble and good.

SOCRATES: He who led the way into the river, Theaetetus, said "The experiment will show;" and perhaps if we go forward in the search, we may stumble upon the thing which we are looking for; but if we stay where we are, nothing will come to light.

THEAETETUS: Very true; let us go forward and try.

SOCRATES: The trail soon comes to an end, for a whole profession is against us.

THEAETETUS: How is that, and what profession do you mean?

SOCRATES: The profession of the great wise ones who are called orators and lawyers; for these persuade men by their art and make them think whatever they like, but they do not teach them. Do you imagine that there are any teachers in the world so clever as to be able to convince others of the truth about acts of robbery or violence, of which they were not eye-witnesses, while a little water is flowing in the clepsydra?

THEAETETUS: Certainly not, they can only persuade them.

SOCRATES: And would you not say that persuading them is making them have an opinion?

THEAETETUS: To be sure.

SOCRATES: When, therefore, judges are justly persuaded about matters which you can know only by seeing them, and not in any other way, and when thus judging of them from report they attain a true opinion about them, they judge without knowledge, and yet are rightly persuaded, if they have judged well.

THEAETETUS: Certainly.

SOCRATES: And yet, O my friend, if true opinion in law courts and knowledge are the same, the perfect judge could not have judged rightly without knowledge; and therefore I must infer that they are not the same.

THEAETETUS: That is a distinction, Socrates, which I have heard made by some one else, but I had forgotten it. He said that true opinion, combined with reason, was knowledge, but that the opinion which had no reason was out of the sphere of knowledge; and that things of which there is no rational account are not knowable--such was the singular expression which he used--and that things which have a reason or explanation are knowable. ...

SOCRATES: Well, and what is the meaning of the term 'explanation'? I

think that we have a choice of three meanings.

THEAETETUS: What are they?

SOCRATES: In the first place, the meaning may be, manifesting one's thought by the voice with verbs and nouns, imaging an opinion in the stream which flows from the lips, as in a mirror or water. Does not explanation appear to be of this nature?

THEAETETUS: Certainly; he who so manifests his thought, is said to explain himself.

SOCRATES: And every one who is not born deaf or dumb is able sooner or later to manifest what he thinks of anything; and if so, all those who have a right opinion about anything will also have right explanation; nor will right opinion be anywhere found to exist apart from knowledge.

THEAETETUS: True.

SOCRATES: Let us not, therefore, hastily charge him who gave this account of knowledge with uttering an unmeaning word; for perhaps he only intended to say, that when a person was asked what was the nature of anything, he should be able to answer his questioner by giving the elements of the thing.

THEAETETUS: As for example, Socrates...?

SOCRATES: As, for example, when Hesiod says that a wagon is made up of a hundred planks. Now, neither you nor I could describe all of them individually; but if any one asked what is a wagon, we should be content to answer, that a wagon consists of wheels, axle, body, rims, yoke.

THEAETETUS: Certainly.

SOCRATES: And our opponent will probably laugh at us, just as he would if we professed to be grammarians and to give a grammatical account of the name of Theaetetus, and yet could only tell the syllables and not the letters of your name--that would be true opinion, and not knowledge; for knowledge, as has been already remarked, is not attained until, combined with true opinion, there is an enumeration of the elements out of which anything is composed.

THEAETETUS: Yes.

SOCRATES: In the same general way, we might also have true opinion about a wagon; but he who can describe its essence by an enumeration of the hundred planks, adds rational explanation to true opinion, and instead of opinion has art and knowledge of the nature of a wagon, in that he attains to the whole through the elements.

THEAETETUS: And do you not agree in that view, Socrates?

SOCRATES: If you do, my friend; but I want to know first, whether you admit the resolution of all things into their elements to be a rational explanation of them, and the consideration of them in syllables or larger combinations of them to be irrational--is this your view?

THEAETETUS: Precisely.

SOCRATES: Well, and do you conceive that a man has knowledge of any element who at one time affirms and at another time denies that element of something, or thinks that the same thing is composed of different elements at different times?

THEAETETUS: Assuredly not.

SOCRATES: And do you not remember that in your case and in that of others this often occurred in the process of learning to read?

THEAETETUS: You mean that I mistook the letters and misspelt the syllables?

SOCRATES: Yes.

THEAETETUS: To be sure; I perfectly remember, and I am very far from supposing that they who are in this condition have knowledge.

SOCRATES: When a person at the time of learning writes the name of Theaetetus, and thinks that he ought to write and does write Th and e; but, again, meaning to write the name of Theodorus, thinks that he ought to write and does write T and e--can we suppose that he knows the first syllables of your two names?

THEAETETUS: We have already admitted that such a one has not yet attained knowledge.

SOCRATES: And in like manner he may enumerate without knowing them the second and third and fourth syllables of your name?

THEAETETUS: He may.

SOCRATES: And in that case, when he knows the order of the letters and can write them out correctly, he has right opinion?

THEAETETUS: Clearly.

SOCRATES: But although we admit that he has right opinion, he will still be without knowledge?

THEAETETUS: Yes.

SOCRATES: And yet he will have explanation, as well as right opinion, for he knew the order of the letters when he wrote; and

this we admit to be explanation.

THEAETETUS: True.

SOCRATES: Then, my friend, there is such a thing as right opinion united with definition or explanation, which does not as yet attain to the exactness of knowledge.

THEAETETUS: It would seem so.

SOCRATES: And what we fancied to be a perfect definition of knowledge is a dream only. But perhaps we had better not say so as yet, for were there not three explanations of knowledge, one of which must, as we said, be adopted by him who maintains knowledge to be true opinion combined with rational explanation? And very likely there may be found some one who will not prefer this but the third.

THEAETETUS: You are quite right; there is still one remaining. The first was the image or expression of the mind in speech; the second, which has just been mentioned, is a way of reaching the whole by an enumeration of the elements. But what is the third definition?

SOCRATES: There is, further, the popular notion of telling the mark or sign of difference which distinguishes the thing in question from all others.

THEAETETUS: Can you give me any example of such a definition?

SOCRATES: As, for example, in the case of the sun, I think that you would be contented with the statement that the sun is the brightest of the heavenly bodies which revolve about the earth.

THEAETETUS: Certainly.

SOCRATES: Understand why:--the reason is, as I was just now saying, that if you get at the difference and distinguishing characteristic of each thing, then, as many persons affirm, you will get at the definition or explanation of it; but while you lay hold only of the common and not of the characteristic notion, you will only have the definition of those things to which this common quality belongs.

THEAETETUS: I understand you, and your account of definition is in my judgment correct.

SOCRATES: But he, who having right opinion about anything, can find out the difference which distinguishes it from other things will know that of which before he had only an opinion.

THEAETETUS: Yes; that is what we are maintaining.

SOCRATES: Nevertheless, Theaetetus, on a nearer view, I find myself quite disappointed; the picture, which at a distance was not so bad, has now become altogether unintelligible.

THEAETETUS: What do you mean?

SOCRATES: I will endeavour to explain: I will suppose myself to have true opinion of you, and if to this I add your definition, then I have knowledge, but if not, opinion only.

THEAETETUS: Yes.

SOCRATES: The definition was assumed to be the interpretation of your difference.

THEAETETUS: True.

SOCRATES: But when I had only opinion, I had no conception of your distinguishing characteristics.

THEAETETUS: I suppose not.

SOCRATES: Then I must have conceived of some general or common nature which no more belonged to you than to another.

THEAETETUS: True.

SOCRATES: Tell me, now--How in that case could I have formed a judgment of you any more than of any one else? Suppose that I imagine Theaetetus to be a man who has nose, eyes, and mouth, and every other member complete; how would that enable me to distinguish Theaetetus from Theodorus, or from some outer barbarian?

THEAETETUS: How could it?

SOCRATES: Or if I had further conceived of you, not only as having nose and eyes, but as having a snub nose and prominent eyes, should I have any more notion of you than of myself and others who resemble me?

THEAETETUS: Certainly not.

SOCRATES: Surely I can have no conception of Theaetetus until your snub-nosedness has left an impression on my mind different from the snub-nosedness of all others whom I have ever seen, and until your other peculiarities have a like distinctness; and so when I meet you to-morrow the right opinion will be recalled?

THEAETETUS: Most true.

SOCRATES: Then right opinion implies the perception of differences?

THEAETETUS: Clearly.

SOCRATES: What, then, shall we say of adding reason or explanation to right opinion? If the meaning is, that we should form an opinion of the way in which something differs from another thing, the proposal is ridiculous.

THEAETETUS: How so?

SOCRATES: We are supposed to acquire a right opinion of the differences which distinguish one thing from another when we have already a right opinion of them, and so we go round and round:--the revolution of the scytal, or pestle, or any other rotatory machine, in the same circles, is as nothing compared with such a requirement; and we may be truly described as the blind directing the blind; for to add those things which we already have, in order that we may learn what we already think, is like a soul utterly benighted.

THEAETETUS: Tell me; what were you going to say just now, when you asked the question?

SOCRATES: If, my boy, the argument, in speaking of adding the definition, had used the word to 'know,' and not merely 'have an opinion' of the difference, this which is the most promising of all the definitions of knowledge would have come to a pretty end, for to know is surely to acquire knowledge.

THEAETETUS: True.

SOCRATES: And so, when the question is asked, What is knowledge? This fair argument will answer 'Right opinion with knowledge,'--knowledge, that is, of difference, for this, as the said argument maintains, is adding the definition.

THEAETETUS: That seems to be true.

SOCRATES: But how utterly foolish, when we are asking what is knowledge, that the reply should only be, right opinion with knowledge of difference or of anything! And so, Theaetetus,

knowledge is neither sensation nor true opinion, nor yet definition and explanation accompanying and added to true opinion?

THEAETETUS: I suppose not.

SOCRATES: And are you still in labour and travail, my dear friend, or have you brought all that you have to say about knowledge to the birth?

THEAETETUS: I am sure, Socrates, that you have elicited from me a good deal more than ever was in me.

SOCRATES: And does not my art show that you have brought forth wind, and that the offspring of your brain are not worth bringing up?

THEAETETUS: Very true.

SOCRATES: But if, Theaetetus, you should ever conceive afresh, you will be all the better for the present investigation, and if not, you will be soberer and humbler and gentler to other men, and will be too modest to fancy that you know what you do not know. These are the limits of my art; I can no further go, nor do I know aught of the things which great and famous men know or have known in this or former ages. The office of a midwife I, like my mother, have received from God; she delivered women, I deliver men; but they must be young and noble and fair. And now I have to go to the porch of the King Archon, where I am to meet Meletus and his indictment. To-morrow morning, Theodorus, I shall hope to see you again at this place.

8. A Priori Knowledge

By Rene Descartes

Meditation I: Of the Things of Which We May Doubt

SEVERAL years have now elapsed since I first became aware that I had accepted, even from my youth, many false opinions for true, and that consequently what I afterward based on such principles was highly doubtful; and from that time I was convinced of the necessity of undertaking once in my life to rid myself of all the opinions I had adopted, and of commencing anew the work of building from the foundation, if I desired to establish a firm and abiding superstructure in the sciences. But as this enterprise appeared to me to be one of great magnitude, I waited until I had attained an age so mature as to leave me no hope that at any stage of life more advanced I should be better able to execute my design. On this account, I have delayed so long that I should henceforth consider I was doing wrong were I still to consume in deliberation any of the time that now remains for action. To-day, then, since I have opportunely freed my mind from all cares [and am happily disturbed by no passions], and since I am in the secure possession of leisure in a peaceable

retirement, I will at length apply myself earnestly and freely to the general overthrow of all my former opinions.

But, to this end, it will not be necessary for me to show that the whole of these are false—a point, perhaps, which I shall never reach; but as even now my reason convinces me that I ought not the less carefully to withhold belief from what is not entirely certain and indubitable, than from what is manifestly false, it will be sufficient to justify the rejection of the whole if I shall find in each some ground for doubt. Nor for this purpose will it be necessary even to deal with each belief individually, which would be truly an endless labor; but, as the removal from below of the foundation necessarily involves the downfall of the whole edifice, I will at once approach the criticism of the principles on which all my former beliefs rested.

All that I have, up to this moment, accepted as possessed of the highest truth and certainty, I received either from or through the senses. I observed, however, that these sometimes misled us; and it is the part of prudence not to place absolute confidence in that by which we have even once been

deceived.

But it may be said, perhaps, that, although the senses occasionally mislead us respecting minute objects, and such as are so far removed from us as to be beyond the reach of close observation, there are yet many other of their informations (presentations), of the truth of which it is manifestly impossible to doubt; as for example, that I am in this place, seated by the fire, clothed in a winter dressing gown, that I hold in my hands this piece of paper, with other intimations of the same nature. But how could I deny that I possess these hands and this body, and withal escape being classed with persons in a state of insanity, whose brains are so disordered and clouded by dark bilious vapors as to cause them pertinaciously to assert that they are monarchs when they are in the greatest poverty; or clothed [in gold] and purple when destitute of any covering; or that their head is made of clay, their body of glass, or that they are gourds? I should certainly be not less insane than they, were I to regulate my procedure according to examples so extravagant.

Though this be true, I must nevertheless here consider that I am a man, and that, consequently, I am in the habit of sleeping, and representing to myself in dreams those same things, or even sometimes others less probable, which the insane think are presented to them in their waking moments. How often have I dreamt that I was in these familiar circumstances, that I was dressed, and occupied this place by the fire, when I was lying undressed in bed? At the present moment, however, I certainly look upon this paper with eyes wide awake; the head which I now move is not asleep; I extend this hand consciously and with express purpose, and I perceive it; the occurrences in sleep are not so distinct as all this. But I cannot forget that, at other times I have been deceived in sleep by similar illusions; and, attentively considering those cases, I perceive so clearly that there exist no certain marks by which the state of waking can ever be distinguished from sleep, that I feel greatly astonished; and in amazement I almost persuade myself that I am now dreaming.

Let us suppose, then, that we are dreaming, and that all these particulars—namely, the opening of the eyes, the motion of the head, the forth-putting of the hands—are merely illusions; and even that we really possess neither an entire body nor hands such as we see. Nevertheless it must be admitted at least that the objects which appear to us in sleep are, as it were, painted representations which could not have been formed unless in the likeness of realities; and, therefore, that those general objects, at all events, namely, eyes, a head, hands, and an entire body, are not simply imaginary, but really existent. For, in truth, painters themselves, even when they study to represent sirens and satyrs by forms the most fantastic and extraordinary, cannot bestow

upon them natures absolutely new, but can only make a certain medley of the members of different animals; or if they chance to imagine something so novel that nothing at all similar has ever been seen before, and such as is, therefore, purely fictitious and absolutely false, it is at least certain that the colors of which this is composed are real. And on the same principle, although these general objects, viz. [a body], eyes, a head, hands, and the like, be imaginary, we are nevertheless absolutely necessitated to admit the reality at least of some other objects still more simple and universal than these, of which, just as of certain real colors, all those images of things, whether true and real, or false and fantastic, that are found in our consciousness (*cogitatio*), are formed.

To this class of objects seem to belong corporeal nature in general and its extension; the figure of extended things, their quantity or magnitude, and their number, as also the place in, and the time during, which they exist, and other things of the same sort.

We will not, therefore, perhaps reason illegitimately if we conclude from this that Physics, Astronomy, Medicine, and all the other sciences that have for their end the consideration of composite objects, are indeed of a doubtful character; but that Arithmetic, Geometry, and the other sciences of the same class, which regard merely the simplest and most general objects, and scarcely inquire whether or not these are really existent, contain somewhat that is certain and indubitable: for whether I am awake or dreaming, it remains true that two and three make five, and that a square has but four sides; nor does it seem possible that truths so apparent can ever fall under a suspicion of falsity [or incertitude].

Nevertheless, the belief that there is a God who is all powerful, and who created me, such as I am, has, for a long time, obtained steady possession of my mind. How, then, do I know that he has not arranged that there should be neither earth, nor sky, nor any extended thing, nor figure, nor magnitude, nor place, providing at the same time, however, for [the rise in me of the perceptions of all these objects, and] the persuasion that these do not exist otherwise than as I perceive them? And further, as I sometimes think that others are in error respecting matters of which they believe themselves to possess a perfect knowledge, how do I know that I am not also deceived each time I add together two and three, or number the sides of a square, or form some judgment still more simple, if more simple indeed can be imagined? But perhaps Deity has not been willing that I should be thus deceived, for he is said to be supremely good. If, however, it were repugnant to the goodness of Deity to have created me subject to constant deception, it would seem likewise to be contrary to his goodness to allow me to be occasionally

deceived; and yet it is clear that this is permitted.

Some, indeed, might perhaps be found who would be disposed rather to deny the existence of a Being so powerful than to believe that there is nothing certain. But let us for the present refrain from opposing this opinion, and grant that all which is here said of a Deity is fabulous: nevertheless, in whatever way it be supposed that I reach the state in which I exist, whether by fate, or chance, or by an endless series of antecedents and consequents, or by any other means, it is clear (since to be deceived and to err is a certain defect) that the probability of my being so imperfect as to be the constant victim of deception, will be increased exactly in proportion as the power possessed by the cause, to which they assign my origin, is lessened. To these reasonings I have assuredly nothing to reply, but am constrained at last to avow that there is nothing of all that I formerly believed to be true of which it is impossible to doubt, and that not through thoughtlessness or levity, but from cogent and maturely considered reasons; so that henceforward, if I desire to discover anything certain, I ought not the less carefully to refrain from assenting to those same opinions than to what might be shown to be manifestly false.

But it is not sufficient to have made these observations; care must be taken likewise to keep them in remembrance. For those old and customary opinions perpetually recur—long and familiar usage giving them the right of occupying my mind, even almost against my will, and subduing my belief; nor will I lose the habit of deferring to them and confiding in them so long as I shall consider them to be what in truth they are, viz, opinions to some extent doubtful, as I have already shown, but still highly probable, and such as it is much more reasonable to believe than deny. It is for this reason I am persuaded that I shall not be doing wrong, if, taking an opposite judgment of deliberate design, I become my own deceiver, by supposing, for a time, that all those opinions are entirely false and imaginary, until at length, having thus balanced my old by my new prejudices, my judgment shall no longer be turned aside by perverted usage from the path that may conduct to the perception of truth. For I am assured that, meanwhile, there will arise neither peril nor error from this course, and that I cannot for the present yield too much to distrust, since the end I now seek is not action but knowledge.

I will suppose, then, not that Deity, who is sovereignly good and the fountain of truth, but that some malignant demon, who is at once exceedingly potent and deceitful, has employed all his artifice to deceive me; I will suppose that the sky, the air, the earth, colors, figures, sounds, and all external things, are nothing better than the illusions of dreams, by means of which this being has laid snares for my credulity; I will consider myself as without hands, eyes, flesh, blood, or any of the senses, and as

falsely believing that I am possessed of these; I will continue resolutely fixed in this belief, and if indeed by this means it be not in my power to arrive at the knowledge of truth, I shall at least do what is in my power, viz., [suspend my judgment], and guard with settled purpose against giving my assent to what is false, and being imposed upon by this deceiver, whatever be his power and artifice. But this undertaking is arduous, and a certain indolence insensibly leads me back to my ordinary course of life; and just as the captive, who, perchance, was enjoying in his dreams an imaginary liberty, when he begins to suspect that it is but a vision, dreads awakening, and conspires with the agreeable illusions that the deception may be prolonged; so I, of my own accord, fall back into the train of my former beliefs, and fear to arouse myself from my slumber, lest the time of laborious wakefulness that would succeed this quiet rest, in place of bringing any light of day, should prove inadequate to dispel the darkness that will arise from the difficulties that have now been raised.

Meditation II: Of the Nature of the Human Mind; and That It is More Easily Known Than the Body

The Meditation of yesterday has filled my mind with so many doubts, that it is no longer in my power to forget them. Nor do I see, meanwhile, any principle on which they can be resolved; and, just as if I had fallen all of a sudden into very deep water, I am so greatly disconcerted as to be unable either to plant my feet firmly on the bottom or sustain myself by swimming on the surface. I will, nevertheless, make an effort, and try anew the same path on which I had entered yesterday, that is, proceed by casting aside all that admits of the slightest doubt, not less than if I had discovered it to be absolutely false; and I will continue always in this track until I shall find something that is certain, or at least, if I can do nothing more, until I shall know with certainty that there is nothing certain. Archimedes, that he might transport the entire globe from the place it occupied to another, demanded only a point that was firm and immovable; so, also, I shall be entitled to entertain the highest expectations, if I am fortunate enough to discover only one thing that is certain and indubitable.

I suppose, accordingly, that all the things which I see are false (fictitious); I believe that none of those objects which my fallacious memory represents ever existed; I suppose that I possess no senses; I believe that body, figure, extension, motion, and place are merely fictions of my mind. What is there, then, that can be esteemed true? Perhaps this only, that there is absolutely nothing certain.

But how do I know that there is not something different altogether from the objects I have now enumerated, of which it

is impossible to entertain the slightest doubt? Is there not a God, or some being, by whatever name I may designate him, who causes these thoughts to arise in my mind? But why suppose such a being, for it may be I myself am capable of producing them? Am I, then, at least not something? But I before denied that I possessed senses or a body; I hesitate, however, for what follows from that? Am I so dependent on the body and the senses that without these I cannot exist? But I had the persuasion that there was absolutely nothing in the world, that there was no sky and no earth, neither minds nor bodies; was I not, therefore, at the same time, persuaded that I did not exist? Far from it; I assuredly existed, since I was persuaded. But there is I know not what being, who is possessed at once of the highest power and the deepest cunning, who is constantly employing all his ingenuity in deceiving me. Doubtless, then, I exist, since I am deceived; and, let him deceive me as he may, he can never bring it about that I am nothing, so long as I shall be conscious that I am something. So that it must, in fine, be maintained, all things being maturely and carefully considered, that this proposition (pronunciatum) I am, I exist, is necessarily true each time it is expressed by me, or conceived in my mind.

But I do not yet know with sufficient clearness what I am, though assured that I am; and hence, in the next place, I must take care, lest perchance I inconsiderately substitute some other object in room of what is properly myself, and thus wander from truth, even in that knowledge (cognition) which I hold to be of all others the most certain and evident. For this reason, I will now consider anew what I formerly believed myself to be, before I entered on the present train of thought; and of my previous opinion I will retrench all that can in the least be invalidated by the grounds of doubt I have adduced, in order that there may at length remain nothing but what is certain and indubitable.

What then did I formerly think I was? Undoubtedly I judged that I was a man. But what is a man? Shall I say a rational animal? Assuredly not; for it would be necessary forthwith to inquire into what is meant by animal, and what by rational, and thus, from a single question, I should insensibly glide into others, and these more difficult than the first; nor do I now possess enough of leisure to warrant me in wasting my time amid subtleties of this sort. I prefer here to attend to the thoughts that sprung up of themselves in my mind, and were inspired by my own nature alone, when I applied myself to the consideration of what I was. In the first place, then, I thought that I possessed a countenance, hands, arms, and all the fabric of members that appears in a corpse, and which I called by the name of body. It further occurred to me that I was nourished, that I walked, perceived, and thought, and all those actions I referred to the soul; but what the soul itself was I either did not stay to consider,

or, if I did, I imagined that it was something extremely rare and subtle, like wind, or flame, or ether, spread through my grosser parts. As regarded the body, I did not even doubt of its nature, but thought I distinctly knew it, and if I had wished to describe it according to the notions I then entertained, I should have explained myself in this manner: By body I understand all that can be terminated by a certain figure; that can be comprised in a certain place, and so fill a certain space as therefrom to exclude every other body; that can be perceived either by touch, sight, hearing, taste, or smell; that can be moved in different ways, not indeed of itself, but by something foreign to it by which it is touched [and from which it receives the impression]; for the power of self-motion, as likewise that of perceiving and thinking, I held as by no means pertaining to the nature of body; on the contrary, I was somewhat astonished to find such faculties existing in some bodies.

But [as to myself, what can I now say that I am], since I suppose there exists an extremely powerful, and, if I may so speak, malignant being, whose whole endeavors are directed toward deceiving me? Can I affirm that I possess any one of all those attributes of which I have lately spoken as belonging to the nature of body? After attentively considering them in my own mind, I find none of them that can properly be said to belong to myself. To recount them were idle and tedious. Let us pass, then, to the attributes of the soul. The first mentioned were the powers of nutrition and walking; but, if it be true that I have no body, it is true likewise that I am capable neither of walking nor of being nourished. Perception is another attribute of the soul; but perception too is impossible without the body; besides, I have frequently, during sleep, believed that I perceived objects which I afterward observed I did not in reality perceive. Thinking is another attribute of the soul; and here I discover what properly belongs to myself. This alone is inseparable from me. I am—I exist: this is certain; but how often? As often as I think; for perhaps it would even happen, if I should wholly cease to think, that I should at the same time altogether cease to be. I now admit nothing that is not necessarily true. I am therefore, precisely speaking, only a thinking thing, that is, a mind (*mens sive animus*), understanding, or reason, terms whose signification was before unknown to me. I am, however, a real thing, and really existent; but what thing? The answer was, a thinking thing.

The question now arises, am I aught besides? I will stimulate my imagination with a view to discover whether I am not still something more than a thinking being. Now it is plain I am not the assemblage of members called the human body; I am not a thin and penetrating air diffused through all these members, or wind, or flame, or vapor, or breath, or any of all the things I can imagine; for I supposed that all these were not, and,

without changing the supposition, I find that I still feel assured of my existence. But it is true, perhaps, that those very things which I suppose to be non-existent, because they are unknown to me, are not in truth different from myself whom I know. This is a point I cannot determine, and do not now enter into any dispute regarding it. I can only judge of things that are known to me: I am conscious that I exist, and I who know that I exist inquire into what I am. It is, however, perfectly certain that the knowledge of my existence, thus precisely taken, is not dependent on things, the existence of which is as yet unknown to me: and consequently it is not dependent on any of the things I can feign in imagination. Moreover, the phrase itself, I frame an image (effingo), reminds me of my error; for I should in truth frame one if I were to imagine myself to be anything, since to imagine is nothing more than to contemplate the figure or image of a corporeal thing; but I already know that I exist, and that it is possible at the same time that all those images, and in general all that relates to the nature of body, are merely dreams [or chimeras]. From this I discover that it is not more reasonable to say, I will excite my imagination that I may know more distinctly what I am, than to express myself as follows: I am now awake, and perceive something real; but because my perception is not sufficiently clear, I will of express purpose go to sleep that my dreams may represent to me the object of my perception with more truth and clearness. And, therefore, I know that nothing of all that I can embrace in imagination belongs to the knowledge which I have of myself, and that there is need to recall with the utmost care the mind from this mode of thinking, that it may be able to know its own nature with perfect distinctness.

But what, then, am I? A thinking thing, it has been said. But what is a thinking thing? It is a thing that doubts, understands, [conceives], affirms, denies, wills, refuses; that imagines also, and perceives.

Assuredly it is not little, if all these properties belong to my nature. But why should they not belong to it? Am I not that very being who now doubts of almost everything; who, for all that, understands and conceives certain things; who affirms one alone as true, and denies the others; who desires to know more of them, and does not wish to be deceived; who imagines many things, sometimes even despite his will; and is likewise percipient of many, as if through the medium of the senses. Is there nothing of all this as true as that I am, even although I should be always dreaming, and although he who gave me being employed all his ingenuity to deceive me? Is there also any one of these attributes that can be properly distinguished from my thought, or that can be said to be separate from myself? For it is of itself so evident that it is I who doubt, I who understand, and I who desire, that it is here unnecessary to add anything by way of rendering it more clear. And I am as certainly the same being

who imagines; for although it may be (as I before supposed) that nothing I imagine is true, still the power of imagination does not cease really to exist in me and to form part of my thought. In fine, I am the same being who perceives, that is, who apprehends certain objects as by the organs of sense, since, in truth, I see light, hear a noise, and feel heat. But it will be said that these presentations are false, and that I am dreaming. Let it be so. At all events it is certain that I seem to see light, hear a noise, and feel heat; this cannot be false, and this is what in me is properly called perceiving (sentire), which is nothing else than thinking.

From this I begin to know what I am with somewhat greater clearness and distinctness than heretofore. But, nevertheless, it still seems to me, and I cannot help believing, that corporeal things, whose images are formed by thought [which fall under the senses], and are examined by the same, are known with much greater distinctness than that I know not what part of myself which is not imaginable; although, in truth, it may seem strange to say that I know and comprehend with greater distinctness things whose existence appears to me doubtful, that are unknown, and do not belong to me, than others of whose reality I am persuaded, that are known to me, and appertain to my proper nature; in a word, than myself. But I see clearly what is the state of the case. My mind is apt to wander, and will not yet submit to be restrained within the limits of truth. Let us therefore leave the mind to itself once more, and, according to it every kind of liberty [permit it to consider the objects that appear to it from without], in order that, having afterward withdrawn it from these gently and opportunely [and fixed it on the consideration of its being and the properties it finds in itself], it may then be the more easily controlled.

Let us now accordingly consider the objects that are commonly thought to be [the most easily, and likewise] the most distinctly known, viz, the bodies we touch and see; not, indeed, bodies in general, for these general notions are usually somewhat more confused, but one body in particular. Take, for example, this piece of wax; it is quite fresh, having been but recently taken from the beehive; it has not yet lost the sweetness of the honey it contained; it still retains somewhat of the odor of the flowers from which it was gathered; its color, figure, size, are apparent (to the sight); it is hard, cold, easily handled; and sounds when struck upon with the finger. In fine, all that contributes to make a body as distinctly known as possible, is found in the one before us. But, while I am speaking, let it be placed near the fire—what remained of the taste exhales, the smell evaporates, the color changes, its figure is destroyed, its size increases, it becomes liquid, it grows hot, it can hardly be handled, and, although struck upon, it emits no sound. Does the same wax still remain after this change? It must be admitted that it does remain; no one doubts it, or judges otherwise. What, then,

was it I knew with so much distinctness in the piece of wax? Assuredly, it could be nothing of all that I observed by means of the senses, since all the things that fell under taste, smell, sight, touch, and hearing are changed, and yet the same wax remains.

It was perhaps what I now think, viz, that this wax was neither the sweetness of honey, the pleasant odor of flowers, the whiteness, the figure, nor the sound, but only a body that a little before appeared to me conspicuous under these forms, and which is now perceived under others. But, to speak precisely, what is it that I imagine when I think of it in this way? Let it be attentively considered, and, retrenching all that does not belong to the wax, let us see what remains. There certainly remains nothing, except something extended, flexible, and movable. But what is meant by flexible and movable? Is it not that I imagine that the piece of wax, being round, is capable of becoming square, or of passing from a square into a triangular figure? Assuredly such is not the case, because I conceive that it admits of an infinity of similar changes; and I am, moreover, unable to compass this infinity by imagination, and consequently this conception which I have of the wax is not the product of the faculty of imagination. But what now is this extension? Is it not also unknown? for it becomes greater when the wax is melted, greater when it is boiled, and greater still when the heat increases; and I should not conceive [clearly and] according to truth, the wax as it is, if I did not suppose that the piece we are considering admitted even of a wider variety of extension than I ever imagined, I must, therefore, admit that I cannot even comprehend by imagination what the piece of wax is, and that it is the mind alone (*mens*, Lat., *entendement*, F.) which perceives it. I speak of one piece in particular; for as to wax in general, this is still more evident. But what is the piece of wax that can be perceived only by the [understanding or] mind? It is certainly the same which I see, touch, imagine; and, in fine, it is the same which, from the beginning, I believed it to be. But (and this it is of moment to observe) the perception of it is neither an act of sight, of touch, nor of imagination, and never was either of these, though it might formerly seem so, but is simply an intuition (*inspectio*) of the mind, which may be imperfect and confused, as it formerly was, or very clear and distinct, as it is at present, according as the attention is more or less directed to the elements which it contains, and of which it is composed.

But, meanwhile, I feel greatly astonished when I observe [the weakness of my mind, and] its proneness to error. For although, without at all giving expression to what I think, I consider all this in my own mind, words yet occasionally impede my progress, and I am almost led into error by the terms of ordinary language. We say, for example, that we see the same wax when it is before us, and not that we judge it to be the same from its retaining the same color and figure: whence I should

forthwith be disposed to conclude that the wax is known by the act of sight, and not by the intuition of the mind alone, were it not for the analogous instance of human beings passing on in the street below, as observed from a window. In this case I do not fail to say that I see the men themselves, just as I say that I see the wax; and yet what do I see from the window beyond hats and cloaks that might cover artificial machines, whose motions might be determined by springs? But I judge that there are human beings from these appearances, and thus I comprehend, by the faculty of judgment alone which is in the mind, what I believed I saw with my eyes.

The man who makes it his aim to rise to knowledge superior to the common, ought to be ashamed to seek occasions of doubting from the vulgar forms of speech: instead, therefore, of doing this, I shall proceed with the matter in hand, and inquire whether I had a clearer and more perfect perception of the piece of wax when I first saw it, and when I thought I knew it by means of the external sense itself, or, at all events, by the common sense (*sensus communis*), as it is called, that is, by the imaginative faculty; or whether I rather apprehend it more clearly at present, after having examined with greater care, both what it is, and in what way it can be known. It would certainly be ridiculous to entertain any doubt on this point. For what, in that first perception, was there distinct? What did I perceive which any animal might not have perceived? But when I distinguish the wax from its exterior forms, and when, as if I had stripped it of its vestments, I consider it quite naked, it is certain, although some error may still be found in my judgment, that I cannot, nevertheless, thus apprehend it without possessing a human mind.

But finally, what shall I say of the mind itself, that is, of myself? for as yet I do not admit that I am anything but mind. What, then! I who seem to possess so distinct an apprehension of the piece of wax, do I not know myself, both with greater truth and certitude, and also much more distinctly and clearly? For if I judge that the wax exists because I see it, it assuredly follows, much more evidently, that I myself am or exist, for the same reason: for it is possible that what I see may not in truth be wax, and that I do not even possess eyes with which to see anything; but it cannot be that when I see, or, which comes to the same thing, when I think I see, I myself who think am nothing. So likewise, if I judge that the wax exists because I touch it, it will still also follow that I am; and if I determine that my imagination, or any other cause, whatever it be, persuades me of the existence of the wax, I will still draw the same conclusion. And what is here remarked of the piece of wax, is applicable to all the other things that are external to me. And further, if the [notion or] perception of wax appeared to me more precise and distinct, after that not only sight and touch, but many other

causes besides, rendered it manifest to my apprehension, with how much greater distinctness must I now know myself, since all the reasons that contribute to the knowledge of the nature of wax, or of any body whatever, manifest still better the nature of my mind? And there are besides so many other things in the mind itself that contribute to the illustration of its nature, that those dependent on the body, to which I have here referred, scarcely merit to be taken into account.

But, in conclusion, I find I have insensibly reverted to the point I desired; for, since it is now manifest to me that bodies themselves are not properly perceived by the senses nor by the

faculty of imagination, but by the intellect alone; and since they are not perceived because they are seen and touched, but only because they are understood [or rightly comprehended by thought], I readily discover that there is nothing more easily or clearly apprehended than my own mind. But because it is difficult to rid one's self so promptly of an opinion to which one has been long accustomed, it will be desirable to tarry for some time at this stage, that, by long continued meditation, I may more deeply impress upon my memory this new knowledge.

9. A Posteriori Knowledge

By John Locke

INTRODUCTION.

1. *An Inquiry into the Understanding pleasant and useful.* Since it is the UNDERSTANDING that sets man above the rest of sensible beings, and gives him all the advantage and dominion which he has over them; it is certainly a subject, even for its nobleness, worth our labour to inquire into. The understanding, like the eye, whilst it makes us see and perceive all other things, takes no notice of itself; and it requires an art and pains to set it at a distance and make it its own object. But whatever be the difficulties that lie in the way of this inquiry; whatever it be that keeps us so much in the dark to ourselves; sure I am that all the light we can let in upon our minds, all the acquaintance we can make with our own understandings, will not only be very pleasant, but bring us great advantage, in directing our thoughts in the search of other things.

2. *Design.* This, therefore, being my purpose--to inquire into the original, certainty, and extent of HUMAN KNOWLEDGE, together with the grounds and degrees of BELIEF, OPINION, and ASSENT;--I shall not at present

meddle with the physical consideration of the mind; or trouble myself to examine wherein its essence consists; or by what motions of our spirits or alterations of our bodies we come to have any SENSATION by our organs, or any IDEAS in our understandings; and whether those ideas do in their formation, any or all of them, depend on matter or not. These are speculations which, however curious and entertaining, I shall decline, as lying out of my way in the design I am now upon. It shall suffice to my present purpose, to consider the discerning faculties of a man, as they are employed about the objects which they have to do with. And I shall imagine I have not wholly misemployed myself in the thoughts I shall have on this occasion, if, in this historical, plain method, I can give any account of the ways whereby our understandings come to attain those notions of things we have; and can set down any measures of the certainty of our knowledge; or the grounds of those persuasions which are to be found amongst men, so various, different, and wholly contradictory; and yet asserted somewhere or other with such assurance and confidence, that he that shall take a view of the opinions of mankind, observe their opposition,

and at the same time consider the fondness and devotion wherewith they are embraced, the resolution and eagerness wherewith they are maintained, may perhaps have reason to suspect, that either there is no such thing as truth at all, or that mankind hath no sufficient means to attain a certain knowledge of it.

3. *Method.* It is therefore worth while to search out the bounds between opinion and knowledge; and examine by what measures, in things whereof we have no certain knowledge, we ought to regulate our assent and moderate our persuasion. In order whereunto I shall pursue this following method:--

First, I shall inquire into the original of those ideas, notions, or whatever else you please to call them, which a man observes, and is conscious to himself he has in his mind; and the ways whereby the understanding comes to be furnished with them.

Secondly, I shall endeavour to show what knowledge the understanding hath by those ideas; and the certainty, evidence, and extent of it.

Thirdly, I shall make some inquiry into the nature and grounds of FAITH or OPINION: whereby I mean that assent which we give to any proposition as true, of whose truth yet we have no certain knowledge. And here we shall have occasion to examine the reasons and degrees of ASSENT.

4. *Useful to know the Extent of our Comprehension.* If by this inquiry into the nature of the understanding, I can discover the powers thereof; how far they reach; to what things they are in any degree proportionate; and where they fail us, I suppose it may be of use to prevail with the busy mind of man to be more cautious in meddling with things exceeding its comprehension; to stop when it is at the utmost extent of its tether; and to sit down in a quiet ignorance of those things which, upon examination, are found to be beyond the reach of our capacities. We should not then perhaps be so forward, out of an affectation of an universal knowledge, to raise questions, and perplex ourselves and others with disputes about things to which our understandings are not suited; and of which we cannot frame in our minds any clear or distinct perceptions, or whereof (as it has perhaps too often happened) we have not any notions at all. If we can find out how far the understanding can extend its view; how far it has faculties to attain certainty; and in what cases it can only judge and guess, we may learn to content ourselves with what is attainable by us in this state.

5. *Our Capacity suited to our State and Concerns.* For though the comprehension of our understandings comes exceeding short of the vast extent of things, yet we shall have cause enough to magnify the bountiful Author of our being, for

that proportion and degree of knowledge he has bestowed on us, so far above all the rest of the inhabitants of this our mansion. Men have reason to be well satisfied with what God hath thought fit for them, since he hath given them (as St. Peter says) [words in Greek], whatsoever is necessary for the conveniences of life and information of virtue; and has put within the reach of their discovery, the comfortable provision for this life, and the way that leads to a better. How short soever their knowledge may come of an universal or perfect comprehension of whatsoever is, it yet secures their great concernments, that they have light enough to lead them to the knowledge of their Maker, and the sight of their own duties. Men may find matter sufficient to busy their heads, and employ their hands with variety, delight, and satisfaction, if they will not boldly quarrel with their own constitution, and throw away the blessings their hands are filled with, because they are not big enough to grasp everything. We shall not have much reason to complain of the narrowness of our minds, if we will but employ them about what may be of use to us; for of that they are very capable. And it will be an unpardonable, as well as childish peevishness, if we undervalue the advantages of our knowledge, and neglect to improve it to the ends for which it was given us, because there are some things that are set out of the reach of it. It will be no excuse to an idle and untoward servant, who would not attend his business by candle light, to plead that he had not broad sunshine. The Candle that is set up in us shines bright enough for all our purposes. The discoveries we can make with this ought to satisfy us; and we shall then use our understandings right, when we entertain all objects in that way and proportion that they are suited to our faculties, and upon those grounds they are capable of being proposed to us; and not peremptorily or intemperately require demonstration, and demand certainty, where probability only is to be had, and which is sufficient to govern all our concernments. If we will disbelieve everything, because we cannot certainly know all things, we shall do much what as wisely as he who would not use his legs, but sit still and perish, because he had no wings to fly.

6. *Knowledge of our Capacity a Cure of Scepticism and Idleness.* When we know our own strength, we shall the better know what to undertake with hopes of success; and when we have well surveyed the POWERS of our own minds, and made some estimate what we may expect from them, we shall not be inclined either to sit still, and not set our thoughts on work at all, in despair of knowing anything; nor on the other side, question everything, and disclaim all knowledge, because some things are not to be understood. It is of great use to the sailor to know the length of his line, though he cannot with it fathom all the depths of the ocean. It is well he knows that it is long enough to reach the bottom, at such places as are necessary to direct his voyage,

and caution him against running upon shoals that may ruin him. Our business here is not to know all things, but those which concern our conduct. If we can find out those measures, whereby a rational creature, put in that state in which man is in this world, may and ought to govern his opinions, and actions depending thereon, we need not to be troubled that some other things escape our knowledge.

7. *Occasion of this Essay.* This was that which gave the first rise to this Essay concerning the understanding. For I thought that the first step towards satisfying several inquiries the mind of man was very apt to run into, was, to take a survey of our own understandings, examine our own powers, and see to what things they were adapted. Till that was done I suspected we began at the wrong end, and in vain sought for satisfaction in a quiet and sure possession of truths that most concerned us, whilst we let loose our thoughts into the vast ocean of Being; as if all that boundless extent were the natural and undoubted possession of our understandings, wherein there was nothing exempt from its decisions, or that escaped its comprehension. Thus men, extending their inquiries beyond their capacities, and letting their thoughts wander into those depths where they can find no sure footing, it is no wonder that they raise questions and multiply disputes, which, never coming to any clear resolution, are proper only to continue and increase their doubts, and to confirm them at last in perfect scepticism. Whereas, were the capacities of our understandings well considered, the extent of our knowledge once discovered, and the horizon found which sets the bounds between the enlightened and dark parts of things; between what is and what is not comprehensible by us, men would perhaps with less scruple acquiesce in the avowed ignorance of the one, and employ their thoughts and discourse with more advantage and satisfaction in the other.

8. *What Idea stands for.* Thus much I thought necessary to say concerning the occasion of this inquiry into human Understanding. But, before I proceed on to what I have thought on this subject, I must here in the entrance beg pardon of my reader for the frequent use of the word IDEA, which he will find in the following treatise. It being that term which, I think, serves best to stand for whatsoever is the OBJECT of the understanding when a man thinks, I have used it to express whatever is meant by PHANTASM, NOTION, SPECIES, or WHATEVER IT IS WHICH THE MIND CAN BE EMPLOYED ABOUT IN THINKING; and I could not avoid frequently using it. I presume it will be easily granted me, that there are such IDEAS in men's minds: every one is conscious of them in himself; and men's words and actions will satisfy him that they are in others.

Our first inquiry then shall be,—how they come into the mind.

CHAPTER I. NO INNATE SPECULATIVE PRINCIPLES.

1. *The way shown how we come by any Knowledge, sufficient to prove it not innate.* It is an established opinion amongst some men, that there are in the understanding certain INNATE PRINCIPLES; some primary notions, KOIVAI EVVOIAI, characters, as it were stamped upon the mind of man; which the soul receives in its very first being, and brings into the world with it. It would be sufficient to convince unprejudiced readers of the falseness of this supposition, if I should only show (as I hope I shall in the following parts of this Discourse) how men, barely by the use of their natural faculties may attain to all the knowledge they have, without the help of any innate impressions; and may arrive at certainty, without any such original notions or principles. For I imagine any one will easily grant that it would be impertinent to suppose the ideas of colours innate in a creature to whom God hath given sight, and a power to receive them by the eyes from external objects: and no less unreasonable would it be to attribute several truths to the impressions of nature, and innate characters, when we may observe in ourselves faculties fit to attain as easy and certain knowledge of them as if they were originally imprinted on the mind.

But because a man is not permitted without censure to follow his own thoughts in the search of truth, when they lead him ever so little out of the common road, I shall set down the reasons that made me doubt of the truth of that opinion, as an excuse for my mistake, if I be in one; which I leave to be considered by those who, with me, dispose themselves to embrace truth wherever they find it.

2. *General Assent the great Argument.* There is nothing more commonly taken for granted than that there are certain PRINCIPLES, both SPECULATIVE and PRACTICAL, (for they speak of both), universally agreed upon by all mankind: which therefore, they argue, must needs be the constant impressions which the souls of men receive in their first beings, and which they bring into the world with them, as necessarily and really as they do any of their inherent faculties.

3. *Universal Consent proves nothing innate.* This argument, drawn from universal consent, has this misfortune in it, that if it were true in matter of fact, that there were certain truths wherein all mankind agreed, it would not prove them innate, if there can be any other way shown how men may come to that universal agreement, in the things they do consent in, which I presume may be done.

4. *"What is is," and "It is possible for the same Thing to be and not to be," not universally assented to.* But, which is worse, this argument of universal consent, which is made use of

to prove innate principles, seems to me a demonstration that there are none such: because there are none to which all mankind give an universal assent. I shall begin with the speculative, and instance in those magnified principles of demonstration, "Whatsoever is, is," and "It is impossible for the same thing to be and not to be"; which, of all others, I think have the most allowed title to innate. These have so settled a reputation of maxims universally received, that it will no doubt be thought strange if any one should seem to question it. But yet I take liberty to say, that these propositions are so far from having an universal assent, that there are a great part of mankind to whom they are not so much as known.

5. *Not on Mind naturally imprinted, because not known to Children, Idiots, &c.* For, first, it is evident, that all children and idiots have not the least apprehension or thought of them. And the want of that is enough to destroy that universal assent which must needs be the necessary concomitant of all innate truths: it seeming to me near a contradiction to say, that there are truths imprinted on the soul, which it perceives or understands not: imprinting, if it signify anything, being nothing else but the making certain truths to be perceived. For to imprint anything on the mind without the mind's perceiving it, seems to me hardly intelligible. If therefore children and idiots have souls, have minds, with those impressions upon them, THEY must unavoidably perceive them, and necessarily know and assent to these truths; which since they do not, it is evident that there are no such impressions. For if they are not notions naturally imprinted, how can they be innate? and if they are notions imprinted, how can they be unknown? To say a notion is imprinted on the mind, and yet at the same time to say, that the mind is ignorant of it, and never yet took notice of it, is to make this impression nothing. No proposition can be said to be in the mind which it never yet knew, which it was never yet conscious of. For if any one may, then, by the same reason, all propositions that are true, and the mind is capable ever of assenting to, may be said to be in the mind, and to be imprinted: since, if any one can be said to be in the mind, which it never yet knew, it must be only because it is capable of knowing it; and so the mind is of all truths it ever shall know. Nay, thus truths may be imprinted on the mind which it never did, nor ever shall know; for a man may live long, and die at last in ignorance of many truths which his mind was capable of knowing, and that with certainty. So that if the capacity of knowing be the natural impression contended for, all the truths a man ever comes to know will, by this account, be every one of them innate; and this great point will amount to no more, but only to a very improper way of speaking; which, whilst it pretends to assert the contrary, says nothing different from those who deny innate principles. For nobody, I think, ever denied that the mind was capable of knowing several truths. The

capacity, they say, is innate; the knowledge acquired. But then to what end such contest for certain innate maxims? If truths can be imprinted on the understanding without being perceived, I can see no difference there can be between any truths the mind is CAPABLE of knowing in respect of their original: they must all be innate or all adventitious: in vain shall a man go about to distinguish them. He therefore that talks of innate notions in the understanding, cannot (if he intend thereby any distinct sort of truths) mean such truths to be in the understanding as it never perceived, and is yet wholly ignorant of. For if these words "to be in the understanding" have any propriety, they signify to be understood. So that to be in the understanding, and not to be understood; to be in the mind and never to be perceived, is all one as to say anything is and is not in the mind or understanding. If therefore these two propositions, "Whatsoever is, is," and "It is impossible for the same thing to be and not to be," are by nature imprinted, children cannot be ignorant of them: infants, and all that have souls, must necessarily have them in their understandings, know the truth of them, and assent to it.

6. *That men know them when they come to the Use of Reason answered.* To avoid this, it is usually answered, that all men know and assent to them, WHEN THEY COME TO THE USE OF REASON; and this is enough to prove them innate. I answer:

7. Doubtful expressions, that have scarce any signification, go for clear reasons to those who, being prepossessed, take not the pains to examine even what they themselves say. For, to apply this answer with any tolerable sense to our present purpose, it must signify one of these two things: either that as soon as men come to the use of reason these supposed native inscriptions come to be known and observed by them; or else, that the use and exercise of men's reason, assists them in the discovery of these principles, and certainly makes them known to them.

8. *If Reason discovered them, that would not prove them innate.* If they mean, that by the use of reason men may discover these principles, and that this is sufficient to prove them innate; their way of arguing will stand thus, viz. that whatever truths reason can certainly discover to us, and make us firmly assent to, those are all naturally imprinted on the mind; since that universal assent, which is made the mark of them, amounts to no more but this,--that by the use of reason we are capable to come to a certain knowledge of and assent to them; and, by this means, there will be no difference between the maxims of the mathematicians, and theorems they deduce from them: all must be equally allowed innate; they being all discoveries made by the use of reason, and truths that a rational creature may certainly come to know, if he apply his thoughts rightly that way.

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12. *The coming of the Use of Reason not the Time we come to know these Maxims.* If by knowing and assenting to them "when we come to the use of reason," be meant, that this is the time when they come to be taken notice of by the mind; and that as soon as children come to the use of reason, they come also to know and assent to these maxims; this also is false and frivolous. First, it is false; because it is evident these maxims are not in the mind so early as the use of reason; and therefore the coming to the use of reason is falsely assigned as the time of their discovery. How many instances of the use of reason may we observe in children, a long time before they have any knowledge of this maxim, "That it is impossible for the same thing to be and not to be?" And a great part of illiterate people and savages pass many years, even of their rational age, without ever thinking on this and the like general propositions. I grant, men come not to the knowledge of these general and more abstract truths, which are thought innate, till they come to the use of reason; and I add, nor then neither. Which is so, because, till after they come to the use of reason, those general abstract ideas are not framed in the mind, about which those general maxims are, which are mistaken for innate principles, but are indeed discoveries made and verities introduced and brought into the mind by the same way, and discovered by the same steps, as several other propositions, which nobody was ever so extravagant as to suppose innate. This I hope to make plain in the sequel of this Discourse. I allow therefore, a necessity that men should come to the use of reason before they get the knowledge of those general truths; but deny that men's coming to the use of reason is the time of their discovery.

13. *By this they are not distinguished from other knowable Truths.* In the mean time it is observable, that this saying that men know and assent to these maxims "when they come to the use of reason," amounts in reality of fact to no more but this,—that they are never known nor taken notice of before the use of reason, but may possibly be assented to some time after, during a man's life; but when is uncertain. And so may all other knowable truths, as well as these which therefore have no advantage nor distinction from other by this note of being known when we come to the use of reason; nor are thereby proved to be innate, but quite the contrary.

14. *If coming to the Use of Reason were the Time of their Discovery, it would not prove them innate.* But, secondly, were it true that the precise time of their being known and assented to were, when men come to the use of reason; neither would that prove them innate. This way of arguing is as frivolous as the supposition itself is false. For, by what kind of logic will it appear that any notion is originally by nature

imprinted in the mind in its first constitution, because it comes first to be observed and assented to when a faculty of the mind, which has quite a distinct province, begins to exert itself? And therefore the coming to the use of speech, if it were supposed the time that these maxims are first assented to, (which it may be with as much truth as the time when men come to the use of reason,) would be as good a proof that they were innate, as to say they are innate because men assent to them when they come to the use of reason. I agree then with these men of innate principles, that there is no knowledge of these general and self-evident maxims in the mind, till it comes to the exercise of reason: but I deny that the coming to the use of reason is the precise time when they are first taken notice of; and if that were the precise time, I deny that it would prove them innate. All that can with any truth be meant by this proposition, that men 'assent to them when they come to the use of reason,' is no more but this,—that the making of general abstract ideas, and the understanding of general names, being a concomitant of the rational faculty, and growing up with it, children commonly get not those general ideas, nor learn the names that stand for them, till, having for a good while exercised their reason about familiar and more particular ideas, they are, by their ordinary discourse and actions with others, acknowledged to be capable of rational conversation. If assenting to these maxims, when men come to the use of reason, can be true in any other sense, I desire it may be shown; or at least, how in this, or any other sense, it proves them innate.

15. *The Steps by which the Mind attains several Truths.* The senses at first let in PARTICULAR ideas, and furnish the yet empty cabinet, and the mind by degrees growing familiar with some of them, they are lodged in the memory, and names got to them. Afterwards, the mind proceeding further, abstracts them, and by degrees learns the use of general names. In this manner the mind comes to be furnished with ideas and language, the MATERIALS about which to exercise its discursive faculty. And the use of reason becomes daily more visible, as these materials that give it employment increase. But though the having of general ideas and the use of general words and reason usually grow together, yet I see not how this any way proves them innate. The knowledge of some truths, I confess, is very early in the mind; but in a way that shows them not to be innate. For, if we will observe, we shall find it still to be about ideas, not innate, but acquired; it being about those first which are imprinted by external things, with which infants have earliest to do, which make the most frequent impressions on their senses. In ideas thus got, the mind discovers that some agree and others differ, probably as soon as it has any use of memory; as soon as it is able to retain and perceive distinct ideas. But whether it be then or no, this is certain, it does so long before it has the use of

words; or comes to that which we commonly call "the use of reason." For a child knows as certainly before it can speak the difference between the ideas of sweet and bitter (i.e. that sweet is not bitter), as it knows afterwards (when it comes to speak) that wormwood and sugarplums are not the same thing.

CHAPTER II. NO INNATE PRACTICAL PRINCIPLES

1. *No moral Principles so clear and so generally received as the forementioned speculative Maxims.* If those speculative Maxims, whereof we discoursed in the foregoing chapter, have not an actual universal assent from all mankind, as we there proved, it is much more visible concerning PRACTICAL Principles, that they come short of an universal reception: and I think it will be hard to instance any one moral rule which can pretend to so general and ready an assent as, "What is, is"; or to be so manifest a truth as this, that "It is impossible for the same thing to be and not to be." Whereby it is evident that they are further removed from a title to be innate; and the doubt of their being native impressions on the mind is stronger against those moral principles than the other. Not that it brings their truth at all in question. They are equally true, though not equally evident. Those speculative maxims carry their own evidence with them: but moral principles require reasoning and discourse, and some exercise of the mind, to discover the certainty of their truth. They lie not open as natural characters engraved on the mind; which, if any such were, they must needs be visible by themselves, and by their own light be certain and known to everybody. But this is no derogation to their truth and certainty; no more than it is to the truth or certainty of the three angles of a triangle being equal to two right ones because it is not so evident as "the whole is bigger than a part," nor so apt to be assented to at first hearing. It may suffice that these moral rules are capable of demonstration: and therefore it is our own faults if we come not to a certain knowledge of them. But the ignorance wherein many men are of them, and the slowness of assent wherewith others receive them, are manifest proofs that they are not innate, and such as offer themselves to their view without searching.

2. *Faith and Justice not owned as Principles by all Men.* Whether there be any such moral principles, wherein all men do agree, I appeal to any who have been but moderately conversant in the history of mankind, and looked abroad beyond the smoke of their own chimneys. Where is that practical truth that is universally received, without doubt or question, as it must be if innate? JUSTICE, and keeping of contracts, is that which most men seem to agree in. This is a principle which is thought to extend itself to the dens of thieves, and the confederacies of the greatest villains; and they who have gone furthest towards the putting off of humanity itself, keep faith and rules of justice

one with another. I grant that outlaws themselves do this one amongst another: but it is without receiving these as the innate laws of nature. They practice them as rules of convenience within their own communities: but it is impossible to conceive that he embraces justice as a practical principle who acts fairly with his fellow-highwayman, and at the same time plunders or kills the next honest man he meets with Justice and truth are the common ties of society; and therefore even outlaws and robbers, who break with all the world besides, must keep faith and rules of equity amongst themselves; or else they cannot hold together. But will any one say, that those that live by fraud or rapine have innate principles of truth and justice which they allow and assent to?...

4. *Moral Rules need a Proof, ERGO not innate.* Another reason that makes me doubt of any innate practical principles is, that I think THERE CANNOT ANY ONE MORAL RULE BE PROPOSED WHEREOF A MAN MAY NOT JUSTLY DEMAND A REASON: which would be perfectly ridiculous and absurd if they were innate; or so much as self-evident, which every innate principle must needs be, and not need any proof to ascertain its truth, nor want any reason to gain it approbation. He would be thought void of common sense who asked on the one side, or on the other side went to give a reason WHY "it is impossible for the same thing to be and not to be." It carries its own light and evidence with it, and needs no other proof: he that understands the terms assents to it for its own sake or else nothing will ever be able to prevail with him to do it. But should that most unshaken rule of morality and foundation of all social virtue, "That should do as he would be done unto," be proposed to one who never heard of it before, but yet is of capacity to understand its meaning; might he not without any absurdity ask a reason why? And were not he that proposed it bound to make out the truth and reasonableness of it to him? Which plainly shows it not to be innate; for if it were it could neither want nor receive any proof; but must needs (at least as soon as heard and understood) be received and assented to as an unquestionable truth, which a man can by no means doubt of. So that the truth of all these moral rules plainly depends upon some other antecedent to them, and from which they must be DEDUCED; which could not be if either they were innate or so much as self-evident. ...

BOOK II

CHAPTER I. OF IDEAS IN GENERAL, AND THEIR ORIGINAL.

1. *Idea is the Object of Thinking.* Every man being conscious to himself that he thinks; and that which his mind is applied about whilst thinking being the IDEAS that are there, it is past doubt

that men have in their minds several ideas,--such as are those expressed by the words whiteness, hardness, sweetness, thinking, motion, man, elephant, army, drunkenness, and others: it is in the first place then to be inquired, HOW HE COMES BY THEM?

I know it is a received doctrine, that men have native ideas, and original characters, stamped upon their minds in their very first being. This opinion I have at large examined already; and, I suppose what I have said in the foregoing Book will be much more easily admitted, when I have shown whence the understanding may get all the ideas it has; and by what ways and degrees they may come into the mind;--for which I shall appeal to every one's own observation and experience.

2. *All Ideas come from Sensation or Reflection.* Let us then suppose the mind to be, as we say, white paper, void of all characters, without any ideas:--How comes it to be furnished? Whence comes it by that vast store which the busy and boundless fancy of man has painted on it with an almost endless variety? Whence has it all the MATERIALS of reason and knowledge? To this I answer, in one word, from EXPERIENCE. In that all our knowledge is founded; and from that it ultimately derives itself. Our observation employed either, about external sensible objects, or about the internal operations of our minds perceived and reflected on by ourselves, is that which supplies our understandings with all the MATERIALS of thinking. These two are the fountains of knowledge, from whence all the ideas we have, or can naturally have, do spring.

3. *The Objects of Sensation one Source of Ideas.* First, our Senses, conversant about particular sensible objects, do convey into the mind several distinct perceptions of things, according to those various ways wherein those objects do affect them. And thus we come by those IDEAS we have of yellow, white, heat, cold, soft, hard, bitter, sweet, and all those which we call sensible qualities; which when I say the senses convey into the mind, I mean, they from external objects convey into the mind what produces there those perceptions. This great source of most of the ideas we have, depending wholly upon our senses, and derived by them to the understanding, I call SENSATION.

4. *The Operations of our Minds, the other Source of them.* Secondly, the other fountain from which experience furnisheth the understanding with ideas is,--the perception of the operations of our own mind within us, as it is employed about the ideas it has got;--which operations, when the soul comes to reflect on and consider, do furnish the understanding with another set of ideas, which could not be had from things without. And such are perception, thinking, doubting, believing, reasoning, knowing, willing, and all the different actings of our own minds;--which we being conscious of, and observing in ourselves, do from

these receive into our understandings as distinct ideas as we do from bodies affecting our senses. This source of ideas every man has wholly in himself; and though it be not sense, as having nothing to do with external objects, yet it is very like it, and might properly enough be called INTERNAL SENSE. But as I call the other Sensation, so I call this REFLECTION, the ideas it affords being such only as the mind gets by reflecting on its own operations within itself. By reflection then, in the following part of this discourse, I would be understood to mean, that notice which the mind takes of its own operations, and the manner of them, by reason whereof there come to be ideas of these operations in the understanding. These two, I say, viz. external material things, as the objects of SENSATION, and the operations of our own minds within, as the objects of REFLECTION, are to me the only originals from whence all our ideas take their beginnings. The term OPERATIONS here I use in a large sense, as comprehending not barely the actions of the mind about its ideas, but some sort of passions arising sometimes from them, such as is the satisfaction or uneasiness arising from any thought...

CHAPTER II. OF SIMPLE IDEAS.

1. *Uncompounded Appearances.* The better to understand the nature, manner, and extent of our knowledge, one thing is carefully to be observed concerning the ideas we have; and that is, that some of them, are SIMPLE and some COMPLEX.

Though the qualities that affect our senses are, in the things themselves, so united and blended, that there is no separation, no distance between them; yet it is plain, the ideas they produce in the mind enter by the senses simple; and unmixed. For, though the sight and touch often take in from the same object, at the same time, different ideas;--as a man sees at once motion and colour; the hand feels softness and warmth in the same piece of wax: yet the simple ideas thus united in the same subject, are as perfectly distinct as those that come in by different senses. The coldness and hardness which a man feels in a piece of ice being as distinct ideas in the mind as the smell and whiteness of a lily; or as the taste of sugar, and smell of a rose. And there is nothing can be plainer to a man than the clear and distinct perception he has of those simple ideas; which, being each in itself uncompounded, contains in it nothing but ONE UNIFORM APPEARANCE, OR CONCEPTION IN THE MIND, and is not distinguishable into different ideas.

2. *The Mind can neither make nor destroy them.* These simple ideas, the materials of all our knowledge, are suggested and furnished to the mind only by those two ways above mentioned, viz. sensation and reflection. When the

understanding is once stored with these simple ideas, it has the power to repeat, compare, and unite them, even to an almost infinite variety, and so can make at pleasure new complex ideas. But it is not in the power of the most exalted wit, or enlarged understanding, by any quickness or variety of thought, to INVENT or FRAME one new simple idea in the mind, not taken in by the ways before mentioned: nor can any force of the understanding DESTROY those that are there. The dominion of man, in this little world of his own understanding being much what the same as it is in the great world of visible things; wherein his power, however managed by art and skill, reaches no farther than to compound and divide the materials that are made to his hand; but can do nothing towards the making the least particle of new matter, or destroying one atom of what is already in being. The same inability will every one find in himself, who shall go about to fashion in his understanding one simple idea, not received in by his senses from external objects, or by reflection from the operations of his own mind about them. I would have any one try to fancy any taste which had never affected his palate; or frame the idea of a scent he had never smelt: and when he can do this, I will also conclude that a blind man hath ideas of colours, and a deaf man true distinct notions of sounds.

3. *Only the qualities that affect the senses are imaginable.* This is the reason why--though we cannot believe it

impossible to God to make a creature with other organs, and more ways to convey into the understanding the notice of corporeal things than those five, as they are usually counted, which he has given to man--yet I think it is not possible for any MAN to imagine any other qualities in bodies, howsoever constituted, whereby they can be taken notice of, besides sounds, tastes, smells, visible and tangible qualities. And had mankind been made but with four senses, the qualities then which are the objects of the fifth sense had been as far from our notice, imagination, and conception, as now any belonging to a sixth, seventh, or eighth sense can possibly be;--which, whether yet some other creatures, in some other parts of this vast and stupendous universe, may not have, will be a great presumption to deny. He that will not set himself proudly at the top of all things, but will consider the immensity of this fabric, and the great variety that is to be found in this little and inconsiderable part of it which he has to do with, may be apt to think that, in other mansions of it, there may be other and different intelligent beings, of whose faculties he has as little knowledge or apprehension as a worm shut up in one drawer of a cabinet hath of the senses or understanding of a man; such variety and excellency being suitable to the wisdom and power of the Maker. I have here followed the common opinion of man's having but five senses; though, perhaps, there may be justly counted more;--but either supposition serves equally to my present purpose.

Part III

Reality

10. Mind and Body

By Rene Descartes

MEDITATION VI. Of the Existence of Material Things, and of the Real Distinction Between the Mind

... Moreover, I find in myself diverse faculties of thinking that have each their special mode: for example, I find I possess the faculties of imagining and perceiving, without which I can indeed clearly and distinctly conceive myself as entire, but I cannot reciprocally conceive them without conceiving myself, that is to say, without an intelligent substance in which they reside, for [in the notion we have of them, or to use the terms of the schools] in their formal concept, they comprise some sort of intellection; whence I perceive that they are distinct from myself as modes are from things. I remark likewise certain other faculties, as the power of changing place, of assuming diverse figures, and the like, that cannot be conceived and cannot therefore exist, any more than the preceding, apart from a substance in which they inhere. It is very evident, however, that these faculties, if they really exist, must belong to some corporeal or extended substance, since in their clear and distinct concept there is contained some sort of extension, but no intellection at all. Further, I cannot doubt but that there is in me a certain passive faculty of perception, that is, of receiving and

taking knowledge of the ideas of sensible things ; but this would be useless to me, if there did not also exist in me, or in some other thing, another active faculty capable of forming and producing those ideas. But this active faculty cannot be in me [in as far as I am but a thinking thing], seeing that it does not presuppose thought, and also that those ideas are frequently produced in my mind without my contributing to it in any way, and even frequently contrary to my will. This faculty must therefore exist in some substance different from me, in which all the objective reality of the ideas that are produced by this faculty ...

But there is nothing which that nature teaches me more expressly [or more sensibly] than that I have a body which is ill affected when I feel pain, and stands in need of food and drink when I experience the sensations of hunger and thirst, etc. And therefore I ought not to doubt but that there is some truth in these informations. Nature likewise teaches me by these sensations of pain, hunger, thirst, etc., that I am not only lodged in my body as a pilot in a vessel, but that I am besides so intimately conjoined, and as it were intermixed with it, that my mind and body compose a certain unity. For if this were not the case, I should

not feel pain when my body is hurt, seeing I am merely a thinking thing, but should perceive the wound by the understanding alone, just as a pilot perceives by sight when any part of his vessel is damaged; and when my body has need of food or drink, I should have a clear knowledge of this, and not be made aware of it by the confused sensations of hunger and thirst: for, in truth, all these sensations of hunger, thirst, pain, etc., are nothing more than certain confused modes of thinking, arising from the union and apparent fusion of mind and body.

Besides this, nature teaches me that my own body is surrounded by many other bodies, some of which I have to seek after, and others to shun. And indeed, as I perceive different sorts of colors, sounds, odors, tastes, heat, hardness, etc., I safely conclude that there are in the bodies from which the diverse perceptions of the senses proceed, certain varieties corresponding to them, although, perhaps, not in reality like them ; and since, among these diverse perceptions of the senses, some are agreeable, and others disagreeable, there can be no doubt that my body, or rather my entire self, in as far as I am composed of body and mind, may be variously affected, both beneficially and hurtfully, by surrounding bodies. ...

To commence this examination accordingly, I here remark, in the first place, that there is a vast difference between mind and body, in respect that body, from its nature, is always divisible, and that mind is entirely indivisible. For in truth, when I consider the mind, that is, when I consider myself in so far only as I am a thinking thing, I can distinguish in myself no parts, but I very clearly discern that I am somewhat absolutely one and entire; and although the whole mind seems to be united to the whole body, yet, when a foot, an arm, or any other part is cut off, I am conscious that nothing has been taken from my mind; nor can the faculties of willing, perceiving, conceiving, etc., properly be called its parts, for it is the same mind that is exercised [all entire] in willing, in perceiving, and in conceiving, etc. But quite the opposite holds in corporeal or extended things ; for I cannot imagine any one of them [how small soever it may be], which I cannot easily sunder in thought, and which, therefore, I do not know to be divisible. This would be sufficient to teach me that the mind or soul of man is entirely different from the body, if I had not already been apprised of it on other grounds.

I remark, in the next place, that the mind does not immediately receive the impression from all the parts of the body, but only from the brain, or perhaps even from one small part of it, viz, that in which the common sense {sensus communis} is said to be, which as often as it is affected in the same way gives rise to the same perception in the mind, although meanwhile the other parts of the body may be diversely

disposed, as is proved by innumerable experiments, which it is unnecessary here to enumerate.

I remark, besides, that the nature of body is such that none of its parts can be moved by another part a little removed from the other, which cannot likewise be moved in the same way by any one of the parts that lie between those two, although the most remote part does not act at all. As, for example, in the cord a, b, c, d, [which is in tension], if its last part d, be pulled, the first part a, will not be moved in a different way than it would be were one of the intermediate parts b or c to be pulled, and the last part d meanwhile to remain fixed. And in the same way, when I feel pain in the foot, the science of physics teaches me that this sensation is experienced by means of the nerves dispersed over the foot, which, extending like cords from it to the brain, when they are contracted in the foot, contract at the same time the inmost parts of the brain in which they have their origin, and excite in these parts a certain motion appointed by nature to cause in the mind a sensation of pain, as if existing in the foot ; but as these nerves must pass through the tibia, the leg, the loins, the back, and neck, in order to reach the brain, it may happen that although their extremities in the foot are not affected, but only certain of their parts that pass through the loins or neck, the same movements, nevertheless, are excited in the brain by this motion as would have been caused there by a hurt received in the foot, and hence the mind will necessarily feel pain in the foot, just as if it had been hurt; and the same is true of all the other perceptions of our senses.

I remark, finally, that as each of the movements that are made in the part of the brain by which the mind is immediately affected, impresses it with but a single sensation, the most likely supposition in the circumstances is, that this movement causes the mind to experience, among all the sensations which it is capable of impressing upon it, that one which is the best fitted, and generally the most useful for the preservation of the human body when it is in full health. But experience shows us that all the perceptions which nature has given us are of such a kind as I have mentioned; and accordingly, there is nothing found in them that does not manifest the power and goodness of God. Thus, for example, when the nerves of the foot are violently or more than usually shaken, the motion passing through the medulla of the spine to the innermost parts of the brain affords a sign to the mind on which it experiences a sensation, viz., of pain, as if it were in the foot, by which the mind is admonished and excited to do its utmost to remove the cause of it as dangerous and hurtful to the foot. It is true that God could have so constituted the nature of man as that the same motion in the brain would have informed the mind of something altogether different: the motion might, for example, have been the occasion on which the mind became conscious of itself, in so far as it is in the brain, or

in so far as it is in some place intermediate between the foot and the brain, or, finally, the occasion on which it perceived some other object quite different, whatever that might be; but nothing of all this would have so well contributed to the preservation of the body as that which the mind actually feels. In the same way, when we stand in need of drink, there arises from this want a

certain parchedness in the throat that moves its nerves, and by means of them the internal parts of the brain; and this movement affects the mind with the sensation of thirst, because there is nothing on that occasion which is more useful for us than to be made aware that we have need of drink for the preservation of our health; and so in other instances.

11. Reality is Mind Dependent

By George Berkeley

HYL. You were represented, in last night's conversation, as one who maintained the most extravagant opinion that ever entered into the mind of man, to wit, that there is no such thing as MATERIAL SUBSTANCE in the world.

PHIL. That there is no such thing as what PHILOSOPHERS CALL MATERIAL SUBSTANCE, I am seriously persuaded: but, if I were made to see anything absurd or sceptical in this, I should then have the same reason to renounce this that I imagine I have now to reject the contrary opinion.

HYL. What I can anything be more fantastical, more repugnant to Common Sense, or a more manifest piece of Scepticism, than to believe there is no such thing as MATTER?

PHIL. Softly, good Hylas. What if it should prove that you, who hold there is, are, by virtue of that opinion, a greater sceptic, and maintain more paradoxes and repugnances to Common Sense, than I who believe no such thing?

HYL. You may as soon persuade me, the part is greater than the whole, as that, in order to avoid absurdity and Scepticism, I should ever be obliged to give up my opinion in this point.

PHIL. Well then, are you content to admit that opinion for true, which upon examination shall appear most agreeable to Common Sense, and remote from Scepticism?

HYL. With all my heart. Since you are for raising disputes about the plainest things in nature, I am content for once to hear what you have to say.

PHIL. Pray, Hylas, what do you mean by a SCEPTIC?

HYL. I mean what all men mean—one that doubts of everything.

PHIL. He then who entertains no doubts concerning some particular point, with regard to that point cannot be thought a sceptic.

HYL. I agree with you.

PHIL. Whether doth doubting consist in embracing the affirmative or negative side of a question?

HYL. In neither; for whoever understands English cannot but know that DOUBTING signifies a suspense between both.

PHIL. He then that denies any point, can no more be said to

doubt of it, than he who affirmeth it with the same degree of assurance.

HYL. True.

PHIL. And, consequently, for such his denial is no more to be esteemed a sceptic than the other.

HYL. I acknowledge it.

PHIL. How cometh it to pass then, Hylas, that you pronounce me A SCEPTIC, because I deny what you affirm, to wit, the existence of Matter? Since, for aught you can tell, I am as preemptory in my denial, as you in your affirmation.

HYL. Hold, Philonous, I have been a little out in my definition; but every false step a man makes in discourse is not to be insisted on. I said indeed that a SCEPTIC was one who doubted of everything; but I should have added, or who denies the reality and truth of things.

PHIL. What things? Do you mean the principles and theorems of sciences? But these you know are universal intellectual notions, and consequently independent of Matter. The denial therefore of this doth not imply the denying them.

HYL. I grant it. But are there no other things? What think you of distrusting the senses, of denying the real existence of sensible things, or pretending to know nothing of them. Is not this sufficient to denominate a man a SCEPTIC?

PHIL. Shall we therefore examine which of us it is that denies the reality of sensible things, or professes the greatest ignorance of them; since, if I take you rightly, he is to be esteemed the greatest SCEPTIC?

HYL. That is what I desire.

PHIL. What mean you by Sensible Things?

HYL. Those things which are perceived by the senses. Can you imagine that I mean anything else?

PHIL. Pardon me, Hylas, if I am desirous clearly to apprehend your notions, since this may much shorten our inquiry. Suffer me then to ask you this farther question. Are those things only perceived by the senses which are perceived immediately? Or, may those things properly be said to be SENSIBLE which are perceived mediately, or not without the intervention of others?

HYL. I do not sufficiently understand you.

PHIL. In reading a book, what I immediately perceive are the letters; but mediately, or by means of these, are suggested to my mind the notions of God, virtue, truth, &c. Now, that the letters are truly sensible things, or perceived by sense, there is no doubt: but I would know whether you take the things suggested

by them to be so too.

HYL. No, certainly: it were absurd to think GOD or VIRTUE sensible things; though they may be signified and suggested to the mind by sensible marks, with which they have an arbitrary connexion.

PHIL. It seems then, that by SENSIBLE THINGS you mean those only which can be perceived IMMEDIATELY by sense?

HYL. Right.

PHIL. Doth it not follow from this, that though I see one part of the sky red, and another blue, and that my reason doth thence evidently conclude there must be some cause of that diversity of colours, yet that cause cannot be said to be a sensible thing, or perceived by the sense of seeing?

HYL. It doth.

PHIL. In like manner, though I hear variety of sounds, yet I cannot be said to hear the causes of those sounds?

HYL. You cannot.

PHIL. And when by my touch I perceive a thing to be hot and heavy, I cannot say, with any truth or propriety, that I feel the cause of its heat or weight?

HYL. To prevent any more questions of this kind, I tell you once for all, that by SENSIBLE THINGS I mean those only which are perceived by sense; and that in truth the senses perceive nothing which they do not perceive IMMEDIATELY: for they make no inferences. The deducing therefore of causes or occasions from effects and appearances, which alone are perceived by sense, entirely relates to reason. ...

PHIL. HEAT then is a sensible thing?

HYL. Certainly.

PHIL. Doth the REALITY of sensible things consist in being perceived? or, is it something distinct from their being perceived, and that bears no relation to the mind?

HYL. To EXIST is one thing, and to be PERCEIVED is another.

PHIL. I speak with regard to sensible things only. And of these I ask, whether by their real existence you mean a subsistence exterior to the mind, and distinct from their being perceived?

HYL. I mean a real absolute being, distinct from, and without any relation to, their being perceived.

PHIL. Heat therefore, if it be allowed a real being, must exist without the mind?

HYL. It must.

PHIL. Tell me, Hylas, is this real existence equally compatible to all degrees of heat, which we perceive; or is there any reason why we should attribute it to some, and deny it to others? And if there be, pray let me know that reason.

HYL. Whatever degree of heat we perceive by sense, we may be sure the same exists in the object that occasions it.

PHIL. What! the greatest as well as the least?

HYL. *I* tell you, the reason is plainly the same in respect of both. They are both perceived by sense; nay, the greater degree of heat is more sensibly perceived; and consequently, if there is any difference, we are more certain of its real existence than we can be of the reality of a lesser degree.

PHIL. But is not the most vehement and intense degree of heat a very great pain?

HYL. No one can deny it.

PHIL. And is any unperceiving thing capable of pain or pleasure?

HYL. No, certainly.

PHIL. Is your material substance a senseless being, or a being endowed with sense and perception?

HYL. It is senseless without doubt.

PHIL. It cannot therefore be the subject of pain?

HYL. By no means.

PHIL. Nor consequently of the greatest heat perceived by sense, since you acknowledge this to be no small pain?

HYL. I grant it.

PHIL. What shall we say then of your external object; is it a material Substance, or no?

HYL. It is a material substance with the sensible qualities inhering in it.

PHIL. How then can a great heat exist in it, since you own it cannot in a material substance? I desire you would clear this point.

HYL. Hold, Philonous, I fear I was out in yielding intense heat to be a pain. It should seem rather, that pain is something distinct from heat, and the consequence or effect of it.

PHIL. Upon putting your hand near the fire, do you perceive one simple uniform sensation, or two distinct sensations?

HYL. But one simple sensation.

PHIL. Is not the heat immediately perceived?

HYL. It is.

PHIL. And the pain?

HYL. True.

PHIL. Seeing therefore they are both immediately perceived at the same time, and the fire affects you only with one simple or uncompounded idea, it follows that this same simple idea is both the intense heat immediately perceived, and the pain; and, consequently, that the intense heat immediately perceived is nothing distinct from a particular sort of pain.

HYL. It seems so.

PHIL. Again, try in your thoughts, Hylas, if you can conceive a vehement sensation to be without pain or pleasure.

HYL. I cannot.

PHIL. Or can you frame to yourself an idea of sensible pain or pleasure in general, abstracted from every particular idea of heat, cold, tastes, smells? &c.

HYL. I do not find that I can.

PHIL. Doth it not therefore follow, that sensible pain is nothing distinct from those sensations or ideas, in an intense degree?

HYL. It is undeniable; and, to speak the truth, I begin to suspect a very great heat cannot exist but in a mind perceiving it.

PHIL. What! are you then in that sceptical state of suspense, between affirming and denying?

HYL. I think I may be positive in the point. A very violent and painful heat cannot exist without the mind.

PHIL. It hath not therefore according to you, any REAL being?

HYL. I own it. ...

PHIL. Can any doctrine be true that necessarily leads a man into an absurdity?

HYL. Without doubt it cannot.

PHIL. Is it not an absurdity to think that the same thing should be at the same time both cold and warm?

HYL. It is.

PHIL. Suppose now one of your hands hot, and the other cold, and that they are both at once put into the same vessel of water, in an intermediate state; will not the water seem cold to one hand, and warm to the other?

HYL. It will.

PHIL. Ought we not therefore, by your principles, to conclude it

is really both cold and warm at the same time, that is, according to your own concession, to believe an absurdity?

HYL. I confess it seems so.

PHIL. Consequently, the principles themselves are false, since you have granted that no true principle leads to an absurdity.

HYL. But, after all, can anything be more absurd than to say, THERE IS NO HEAT IN THE FIRE?

PHIL. To make the point still clearer; tell me whether, in two cases exactly alike, we ought not to make the same judgment?

HYL. We ought.

PHIL. When a pin pricks your finger, doth it not rend and divide the fibres of your flesh?

HYL. It doth.

PHIL. And when a coal burns your finger, doth it any more?

HYL. It doth not.

PHIL. Since, therefore, you neither judge the sensation itself occasioned by the pin, nor anything like it to be in the pin; you should not, conformably to what you have now granted, judge the sensation occasioned by the fire, or anything like it, to be in the fire.

HYL. Well, since it must be so, I am content to yield this point, and acknowledge that heat and cold are only sensations existing in our minds. But there still remain qualities enough to secure the reality of external things.

PHIL. But what will you say, Hylas, if it shall appear that the case is the same with regard to all other sensible qualities, and that they can no more be supposed to exist without the mind, than heat and cold?

HYL. Then indeed you will have done something to the purpose; but that is what I despair of seeing proved.

PHIL. Let us examine them in order. What think you of TASTES, do they exist without the mind, or no?

HYL. Can any man in his senses doubt whether sugar is sweet, or wormwood bitter?

PHIL. Inform me, Hylas. Is a sweet taste a particular kind of pleasure or pleasant sensation, or is it not?

HYL. It is.

PHIL. And is not bitterness some kind of uneasiness or pain?

HYL. I grant it.

PHIL. If therefore sugar and wormwood are unthinking

corporeal substances existing without the mind, how can sweetness and bitterness, that is, Pleasure and pain, agree to them?

HYL. Hold, Philonous, I now see what it was delude time. You asked whether heat and cold, sweetness at were not particular sorts of pleasure and pain; to which simply, that they were. Whereas I should have thus distinguished: those qualities, as perceived by us, are pleasures or pain existing in the external objects. We must not therefore conclude absolutely, that there is no heat in the fire, or sweetness in the sugar, but only that heat or sweetness, as perceived by us, are not in the fire or sugar. What say you to this?

PHIL. I say it is nothing to the purpose. Our discourse proceeded altogether concerning sensible things, which you defined to be, THE THINGS WE IMMEDIATELY PERCEIVE BY OUR SENSES. Whatever other qualities, therefore, you speak of as distinct from these, I know nothing of them, neither do they at all belong to the point in dispute. You may, indeed, pretend to have discovered certain qualities which you do not perceive, and assert those insensible qualities exist in fire and sugar. But what use can be made of this to your present purpose, I am at a loss to conceive. Tell me then once more, do you acknowledge that heat and cold, sweetness and bitterness (meaning those qualities which are perceived by the senses), do not exist without the mind?

HYL. I see it is to no purpose to hold out, so I give up the cause as to those mentioned qualities. Though I profess it sounds oddly, to say that sugar is not sweet.

PHIL. But, for your farther satisfaction, take this along with you: that which at other times seems sweet, shall, to a distempered palate, appear bitter. And, nothing can be plainer than that divers persons perceive different tastes in the same food; since that which one man delights in, another abhors. And how could this be, if the taste was something really inherent in the food?

HYL. I acknowledge I know not how.

PHIL. In the next place, ODOURS are to be considered. And, with regard to these, I would fain know whether what hath been said of tastes doth not exactly agree to them? Are they not so many pleasing or displeasing sensations?

HYL. They are.

PHIL. Can you then conceive it possible that they should exist in an unperceiving thing?

HYL. I cannot.

PHIL. Or, can you imagine that filth and ordure affect those brute animals that feed on them out of choice, with the same

smells which we perceive in them?

HYL. By no means.

PHIL. May we not therefore conclude of smells, as of the other forementioned qualities, that they cannot exist in any but a perceiving substance or mind?

HYL. I think so.

PHIL. Then as to SOUNDS, what must we think of them: are they accidents really inherent in external bodies, or not?

HYL. That they inhere not in the sonorous bodies is plain from hence: because a bell struck in the exhausted receiver of an air-pump sends forth no sound. The air, therefore, must be thought the subject of sound.

PHIL. What reason is there for that, Hylas?

HYL. Because, when any motion is raised in the air, we perceive a sound greater or lesser, according to the air's motion; but without some motion in the air, we never hear any sound at all.

PHIL. And granting that we never hear a sound but when some motion is produced in the air, yet I do not see how you can infer from thence, that the sound itself is in the air.

HYL. It is this very motion in the external air that produces in the mind the sensation of SOUND. For, striking on the drum of the ear, it causeth a vibration, which by the auditory nerves being communicated to the brain, the soul is thereupon affected with the sensation called SOUND.

PHIL. What! is sound then a sensation?

HYL. I tell you, as perceived by us, it is a particular sensation in the mind.

PHIL. And can any sensation exist without the mind?

HYL. No, certainly.

PHIL. How then can sound, being a sensation, exist in the air, if by the AIR you mean a senseless substance existing without the mind?

HYL. You must distinguish, Philonous, between sound as it is perceived by us, and as it is in itself; or (which is the same thing) between the sound we immediately perceive, and that which exists without us. The former, indeed, is a particular kind of sensation, but the latter is merely a vibrative or undulatory motion the air.

PHIL. I thought I had already obviated that distinction, by answer I gave when you were applying it in a like case before. But, to say no more of that, are you sure then that sound is really nothing but motion?

HYL. I am.

PHIL. Whatever therefore agrees to real sound, may with truth be attributed to motion?

HYL. It may.

PHIL. It is then good sense to speak of MOTION as of a thing that is LOUD, SWEET, ACUTE, or GRAVE.

HYL. I see you are resolved not to understand me. Is it not evident those accidents or modes belong only to sensible sound, or SOUND in the common acceptation of the word, but not to sound in the real and philosophic sense; which, as I just now told you, is nothing but a certain motion of the air?

PHIL. It seems then there are two sorts of sound—the one vulgar, or that which is heard, the other philosophical and real?

HYL. Even so.

PHIL. And the latter consists in motion?

HYL. I told you so before.

PHIL. Tell me, Hylas, to which of the senses, think you, the idea of motion belongs? to the hearing?

HYL. No, certainly; but to the sight and touch.

PHIL. It should follow then, that, according to you, real sounds may possibly be SEEN OR FELT, but never HEARD.

HYL. Look you, Philonous, you may, if you please, make a jest of my opinion, but that will not alter the truth of things. I own, indeed, the inferences you draw me into sound something oddly; but common language, you know, is framed by, and for the use of the vulgar: we must not therefore wonder if expressions adapted to exact philosophic notions seem uncouth and out of the way.

PHIL. Is it come to that? I assure you, I imagine myself to have gained no small point, since you make so light of departing from common phrases and opinions; it being a main part of our inquiry, to examine whose notions are widest of the common road, and most repugnant to the general sense of the world. But, can you think it no more than a philosophical paradox, to say that REAL SOUNDS ARE NEVER HEARD, and that the idea of them is obtained by some other sense? And is there nothing in this contrary to nature and the truth of things?

HYL. To deal ingenuously, I do not like it. And, after the concessions already made, I had as well grant that sounds too have no real being without the mind.

PHIL. And I hope you will make no difficulty to acknowledge the same of COLOURS.

HYL. Pardon me: the case of colours is very different. Can anything be plainer than that we see them on the objects?

PHIL. The objects you speak of are, I suppose, corporeal Substances existing without the mind?

HYL. They are.

PHIL. And have true and real colours inhering in them?

HYL. Each visible object hath that colour which we see in it.

PHIL. How! is there anything visible but what we perceive by sight?

HYL. There is not.

PHIL. And, do we perceive anything by sense which we do not perceive immediately?

HYL. How often must I be obliged to repeat the same thing? I tell you, we do not.

PHIL. Have patience, good Hylas; and tell me once more, whether there is anything immediately perceived by the senses, except sensible qualities. I know you asserted there was not; but I would now be informed, whether you still persist in the same opinion.

HYL. I do.

PHIL. Pray, is your corporeal substance either a sensible quality, or made up of sensible qualities?

HYL. What a question that is! who ever thought it was?

PHIL. My reason for asking was, because in saying, EACH VISIBLE OBJECT HATH THAT COLOUR WHICH WE SEE IN IT, you make visible objects to be corporeal substances; which implies either that corporeal substances are sensible qualities, or else that there is something besides sensible qualities perceived by sight: but, as this point was formerly agreed between us, and is still maintained by you, it is a clear consequence, that your CORPOREAL SUBSTANCE is nothing distinct from SENSIBLE QUALITIES.

HYL. You may draw as many absurd consequences as you please, and endeavour to perplex the plainest things; but you shall never persuade me out of my senses. I clearly understand my own meaning.

PHIL. I wish you would make me understand it too. But, since you are unwilling to have your notion of corporeal substance examined, I shall urge that point no farther. Only be pleased to let me know, whether the same colours which we see exist in external bodies, or some other.

HYL. The very same.

PHIL. What! are then the beautiful red and purple we see on yonder clouds really in them? Or do you imagine they have in themselves any other form than that of a dark mist or vapour?

HYL. I must own, Philonous, those colours are not really in the clouds as they seem to be at this distance. They are only apparent colours.

PHIL. APPARENT call you them? how shall we distinguish these apparent colours from real?

HYL. Very easily. Those are to be thought apparent which, appearing only at a distance, vanish upon a nearer approach.

PHIL. And those, I suppose, are to be thought real which are discovered by the most near and exact survey.

HYL. Right.

PHIL. Is the nearest and exactest survey made by the help of a microscope, or by the naked eye?

HYL. By a microscope, doubtless.

PHIL. But a microscope often discovers colours in an object different from those perceived by the unassisted sight. And, in case we had microscopes magnifying to any assigned degree, it is certain that no object whatsoever, viewed through them, would appear in the same colour which it exhibits to the naked eye.

HYL. And what will you conclude from all this? You cannot argue that there are really and naturally no colours on objects: because by artificial managements they may be altered, or made to vanish.

PHIL. I think it may evidently be concluded from your own concessions, that all the colours we see with our naked eyes are only apparent as those on the clouds, since they vanish upon a more close and accurate inspection which is afforded us by a microscope. Then' as to what you say by way of prevention: I ask you whether the real and natural state of an object is better discovered by a very sharp and piercing sight, or by one which is less sharp? ...

HYL. I frankly own, Philonous, that it is in vain to longer. Colours, sounds, tastes, in a word all those termed SECONDARY QUALITIES, have certainly no existence without the mind. But by this acknowledgment I must not be supposed to derogate, the reality of Matter, or external objects; seeing it is no more than several philosophers maintain, who nevertheless are the farthest imaginable from denying Matter. For the clearer understanding of this, you must know sensible qualities are by philosophers divided into PRIMARY and SECONDARY. The former are Extension, Figure, Solidity, Gravity, Motion, and Rest; and these they hold exist really in

bodies. The latter are those above enumerated; or, briefly, ALL SENSIBLE QUALITIES BESIDE THE PRIMARY; which they assert are only so many sensations or ideas existing nowhere but in the mind. But all this, I doubt not, you are apprised of. For my part, I have been a long time sensible there was such an opinion current among philosophers, but was never thoroughly convinced of its truth until now.

PHIL. You are still then of opinion that EXTENSION and FIGURES are inherent in external unthinking substances?

HYL. I am.

PHIL. But what if the same arguments which are brought against Secondary Qualities will hold good against these also?

HYL. Why then I shall be obliged to think, they too exist only in the mind.

PHIL. Is it your opinion the very figure and extension which you perceive by sense exist in the outward object or material substance? HYL. It is.

PHIL. Have all other animals as good grounds to think the same of the figure and extension which they see and feel?

HYL. Without doubt, if they have any thought at all.

PHIL. Answer me, Hylas. Think you the senses were bestowed upon all animals for their preservation and well-being in life? or were they given to men alone for this end?

HYL. I make no question but they have the same use in all other animals.

PHIL. If so, is it not necessary they should be enabled by them to perceive their own limbs, and those bodies which are capable of harming them?

HYL. Certainly.

PHIL. A mite therefore must be supposed to see his own foot, and things equal or even less than it, as bodies of some considerable dimension; though at the same time they appear to you scarce discernible, or at best as so many visible points?

HYL. I cannot deny it.

PHIL. And to creatures less than the mite they will seem yet larger?

HYL. They will.

PHIL. Insomuch that what you can hardly discern will to another extremely minute animal appear as some huge mountain?

HYL. All this I grant.

PHIL. Can one and the same thing be at the same time in itself

of different dimensions?

HYL. That were absurd to imagine.

PHIL. But, from what you have laid down it follows that both the extension by you perceived, and that perceived by the mite itself, as likewise all those perceived by lesser animals, are each of them the true extension of the mite's foot; that is to say, by your own principles you are led into an absurdity.

HYL. There seems to be some difficulty in the point.

PHIL. Again, have you not acknowledged that no real inherent property of any object can be changed without some change in the thing itself?

HYL. I have.

PHIL. But, as we approach to or recede from an object, the visible extension varies, being at one distance ten or a hundred times greater than another. Doth it not therefore follow from hence likewise that it is not really inherent in the object?

HYL. I own I am at a loss what to think.

PHIL. Your judgment will soon be determined, if you will venture to think as freely concerning this quality as you have done concerning the rest. Was it not admitted as a good argument, that neither heat nor cold was in the water, because it seemed warm to one hand and cold to the other?

HYL. It was.

PHIL. Is it not the very same reasoning to conclude, there is no extension or figure in an object, because to one eye it shall seem little, smooth, and round, when at the same time it appears to the other, great, uneven, and regular? ... Consequently, the very same arguments which you admitted as conclusive against the Secondary Qualities are, without any farther application of force, against the Primary too. ...

HYL. I acknowledge, Philonous, that, upon a fair observation of what passes in my mind, I can discover nothing else but that I am a thinking being, affected with variety of sensations; neither is it possible to conceive how a sensation should exist in an unperceiving substance. But then, on the other hand, when I look on sensible things in a different view, considering them as so many modes and qualities, I find it necessary to suppose a MATERIAL SUBSTRATUM, without which they cannot be conceived to exist.

PHIL. MATERIAL SUBSTRATUM call you it? Pray, by which of your senses came you acquainted with that being?

HYL. It is not itself sensible; its modes and qualities only being perceived by the senses.

PHIL. I presume then it was by reflexion and reason you obtained the idea of it?

HYL. I do not pretend to any proper positive IDEA of it. However, I conclude it exists, because qualities cannot be conceived to exist without a support.

PHIL. It seems then you have only a relative NOTION of it, or that you conceive it not otherwise than by conceiving the relation it bears to sensible qualities?

HYL. Right.

PHIL. Be pleased therefore to let me know wherein that relation consists.

HYL. Is it not sufficiently expressed in the term SUBSTRATUM, or SUBSTANCE?

PHIL. If so, the word SUBSTRATUM should import that it is spread under the sensible qualities or accidents?

HYL. True.

PHIL. And consequently under extension?

HYL. I own it.

PHIL. It is therefore somewhat in its own nature entirely distinct from extension?

HYL. I tell you, extension is only a mode, and Matter is something that supports modes. And is it not evident the thing supported is different from the thing supporting?

PHIL. So that something distinct from, and exclusive of, extension is supposed to be the SUBSTRATUM of extension?

HYL. Just so.

PHIL. Answer me, Hylas. Can a thing be spread without extension? or is not the idea of extension necessarily included in SPREADING?

HYL. It is.

PHIL. Whatsoever therefore you suppose spread under anything must have in itself an extension distinct from the extension of that thing under which it is spread?

HYL. It must.

PHIL. Consequently, every corporeal substance, being the SUBSTRATUM of extension, must have in itself another extension, by which it is qualified to be a SUBSTRATUM: and so on to infinity. And I ask whether this be not absurd in itself, and repugnant to what you granted just now, to wit, that the SUBSTRATUM was something distinct from and exclusive of extension?

HYL. Aye but, Philonous, you take me wrong. I do not mean that Matter is SPREAD in a gross literal sense under extension. The word SUBSTRATUM is used only to express in general the same thing with SUBSTANCE.

PHIL. Well then, let us examine the relation implied in the term SUBSTANCE. Is it not that it stands under accidents?

HYL. The very same.

PHIL. But, that one thing may stand under or support another, must it not be extended?

HYL. It must.

PHIL. Is not therefore this supposition liable to the same absurdity with the former?

HYL. You still take things in a strict literal sense. That is not fair, Philonous.

PHIL. I am not for imposing any sense on your words: you are at liberty to explain them as you please. Only, I beseech you, make me understand something by them. You tell me Matter supports or stands under accidents. How! is it as your legs support your body?

HYL. No; that is the literal sense.

PHIL. Pray let me know any sense, literal or not literal, that you understand it in.—How long must I wait for an answer, Hylas?

HYL. I declare I know not what to say. I once thought I understood well enough what was meant by Matter's supporting accidents. But now, the more I think on it the less can I comprehend it: in short I find that I know nothing of it.

PHIL. It seems then you have no idea at all, neither relative nor positive, of Matter; you know neither what it is in itself, nor what relation it bears to accidents?

HYL. I acknowledge it.

PHIL. And yet you asserted that you could not conceive how qualities or accidents should really exist, without conceiving at the same time a material support of them?

HYL. I did.

PHIL. That is to say, when you conceive the real existence of qualities, you do withal conceive Something which you cannot conceive? ... But neither is this all. Which are material objects in themselves—perceptible or imperceptible?

HYL. Properly and immediately nothing can be perceived but ideas. All material things, therefore, are in themselves insensible, and to be perceived only by our ideas.

PHIL. Ideas then are sensible, and their archetypes or originals insensible?

HYL. Right.

PHIL. But how can that which is sensible be like that which is insensible? Can a real thing, in itself INVISIBLE, be like a COLOUR; or a real thing, which is not AUDIBLE, be like a SOUND? In a word, can anything be like a sensation or idea, but another sensation or idea?

HYL. I must own, I think not.

PHIL. Is it possible there should be any doubt on the point? Do you not perfectly know your own ideas?

HYL. I know them perfectly; since what I do not perceive or know can be no part of my idea.

PHIL. Consider, therefore, and examine them, and then tell me if there be anything in them which can exist without the mind: or if you can conceive anything like them existing without the mind.

HYL. Upon inquiry, I find it is impossible for me to conceive or understand how anything but an idea can be like an idea. And it is most evident that NO IDEA CAN EXIST WITHOUT THE MIND.

PHIL. You are therefore, by your principles, forced to deny the REALITY of sensible things; since you made it to consist in an absolute existence exterior to the mind. That is to say, you are a downright sceptic. So I have gained my point, which was to shew your principles led to Scepticism.

HYL. For the present I am, if not entirely convinced, at least silenced. ...

12. Reality is Mind Independent

By Immanuel Kant

REFUTATION OF IDEALISM.

Idealism—I mean material idealism—is the theory which declares the existence of objects in space without us to be either (1) doubtful and indemonstrable, or (2) false and impossible. The first is the problematical idealism of Descartes, who admits the undoubted certainty of only one empirical assertion (assertio), to wit, "I am." The second is the dogmatical idealism of Berkeley, who maintains that space, together with all the objects of which it is the inseparable condition, is a thing which is in itself impossible, and that consequently the objects in space are mere products of the imagination. The dogmatical theory of idealism is unavoidable, if we regard space as a property of things in themselves; for in that case it is, with all to which it serves as condition, a nonentity. But the foundation for this kind of idealism we have already destroyed in the transcendental aesthetic. Problematical idealism, which makes no such assertion, but only alleges our incapacity to prove the existence of anything besides ourselves by means of immediate experience, is a theory rational and evidencing a thorough and philosophical mode of thinking, for it observes the rule not to form a decisive judgement before sufficient proof be shown. The

desired proof must therefore demonstrate that we have experience of external things, and not mere fancies. For this purpose, we must prove, that our internal and, to Descartes, indubitable experience is itself possible only under the previous assumption of external experience.

THEOREM.

The simple but empirically determined consciousness of my own existence proves the existence of external objects in space.

PROOF

I am conscious of my own existence as determined in time. All determination in regard to time presupposes the existence of something permanent in perception. But this permanent something cannot be something in me, for the very reason that my existence in time is itself determined by this permanent something. It follows that the perception of this permanent existence is possible only through a thing without me and not through the mere representation of a thing without me. Consequently, the determination of my existence in time is possible only through the existence of real things external to me. Now, consciousness in time is necessarily connected with the

consciousness of the possibility of this determination in time. Hence it follows that consciousness in time is necessarily connected also with the existence of things without me, inasmuch as the existence of these things is the condition of determination in time. That is to say, the consciousness of my own existence is at the same time an immediate consciousness of the existence of other things without me.

Remark I. The reader will observe, that in the foregoing proof the game which idealism plays is retorted upon itself, and with more justice. It assumed that the only immediate experience is internal and that from this we can only infer the existence of external things. But, as always happens, when we reason from given effects to determined causes, idealism has reasoned with too much haste and uncertainty, for it is quite possible that the cause of our representations may lie in ourselves, and that we ascribe it falsely to external things. But our proof shows that external experience is properly immediate,** that only by virtue of it—not, indeed, the consciousness of our own existence, but certainly the determination of our existence in time, that is, internal experience—is possible. It is true, that the representation "I am," which is the expression of the consciousness which can accompany all my thoughts, is that which immediately includes the existence of a subject. But in this representation we cannot find any knowledge of the subject, and therefore also no empirical knowledge, that is, experience. For experience contains, in addition to the thought of something existing, intuition, and in this case it must be internal intuition, that is, time, in relation to which the subject must be determined. But the existence of external things is absolutely requisite for this purpose, so that it follows that internal experience is itself possible only mediately and through external experience.

Remark II. Now with this view all empirical use of our faculty of cognition in the determination of time is in perfect accordance. Its truth is supported by the fact that it is possible to perceive a determination of time only by means of a change in external relations (motion) to the permanent in space (for example, we become aware of the sun's motion by observing the changes of his relation to the objects of this earth). But this is not all. We find that we possess nothing permanent that can correspond and be submitted to the conception of a substance as intuition, except matter. This idea of permanence is not itself derived from

*The immediate consciousness of the existence of external things is, in the preceding theorem, not presupposed, but proved, by the possibility of this consciousness understood by us or not. The question as to the possibility of it would stand thus: "Have we an internal sense, but no external sense, and is our belief in external perception a mere delusion?" But it is evident that, in order merely to fancy to ourselves anything as external, that is, to present it to the sense in intuition we must already possess an external sense, and must thereby distinguish immediately the mere receptivity of an external intuition from the spontaneity which characterizes every act of imagination. For merely to imagine also an external sense, would annihilate the faculty of intuition itself which is to be determined by the imagination.

external experience, but is an a priori necessary condition of all determination of time, consequently also of the internal sense in reference to our own existence, and that through the existence of external things. In the representation "I," the consciousness of myself is not an intuition, but a merely intellectual representation produced by the spontaneous activity of a thinking subject. It follows, that this "I" has not any predicate of intuition, which, in its character of permanence, could serve as correlate to the determination of time in the internal sense—in the same way as impenetrability is the correlate of matter as an empirical intuition.

Remark III. From the fact that the existence of external things is a necessary condition of the possibility of a determined consciousness of ourselves, it does not follow that every intuitive representation of external things involves the existence of these things, for their representations may very well be the mere products of the imagination (in dreams as well as in madness); though, indeed, these are themselves created by the reproduction of previous external perceptions, which, as has been shown, are possible only through the reality of external objects. The sole aim of our remarks has, however, been to prove that internal experience in general is possible only through external experience in general. Whether this or that supposed experience be purely imaginary must be discovered from its particular determinations and by comparing these with the criteria of all real experience.

Finally, as regards the third postulate, it applies to material necessity in existence, and not to merely formal and logical necessity in the connection of conceptions. Now as we cannot cognize completely a priori the existence of any object of sense, though we can do so comparatively a priori, that is, relatively to some other previously given existence—a cognition, however, which can only be of such an existence as must be contained in the complex of experience, of which the previously given perception is a part—the necessity of existence can never be cognized from conceptions, but always, on the contrary, from its connection with that which is an object of perception. But the only existence cognized, under the condition of other given phenomena, as necessary, is the existence of effects from given causes in conformity with the laws of causality. It is consequently not the necessity of the existence of things (as substances), but the necessity of the state of things that we cognize, and that not immediately, but by means of the existence of other states given in perception, according to empirical laws of causality. Hence it follows that the criterion of necessity is to be found only in the law of possible experience—that everything which happens is determined a priori in the phenomenon by its cause. Thus we cognize only the necessity of effects in nature, the causes of which are given us. Moreover, the criterion of

necessity in existence possesses no application beyond the field of possible experience, and even in this it is not valid of the existence of things as substances, because these can never be considered as empirical effects, or as something that happens and has a beginning. Necessity, therefore, regards only the relations of phenomena according to the dynamical law of causality, and the possibility grounded thereon, of reasoning from some given existence (of a cause) a priori to another existence (of an effect). "Everything that happens is hypothetically necessary," is a principle which subjects the changes that take place in the world to a law, that is, to a rule of necessary existence, without which nature herself could not possibly exist. Hence the proposition, "Nothing happens by blind chance (in mundo non datur casus)," is an a priori law of nature. The case is the same with the proposition, "Necessity in nature is not blind," that is, it is conditioned, consequently intelligible necessity (non datur fatum). Both laws subject the play of change to "a nature of things (as phenomena)," or, which is the same thing, to the unity of the understanding, and through the understanding alone can changes belong to an experience, as the synthetical unity of phenomena. Both belong to the class of dynamical principles. The former is properly a consequence of the principle of causality—one of the analogies of experience. The latter belongs to the principles of modality, which to the determination of causality adds the conception of necessity, which is itself, however, subject to a rule of the understanding. The principle of continuity forbids any leap in the series of phenomena regarded as changes (in mundo non datur saltus); and likewise, in the complex of all empirical intuitions in space, any break or hiatus between two phenomena (non datur hiatus)—for we can so express the principle, that experience can admit nothing which proves the existence of a vacuum, or which even admits it as a part of an empirical synthesis. For, as regards a vacuum or void, which we may cogitate as out and beyond the field of possible experience (the world), such a question cannot come before the tribunal of mere understanding, which decides only upon questions that concern the employment of given phenomena for the construction of empirical cognition. It is rather a problem for ideal reason, which passes beyond the sphere of a possible experience and aims at forming a judgement of that which surrounds and circumscribes it, and the proper place for the consideration of it is the transcendental dialectic. These four propositions, "In mundo non datur hiatus, non datur saltus, non datur casus, non datur fatum," as well as all principles of transcendental origin, we could very easily exhibit in their proper order, that is, in conformity with the order of the categories, and assign to each its proper place. But the already practised reader will do this for himself, or discover the clue to such an arrangement. But the combined result of all is simply this, to admit into the empirical synthesis nothing which might

cause a break in or be foreign to the understanding and the continuous connection of all phenomena, that is, the unity of the conceptions of the understanding. For in the understanding alone is the unity of experience, in which all perceptions must have their assigned place, possible.

Whether the field of possibility be greater than that of reality, and whether the field of the latter be itself greater than that of necessity, are interesting enough questions, and quite capable of synthetic solution, questions, however, which come under the jurisdiction of reason alone. For they are tantamount to asking whether all things as phenomena do without exception belong to the complex and connected whole of a single experience, of which every given perception is a part which therefore cannot be conjoined with any other phenomena—or, whether my perceptions can belong to more than one possible experience? The understanding gives to experience, according to the subjective and formal conditions, of sensibility as well as of apperception, the rules which alone make this experience possible. Other forms of intuition besides those of space and time, other forms of understanding besides the discursive forms of thought, or of cognition by means of conceptions, we can neither imagine nor make intelligible to ourselves; and even if we could, they would still not belong to experience, which is the only mode of cognition by which objects are presented to us. Whether other perceptions besides those which belong to the total of our possible experience, and consequently whether some other sphere of matter exists, the understanding has no power to decide, its proper occupation being with the synthesis of that which is given. Moreover, the poverty of the usual arguments which go to prove the existence of a vast sphere of possibility, of which all that is real (every object of experience) is but a small part, is very remarkable. "All real is possible"; from this follows naturally, according to the logical laws of conversion, the particular proposition: "Some possible is real." Now this seems to be equivalent to: "Much is possible that is not real." No doubt it does seem as if we ought to consider the sum of the possible to be greater than that of the real, from the fact that something must be added to the former to constitute the latter. But this notion of adding to the possible is absurd. For that which is not in the sum of the possible, and consequently requires to be added to it, is manifestly impossible. In addition to accordance with the formal conditions of experience, the understanding requires a connection with some perception; but that which is connected with this perception is real, even although it is not immediately perceived. But that another series of phenomena, in complete coherence with that which is given in perception, consequently more than one all-embracing experience is possible, is an inference which cannot be concluded from the data given us by experience, and still less without any data at all. That which is

possible only under conditions which are themselves merely possible, is not possible in any respect. And yet we can find no more certain ground on which to base the discussion of the question whether the sphere of possibility is wider than that of experience.

I have merely mentioned these questions, that in treating of the conception of the understanding, there might be no omission of anything that, in the common opinion, belongs to them. In reality, however, the notion of absolute possibility (possibility which is valid in every respect) is not a mere conception of the understanding, which can be employed empirically, but belongs to reason alone, which passes the bounds of all empirical use of the understanding. We have, therefore, contented ourselves with a merely critical remark, leaving the subject to be explained in the sequel.

Before concluding this fourth section, and at the same time the system of all principles of the pure understanding, it seems proper to mention the reasons which induced me to term the principles of modality postulates. This expression I do not here use in the sense which some more recent philosophers, contrary to its meaning with mathematicians, to whom the word properly belongs, attach to it—that of a proposition, namely, immediately certain, requiring neither deduction nor proof. For if, in the case of synthetical propositions, however evident they may be, we accord to them without deduction, and merely on the strength of their own pretensions, unqualified belief, all critique of the understanding is entirely lost; and, as there is no want of bold pretensions, which the common belief (though for the philosopher this is no credential) does not reject, the understanding lies exposed to every delusion and conceit, without the power of refusing its assent to those assertions, which, though illegitimate, demand acceptance as veritable axioms. When, therefore, to the conception of a thing an a priori determination is synthetically added, such a proposition must obtain, if not a proof, at least a deduction of the legitimacy of its assertion.

The principles of modality are, however, not objectively synthetical, for the predicates of possibility, reality, and necessity do not in the least augment the conception of that of which they are affirmed, inasmuch as they contribute nothing to the representation of the object. But as they are, nevertheless, always synthetical, they are so merely subjectively. That is to say, they have a reflective power, and apply to the conception of a thing, of which, in other respects, they affirm nothing, the faculty of cognition in which the conception originates and has its seat. So that if the conception merely agree with the formal conditions of experience, its object is called possible; if it is in connection with perception, and determined thereby, the object is

real; if it is determined according to conceptions by means of the connection of perceptions, the object is called necessary. The principles of modality therefore predicate of a conception nothing more than the procedure of the faculty of cognition which generated it. Now a postulate in mathematics is a practical proposition which contains nothing but the synthesis by which we present an object to ourselves, and produce the conception of it, for example—"With a given line, to describe a circle upon a plane, from a given point"; and such a proposition does not admit of proof, because the procedure, which it requires, is exactly that by which alone it is possible to generate the conception of such a figure. With the same right, accordingly, can we postulate the principles of modality, because they do not augment** the conception of a thing but merely indicate the manner in which it is connected with the faculty of cognition.

*When I think the reality of a thing, I do really think more than the possibility, but not in the thing; for that can never contain more in reality than was contained in its complete possibility. But while the notion of possibility is merely the notion of a position of thing in relation to the understanding (its empirical use), reality is the conjunction of the thing with perception.

13. Universal Forms

By Plato

Yes, my friend, and I shall be at least equally satisfied, but I cannot help fearing that I shall fail, and that my indiscreet zeal will bring ridicule upon me. No, sweet sirs, let us not at present ask what is the actual nature of the good, for to reach what is now in my thoughts would be an effort too great for me. But of the child of the good who is likest him, I would fain speak, if I could be sure that you wished to hear—otherwise, not.

By all means, he said, tell us about the child, and you shall remain in our debt for the account of the parent.

I do indeed wish, I replied, that I could pay, and you receive, the account of the parent, and not, as now, of the offspring only; take, however, this latter by way of interest, and at the same time have a care that I do not render a false account, although I have no intention of deceiving you.

Yes, we will take all the care that we can: proceed.

Yes, I said, but I must first come to an understanding with you, and remind you of what I have mentioned in the course of this discussion, and at many other times.

What?

The old story, that there is a many beautiful and a many good, and so of other things which we describe and define; to all of them the term 'many' is applied.

True, he said.

And there is an absolute beauty and an absolute good, and of other things to which the term 'many' is applied there is an absolute; for they may be brought under a single idea, which is called the essence of each.

Very true.

The many, as we say, are seen but not known, and the ideas are known but not seen.

Exactly.

And what is the organ with which we see the visible things?

The sight, he said.

And with the hearing, I said, we hear, and with the other senses

perceive the other objects of sense?

True.

But have you remarked that sight is by far the most costly and complex piece of workmanship which the artificer of the senses ever contrived?

No, I never have, he said.

Then reflect; has the ear or voice need of any third or additional nature in order that the one may be able to hear and the other to be heard?

Nothing of the sort.

No, indeed, I replied; and the same is true of most, if not all, the other senses—you would not say that any of them requires such an addition?

Certainly not.

But you see that without the addition of some other nature there is no seeing or being seen?

How do you mean?

Sight being, as I conceive, in the eyes, and he who has eyes wanting to see; color being also present in them, still unless there be a third nature specially adapted to the purpose, the owner of the eyes will see nothing and the colors will be invisible.

Of what nature are you speaking?

Of that which you term light, I replied.

True, he said.

Noble, then, is the bond which links together sight and visibility, and great beyond other bonds by no small difference of nature; for light is their bond, and light is no ignoble thing?

Nay, he said, the reverse of ignoble.

And which, I said, of the gods in heaven would you say was the lord of this element? Whose is that light which makes the eye to see perfectly and the visible to appear?

You mean the sun, as you and all mankind say.

May not the relation of sight to this deity be described as follows?

How?

Neither sight nor the eye in which sight resides is the sun?

No.

Yet of all the organs of sense the eye is the most like the sun?

By far the most like.

And the power which the eye possesses is a sort of effluence which is dispensed from the sun?

Exactly.

Then the sun is not sight, but the author of sight who is recognized by sight?

True, he said.

And this is he whom I call the child of the good, whom the good begat in his own likeness, to be in the visible world, in relation to sight and the things of sight, what the good is in the intellectual world in relation to mind and the things of mind:

Will you be a little more explicit? he said.

Why, you know, I said, that the eyes, when a person directs them towards objects on which the light of day is no longer shining, but the moon and stars only, see dimly, and are nearly blind; they seem to have no clearness of vision in them?

Very true.

But when they are directed towards objects on which the sun shines, they see clearly and there is sight in them?

Certainly.

And the soul is like the eye: when resting upon that on which truth and being shine, the soul perceives and understands, and is radiant with intelligence; but when turned towards the twilight of becoming and perishing, then she has opinion only, and goes blinking about, and is first of one opinion and then of another, and seems to have no intelligence?

Just so.

Now, that which imparts truth to the known and the power of knowing to the knower is what I would have you term the idea of good, and this you will deem to be the cause of science, and of truth in so far as the latter becomes the subject of knowledge; beautiful too, as are both truth and knowledge, you will be right in esteeming this other nature as more beautiful than either; and, as in the previous instance, light and sight may be truly said to be like the sun, and yet not to be the sun, so in this other sphere, science and truth may be deemed to be like the good, but not the good; the good has a place of honour yet higher.

What a wonder of beauty that must be, he said, which is the author of science and truth, and yet surpasses them in beauty; for you surely cannot mean to say that pleasure is the good?

God forbid, I replied; but may I ask you to consider the image in another point of view?

In what point of view?

You would say, would you not, that the sun is not only the author of visibility in all visible things, but of generation and nourishment and growth, though he himself is not generation?

Certainly.

In like manner the good may be said to be not only the author of knowledge to all things known, but of their being and essence, and yet the good is not essence, but far exceeds essence in dignity and power.

Glaucon said, with a ludicrous earnestness: By the light of heaven, how amazing!

Yes, I said, and the exaggeration may be set down to you; for you made me utter my fancies.

And pray continue to utter them; at any rate let us hear if there is anything more to be said about the similitude of the sun.

Yes, I said, there is a great deal more.

Then omit nothing, however slight.

I will do my best, I said; but I should think that a great deal will have to be omitted.

I hope not, he said.

The Divided Line

You have to imagine, then, that there are two ruling powers, and that one of them is set over the intellectual world, the other over the visible. I do not say heaven, lest you should fancy that I am playing upon the name ('ourhanoz, orhatoz'). May I suppose that you have this distinction of the visible and intelligible fixed in your mind?

I have.

Now take a line which has been cut into two unequal parts, and divide each of them again in the same proportion, and suppose the two main divisions to answer, one to the visible and the other to the intelligible, and then compare the subdivisions in respect of their clearness and want of clearness, and you will find that the first section in the sphere of the visible consists of images. And by images I mean, in the first place, shadows, and in the second place, reflections in water and in solid, smooth and polished bodies and the like: Do you understand?

Yes, I understand.

Imagine, now, the other section, of which this is only the resemblance, to include the animals which we see, and everything that grows or is made.

Very good.

Would you not admit that both the sections of this division have different degrees of truth, and that the copy is to the original as the sphere of opinion is to the sphere of knowledge?

Most undoubtedly.

Next proceed to consider the manner in which the sphere of the intellectual is to be divided.

In what manner?

Thus:—There are two subdivisions, in the lower of which the soul uses the figures given by the former division as images; the enquiry can only be hypothetical, and instead of going upwards to a principle descends to the other end; in the higher of the two, the soul passes out of hypotheses, and goes up to a principle which is above hypotheses, making no use of images as in the former case, but proceeding only in and through the ideas themselves.

I do not quite understand your meaning, he said.

Then I will try again; you will understand me better when I have made some preliminary remarks. You are aware that students of geometry, arithmetic, and the kindred sciences assume the odd and the even and the figures and three kinds of angles and the like in their several branches of science; these are their hypotheses, which they and every body are supposed to know, and therefore they do not deign to give any account of them either to themselves or others; but they begin with them, and go on until they arrive at last, and in a consistent manner, at their conclusion?

Yes, he said, I know.

And do you not know also that although they make use of the visible forms and reason about them, they are thinking not of these, but of the ideals which they resemble; not of the figures which they draw, but of the absolute square and the absolute diameter, and so on—the forms which they draw or make, and which have shadows and reflections in water of their own, are converted by them into images, but they are really seeking to behold the things themselves, which can only be seen with the eye of the mind?

That is true.

And of this kind I spoke as the intelligible, although in the search after it the soul is compelled to use hypotheses; not ascending to a first principle, because she is unable to rise above the region of hypothesis, but employing the objects of which the shadows below are resemblances in their turn as images, they having in relation to the shadows and reflections of them a

greater distinctness, and therefore a higher value.

I understand, he said, that you are speaking of the province of geometry and the sister arts.

And when I speak of the other division of the intelligible, you will understand me to speak of that other sort of knowledge which reason herself attains by the power of dialectic, using the hypotheses not as first principles, but only as hypotheses—that is to say, as steps and points of departure into a world which is above hypotheses, in order that she may soar beyond them to the first principle of the whole; and clinging to this and then to that which depends on this, by successive steps she descends again without the aid of any sensible object, from ideas, through ideas, and in ideas she ends.

I understand you, he replied; not perfectly, for you seem to me to be describing a task which is really tremendous; but, at any rate, I understand you to say that knowledge and being, which the science of dialectic contemplates, are clearer than the notions of the arts, as they are termed, which proceed from hypotheses only: these are also contemplated by the understanding, and not by the senses: yet, because they start from hypotheses and do not ascend to a principle, those who contemplate them appear to you not to exercise the higher reason upon them, although when a first principle is added to them they are cognizable by the higher reason. And the habit which is concerned with geometry and the cognate sciences I suppose that you would term understanding and not reason, as being intermediate between opinion and reason.

You have quite conceived my meaning, I said; and now, corresponding to these four divisions, let there be four faculties in the soul—reason answering to the highest, understanding to the second, faith (or conviction) to the third, and perception of shadows to the last—and let there be a scale of them, and let us suppose that the several faculties have clearness in the same degree that their objects have truth.

I understand, he replied, and give my assent, and accept your arrangement.

Allegory of the Cave

And now, I said, let me show in a figure how far our nature is enlightened or unenlightened:—Behold! human beings living in a underground den, which has a mouth open towards the light and reaching all along the den; here they have been from their childhood, and have their legs and necks chained so that they cannot move, and can only see before them, being prevented by the chains from turning round their heads. Above and behind them a fire is blazing at a distance, and between the fire and the

prisoners there is a raised way; and you will see, if you look, a low wall built along the way, like the screen which marionette players have in front of them, over which they show the puppets.

I see.

And do you see, I said, men passing along the wall carrying all sorts of vessels, and statues and figures of animals made of wood and stone and various materials, which appear over the wall? Some of them are talking, others silent.

You have shown me a strange image, and they are strange prisoners.

Like ourselves, I replied; and they see only their own shadows, or the shadows of one another, which the fire throws on the opposite wall of the cave?

True, he said; how could they see anything but the shadows if they were never allowed to move their heads?

And of the objects which are being carried in like manner they would only see the shadows?

Yes, he said.

And if they were able to converse with one another, would they not suppose that they were naming what was actually before them?

Very true.

And suppose further that the prison had an echo which came from the other side, would they not be sure to fancy when one of the passers-by spoke that the voice which they heard came from the passing shadow?

No question, he replied.

To them, I said, the truth would be literally nothing but the shadows of the images.

That is certain.

And now look again, and see what will naturally follow if the prisoners are released and disabused of their error. At first, when any of them is liberated and compelled suddenly to stand up and turn his neck round and walk and look towards the light, he will suffer sharp pains; the glare will distress him, and he will be unable to see the realities of which in his former state he had seen the shadows; and then conceive some one saying to him, that what he saw before was an illusion, but that now, when he is approaching nearer to being and his eye is turned towards more real existence, he has a clearer vision,—what will be his reply? And you may further imagine that his instructor is pointing to the objects as they pass and requiring him to name them,—will he not be perplexed? Will he not fancy that the shadows which

he formerly saw are truer than the objects which are now shown to him?

Far truer.

And if he is compelled to look straight at the light, will he not have a pain in his eyes which will make him turn away to take refuge in the objects of vision which he can see, and which he will conceive to be in reality clearer than the things which are now being shown to him?

True, he said.

And suppose once more, that he is reluctantly dragged up a steep and rugged ascent, and held fast until he is forced into the presence of the sun himself, is he not likely to be pained and irritated? When he approaches the light his eyes will be dazzled, and he will not be able to see anything at all of what are now called realities.

Not all in a moment, he said.

He will require to grow accustomed to the sight of the upper world. And first he will see the shadows best, next the reflections of men and other objects in the water, and then the objects themselves; then he will gaze upon the light of the moon and the stars and the spangled heaven; and he will see the sky and the stars by night better than the sun or the light of the sun by day?

Certainly.

Last of all he will be able to see the sun, and not mere reflections of him in the water, but he will see him in his own proper place, and not in another; and he will contemplate him as he is.

Certainly.

He will then proceed to argue that this is he who gives the season and the years, and is the guardian of all that is in the visible world, and in a certain way the cause of all things which he and his fellows have been accustomed to behold?

Clearly, he said, he would first see the sun and then reason about him.

And when he remembered his old habitation, and the wisdom of the den and his fellow-prisoners, do you not suppose that he would felicitate himself on the change, and pity them?

Certainly, he would.

And if they were in the habit of conferring honours among themselves on those who were quickest to observe the passing shadows and to remark which of them went before, and which followed after, and which were together; and who were therefore best able to draw conclusions as to the future, do you think that he would care for such honours and glories, or envy the

possessors of them? Would he not say with Homer,

'Better to be the poor servant of a poor master,'

and to endure anything, rather than think as they do and live after their manner?

Yes, he said, I think that he would rather suffer anything than entertain these false notions and live in this miserable manner.

Imagine once more, I said, such an one coming suddenly out of the sun to be replaced in his old situation; would he not be certain to have his eyes full of darkness?

To be sure, he said.

And if there were a contest, and he had to compete in measuring the shadows with the prisoners who had never moved out of the den, while his sight was still weak, and before his eyes had become steady (and the time which would be needed to acquire this new habit of sight might be very considerable), would he not be ridiculous? Men would say of him that up he went and down he came without his eyes; and that it was better not even to think of ascending; and if any one tried to loose another and lead him up to the light, let them only catch the offender, and they would put him to death.

No question, he said.

This entire allegory, I said, you may now append, dear Glaucon, to the previous argument; the prison-house is the world of sight, the light of the fire is the sun, and you will not misapprehend me if you interpret the journey upwards to be the ascent of the soul into the intellectual world according to my poor belief, which, at your desire, I have expressed—whether rightly or wrongly God knows. But, whether true or false, my opinion is that in the world of knowledge the idea of good appears last of all, and is seen only with an effort; and, when seen, is also inferred to be the universal author of all things beautiful and right, parent of light and of the lord of light in this visible world, and the immediate source of reason and truth in the intellectual; and that this is the power upon which he who would act rationally either in public or private life must have his eye fixed.

I agree, he said, as far as I am able to understand you.

Moreover, I said, you must not wonder that those who attain to this beatific vision are unwilling to descend to human affairs; for their souls are ever hastening into the upper world where they desire to dwell; which desire of theirs is very natural, if our allegory may be trusted.

Yes, very natural.

And is there anything surprising in one who passes from divine contemplations to the evil state of man, misbehaving himself in a

ridiculous manner; if, while his eyes are blinking and before he has become accustomed to the surrounding darkness, he is compelled to fight in courts of law, or in other places, about the images or the shadows of images of justice, and is endeavouring to meet the conceptions of those who have never yet seen absolute justice?

Anything but surprising, he replied.

Any one who has common sense will remember that the bewilderments of the eyes are of two kinds, and arise from two causes, either from coming out of the light or from going into the light, which is true of the mind's eye, quite as much as of the bodily eye; and he who remembers this when he sees any one whose vision is perplexed and weak, will not be too ready to laugh; he will first ask whether that soul of man has come out of the brighter life, and is unable to see because unaccustomed to the dark, or having turned from darkness to the day is dazzled by excess of light. And he will count the one happy in his condition and state of being, and he will pity the other; or, if he have a mind to laugh at the soul which comes from below into the light, there will be more reason in this than in the laugh which greets him who returns from above out of the light into the den.

That, he said, is a very just distinction.

But then, if I am right, certain professors of education must be wrong when they say that they can put a knowledge into the soul which was not there before, like sight into blind eyes.

They undoubtedly say this, he replied.

Whereas, our argument shows that the power and capacity of learning exists in the soul already; and that just as the eye was unable to turn from darkness to light without the whole body, so too the instrument of knowledge can only by the movement of the whole soul be turned from the world of becoming into that of

being, and learn by degrees to endure the sight of being, and of the brightest and best of being, or in other words, of the good.

Very true.

And must there not be some art which will effect conversion in the easiest and quickest manner; not implanting the faculty of sight, for that exists already, but has been turned in the wrong direction, and is looking away from the truth?

Yes, he said, such an art may be presumed.

And whereas the other so-called virtues of the soul seem to be akin to bodily qualities, for even when they are not originally innate they can be implanted later by habit and exercise, the virtue of wisdom more than anything else contains a divine element which always remains, and by this conversion is rendered useful and profitable; or, on the other hand, hurtful and useless. Did you never observe the narrow intelligence flashing from the keen eye of a clever rogue—how eager he is, how clearly his paltry soul sees the way to his end; he is the reverse of blind, but his keen eye-sight is forced into the service of evil, and he is mischievous in proportion to his cleverness?

Very true, he said.

But what if there had been a circumcision of such natures in the days of their youth; and they had been severed from those sensual pleasures, such as eating and drinking, which, like leaden weights, were attached to them at their birth, and which drag them down and turn the vision of their souls upon the things that are below—if, I say, they had been released from these impediments and turned in the opposite direction, the very same faculty in them would have seen the truth as keenly as they see what their eyes are turned to now.

14. Particular Parts

By David Hume

A very material question has been started concerning ABSTRACT or GENERAL ideas, WHETHER THEY BE GENERAL OR PARTICULAR IN THE MIND'S CONCEPTION OF THEM. A great philosopher [Dr. Berkeley.] has disputed the received opinion in this particular, and has asserted, that all general ideas are nothing but particular ones, annexed to a certain term, which gives them a more extensive signification, and makes them recall upon occasion other individuals, which are similar to them. As I look upon this to be one of the greatest and most valuable discoveries that has been made of late years in the republic of letters, I shall here endeavour to confirm it by some arguments, which I hope will put it beyond all doubt and controversy.

It is evident, that in forming most of our general ideas, if not all of them, we abstract from every particular degree of quantity and quality, and that an object ceases not to be of any particular species on account of every small alteration in its extension, duration and other properties. It may therefore be thought, that here is a plain dilemma, that decides concerning the nature of those abstract ideas, which have afforded so much

speculation to philosophers. The abstract idea of a man represents men of all sizes and all qualities; which it is concluded it cannot do, but either by representing at once all possible sizes and all possible qualities, or by, representing no particular one at all. Now it having been esteemed absurd to defend the former proposition, as implying an infinite capacity in the mind, it has been commonly inferred in favour of the latter: and our abstract ideas have been supposed to represent no particular degree either of quantity or quality. But that this inference is erroneous, I shall endeavour to make appear, first, by proving, that it is utterly impossible to conceive any quantity or quality, without forming a precise notion of its degrees: And secondly by showing, that though the capacity of the mind be not infinite, yet we can at once form a notion of all possible degrees of quantity and quality, in such a manner at least, as, however imperfect, may serve all the purposes of reflection and conversation.

To begin with the first proposition, THAT THE MIND CANNOT FORM ANY NOTION OF QUANTITY OR QUALITY WITHOUT FORMING A PRECISE NOTION OF

DEGREES OF EACH; we may prove this by the three following arguments. First, We have observed, that whatever objects are different are distinguishable, and that whatever objects are distinguishable are separable by the thought and imagination. And we may here add, that these propositions are equally true in the inverse, and that whatever objects are separable are also distinguishable, and that whatever objects are distinguishable, are also different. For how is it possible we can separate what is not distinguishable, or distinguish what is not different? In order therefore to know, whether abstraction implies a separation, we need only consider it in this view, and examine, whether all the circumstances, which we abstract from in our general ideas, be such as are distinguishable and different from those, which we retain as essential parts of them. But it is evident at first sight, that the precise length of a line is not different nor distinguishable from the line itself nor the precise degree of any quality from the quality. These ideas, therefore, admit no more of separation than they do of distinction and difference. They are consequently conjoined with each other in the conception; and the general idea of a line, notwithstanding all our abstractions and refinements, has in its appearance in the mind a precise degree of quantity and quality; however it may be made to represent others, which have different degrees of both.

Secondly, it is contest, that no object can appear to the senses; or in other words, that no impression can become present to the mind, without being determined in its degrees both of quantity and quality. The confusion, in which impressions are sometimes involved, proceeds only from their faintness and unsteadiness, not from any capacity in the mind to receive any impression, which in its real existence has no particular degree nor proportion. That is a contradiction in terms; and even implies the flattest of all contradictions, viz. that it is possible for the same thing both to be and not to be.

Now since all ideas are derived from impressions, and are nothing but copies and representations of them, whatever is true of the one must be acknowledged concerning the other. Impressions and ideas differ only in their strength and vivacity. The foregoing conclusion is not founded on any particular degree of vivacity. It cannot therefore be affected by any variation in that particular. An idea is a weaker impression; and as a strong impression must necessarily have a determinate quantity and quality, the case must be the same with its copy or representative.

Thirdly, it is a principle generally received in philosophy that everything in nature is individual, and that it is utterly absurd to suppose a triangle really existent, which has no precise proportion of sides and angles. If this therefore be absurd in fact and reality, it must also be absurd in idea; since nothing of

which we can form a clear and distinct idea is absurd and impossible. But to form the idea of an object, and to form an idea simply, is the same thing; the reference of the idea to an object being an extraneous denomination, of which in itself it bears no mark or character. Now as it is impossible to form an idea of an object, that is possest of quantity and quality, and yet is possest of no precise degree of either; it follows that there is an equal impossibility of forming an idea, that is not limited and confined in both these particulars. Abstract ideas are therefore in themselves individual, however they may become general in their representation. The image in the mind is only that of a particular object, though the application of it in our reasoning be the same, as if it were universal.

This application of ideas beyond their nature proceeds from our collecting all their possible degrees of quantity and quality in such an imperfect manner as may serve the purposes of life, which is the second proposition I proposed to explain. When we have found a resemblance [FN 2.] among several objects, that often occur to us, we apply the same name to all of them, whatever differences we may observe in the degrees of their quantity and quality, and whatever other differences may appear among them. After we have acquired a custom of this kind, the hearing of that name revives the idea of one of these objects, and makes the imagination conceive it with all its particular circumstances and proportions. But as the same word is supposed to have been frequently applied to other individuals, that are different in many respects from that idea, which is immediately present to the mind; the word not being able to revive the idea of all these individuals, but only touches the soul, if I may be allowed so to speak, and revives that custom, which we have acquired by surveying them. They are not really and in fact present to the mind, but only in power; nor do we draw them all out distinctly in the imagination, but keep ourselves in a readiness to survey any of them, as we may be prompted by a present design or necessity. The word raises up an individual idea, along with a certain custom; and that custom produces any other individual one, for which we may have occasion. But as the production of all the ideas, to which the name may be applied, is in most cases impossible, we abridge that work by a more partial consideration, and find but few inconveniences to arise in our reasoning from that abridgment.

For this is one of the most extraordinary circumstances in the present affair, that after the mind has produced an individual idea, upon which we reason, the attendant custom, revived by the general or abstract term, readily suggests any other individual, if by chance we form any reasoning, that agrees not with it. Thus should we mention the word triangle, and form the idea of a particular equilateral one to correspond to it, and should we afterwards assert, that the three angles of a triangle

are equal to each other, the other individuals of a scalenum and isosceles, which we overlooked at first, immediately crowd in upon us, and make us perceive the falshood of this proposition, though it be true with relation to that idea, which we had formed. If the mind suggests not always these ideas upon occasion, it proceeds from some imperfection in its faculties; and such a one as is often the source of false reasoning and sophistry. But this is principally the case with those ideas which are abstruse and compounded. On other occasions the custom is more entire, and it is seldom we run into such errors.

Nay so entire is the custom, that the very same idea may be annexed to several different words, and may be employed in different reasonings, without any danger of mistake. Thus the idea of an equilateral triangle of an inch perpendicular may serve us in talking of a figure, of a rectilinear figure, of a regular figure, of a triangle, and of an equilateral triangle. All these terms, therefore, are in this case attended with the same idea; but as they are wont to be applied in a greater or lesser compass, they excite their particular habits, and thereby keep the mind in a readiness to observe, that no conclusion be formed contrary to any ideas, which are usually comprized under them.

Before those habits have become entirely perfect, perhaps the mind may not be content with forming the idea of only one individual, but may run over several, in order to make itself comprehend its own meaning, and the compass of that collection, which it intends to express by the general term. That we may fix the meaning of the word, figure, we may revolve in our mind the ideas of circles, squares, parallelograms, triangles of different sizes and proportions, and may not rest on one image or idea. However this may be, it is certain that we form the idea of individuals, whenever we use any general term; that we seldom or never can exhaust these individuals; and that those, which remain, are only represented by means of that habit, by which we recall them, whenever any present occasion requires it. This then is the nature of our abstract ideas and general terms; and it is after this manner we account for the foregoing paradox, **THAT SOME IDEAS ARE PARTICULAR IN THEIR NATURE, BUT GENERAL IN THEIR REPRESENTATION.** A particular idea becomes general by being annexed to a general term; that is, to a term, which from a customary conjunction has a relation to many other particular ideas, and readily recalls them in the imagination.

The only difficulty, that can remain on this subject, must be with regard to that custom, which so readily recalls every particular idea, for which we may have occasion, and is excited by any word or sound, to which we commonly annex it. The most proper method, in my opinion, of giving a satisfactory explication of this act of the mind, is by producing other

instances, which are analogous to it, and other principles, which facilitate its operation. To explain the ultimate causes of our mental actions is impossible. It is sufficient, if we can give any satisfactory account of them from experience and analogy.

First then I observe, that when we mention any great number, such as a thousand, the mind has generally no adequate idea of it, but only a power of producing such an idea, by its adequate idea of the decimals, under which the number is comprehended. This imperfection, however, in our ideas, is never felt in our reasonings; which seems to be an instance parallel to the present one of universal ideas.

Secondly, we have several instances of habits, which may be revived by one single word; as when a person, who has by rote any periods of a discourse, or any number of verses, will be put in remembrance of the whole, which he is at a loss to recollect, by that single word or expression, with which they begin.

Thirdly, I believe every one, who examines the situation of his mind in reasoning will agree with me, that we do not annex distinct and compleat ideas to every term we make use of, and that in talking of government, church, negotiation, conquest, we seldom spread out in our minds all the simple ideas, of which these complex ones are composed. It is however observable, that notwithstanding this imperfection we may avoid talking nonsense on these subjects, and may perceive any repugnance among the ideas, as well as if we had a full comprehension of them. Thus if instead of saying, that in war the weaker have always recourse to negotiation, we should say, that they have always recourse to conquest, the custom, which we have acquired of attributing certain relations to ideas, still follows the words, and makes us immediately perceive the absurdity of that proposition; in the same manner as one particular idea may serve us in reasoning concerning other ideas, however different from it in several circumstances.

Fourthly, As the individuals are collected together, said placed under a general term with a view to that resemblance, which they bear to each other, this relation must facilitate their entrance in the imagination, and make them be suggested more readily upon occasion. And indeed if we consider the common progress of the thought, either in reflection or conversation, we shall find great reason to be satisfied in this particular. Nothing is more admirable, than the readiness, with which the imagination suggests its ideas, and presents them at the very instant, in which they become necessary or useful. The fancy runs from one end of the universe to the other in collecting those ideas, which belong to any subject. One would think the whole intellectual world of ideas was at once subjected to our view, and that we did nothing but pick out such as were most proper for

our purpose. There may not, however, be any present, beside those very ideas, that are thus collected by a kind of magical faculty in the soul, which, though it be always most perfect in the greatest geniuses, and is properly what we call a genius, is however inexplicable by the utmost efforts of human understanding.

Perhaps these four reflections may help to remove an difficulties to the hypothesis I have proposed concerning abstract ideas, so contrary to that, which has hitherto prevailed in philosophy, But, to tell the truth I place my chief confidence in what I have already proved concerning the impossibility of general ideas, according to the common method of explaining them. We must certainly seek some new system on this head, and there plainly is none beside what I have proposed. If ideas be particular in their nature, and at the same time finite in their number, it is only by custom they can become general in their representation, and contain an infinite number of other ideas under them.

Before I leave this subject I shall employ the same principles to explain that distinction of reason, which is so much talked of, and is so little understood, in the schools. Of this kind is the distinction betwixt figure and the body figured; motion and the body moved. The difficulty of explaining this distinction arises from the principle above explained, that all ideas, which are different, are separable. For it follows from thence, that if the figure be different from the body, their ideas must be separable as well as distinguishable: if they be not different, their ideas can neither be separable nor distinguishable. What then is meant by a distinction of reason, since it implies neither a difference nor separation.

To remove this difficulty we must have recourse to the foregoing explication of abstract ideas. It is certain that the mind would never have dreamed of distinguishing a figure from the body figured, as being in reality neither distinguishable, nor different, nor separable; did it not observe, that even in this simplicity there might be contained many different resemblances and relations. Thus when a globe of white marble is presented, we receive only the impression of a white colour disposed in a certain form, nor are we able to separate and distinguish the colour from the form. But observing afterwards a globe of black marble and a cube of white, and comparing them with our former object, we find two separate resemblances, in what formerly seemed, and really is, perfectly inseparable. After a little more practice of this kind, we begin to distinguish the figure from the colour by a distinction of reason; that is, we consider the figure and colour together, since they are in effect the same and undistinguishable; but still view them in different aspects, according to the resemblances, of which they are susceptible. When we would consider only the figure of the globe of white marble, we form in reality an idea both of the figure and colour, but tacitly carry our eye to its resemblance with the globe of black marble: And in the same manner, when we would consider its colour only, we turn our view to its resemblance with the cube of white marble. By this means we accompany our ideas with a kind of reflection, of which custom renders us, in a great measure, insensible. A person, who desires us to consider the figure of a globe of white marble without thinking on its colour, desires an impossibility but his meaning is, that we should consider the figure and colour together, but still keep in our eye the resemblance to the globe of black marble, or that to any other globe of whatever colour or substance.

Part IV

Freewill

15. Determinism

By Paul Henri Thiery (Baron d'Holbach)

It has been already sufficiently proved, that the soul is nothing more than the body, considered relatively to some of its functions, more concealed than others: it has been shewn, that this soul, even when it shall be supposed immaterial, is continually modified conjointly with the body; is submitted to all its motion; that without this it would remain inert and dead: that, consequently, it is subjected to the influence of those material, to the operation those physical causes, which give impulse to the body; of which the mode of existence, whether habitual or transitory, depends upon the material elements by which it is surrounded; that form its texture; that constitute its temperament; that enter into it by the means of the aliments; that penetrate it by their subtility; the faculties which are called intellectual, and those qualities which are styled moral, have been explained in a manner purely physical; entirely natural: in the last place, it has been demonstrated, that all the ideas, all the systems, all the affections, all the opinions, whether true or false, which man forms to himself, are to be attributed to his physical powers; are to be ascribed to his material senses. Thus man is a being purely physical; in whatever manner he is considered, he is connected to universal Nature: submitted to the necessary, to the immutable laws that she imposes on all the beings she contains, according

to their peculiar essences; conformable to the respective properties with which, without consulting them, she endows each particular species. Man's life is a line that Nature commands him to describe upon the surface of the earth: without his ever being able to swerve from it even for an instant. He is born without his own consent; his organizations does in no wise depend upon himself; his ideas come to him involuntarily; his habits are in the power of those who cause him to contract them; he is unceasingly modified by causes, whether visible or concealed, over which he has no controul; give the hue to his way of thinking, and determine his manner of acting. He is good or bad—happy or miserable—wise or foolish—reasonable or irrational, without his will going for anything in these various states. Nevertheless, in despite of the shackles by which he is bound, it is pretended he is a free agent, or that independent of the causes by which he is moved, he determines his own will; regulates his own condition.

However slender the foundation of this opinion, of which every thing ought to point out to him the error; it is current at this day for an incontestible truth, and believed enlightened; it is the basis or religion, which has been incapable

of imagining how man could either merit reward or deserve punishment if he was not a free agent. Society has been believed interested in this system, because an idea has gone abroad, that if all the actions of man were to be contemplated as necessary, the right of punishing those who injure their associates would no longer exist. At length human vanity accommodated itself to an hypothesis which, unquestionable, appears to distinguish man from all other physical beings, by assigning to him the special privilege of a total independence of all other causes; but of which a very little reflection would have shewn him the absurdity or even the impossibility. ...

The will, as we have elsewhere said, is a modification of the brain, by which it is disposed to action or prepared to give play to the organs. This will is necessarily determined by the qualities, good or bad, agreeable or painful, of the object or the motive that acts upon his senses; or of which the idea remains with him, and is resuscitated by his memory. In consequence, he acts necessarily; his action is the result of the impulse he receives either from the motive, from the object, or from the idea, which has modified his brain, or disposed his will. When he does not act according to this impulse, it is because there comes some new cause, some new motive, some new idea, which modifies his brain in a different manner, gives him a new impulse, determines his will in another way; by which the action of the former impulse is suspended: thus, the sight of an agreeable object, or its idea, determines his will to set him in action to procure it; but if a new object or a new idea more powerfully attracts him, it gives a new direction to his will, annihilates the effect of the former, and prevents the action by which it was to be procured. This is the mode in which reflection, experience, reason, necessarily arrests or suspends the action of man's will; without this, he would, of necessity, have followed the anterior impulse which carried him towards a then desirable object. In all this he always acts according to necessary laws, from which he has no means of emancipating himself.

If, when tormented with violent thirst, he figures to himself an idea, or really perceives a fountain, whose limpid streams might cool his feverish habit, is he sufficient master of himself to desire or not to desire the object competent to satisfy so lively a want? It will no doubt be conceded, that it is impossible he should not be desirous to satisfy it; but it will be said,—If at this moment it is announced to him, the water he so ardently desires is poisoned, he will, notwithstanding his vehement thirst, abstain from drinking it; and it has, therefore, been falsely concluded that he is a free agent. The fact, however, is, that the motive in either case is exactly the same: his own conservation. The same necessity that determined him to drink, before he knew the water was deleterious, upon this new discovery, equally determines him not to drink; the desire of

conserving himself, either annihilates or suspends the former impulse; the second motive becomes stronger than the preceding; that is, the fear of death, or the desire of preserving himself, necessarily prevails over the painful sensation caused by his eagerness to drink. But, (it will be said) if the thirst is very parching, an inconsiderate man, without regarding the danger, will risque swallowing the water. Nothing is gained by this remark: in this case, the anterior impulse only regains the ascendancy; he is persuaded, that life may possibly be longer preserved, or that he shall derive a greater good by drinking the poisoned water, than by enduring the torment, which, to his mind, threatens instant dissolution: thus, the first becomes the strongest, and necessarily urges him on to action. Nevertheless, in either case, whether he partakes of the water, or whether he does not, the two actions will be equally necessary; they will be the effect of that motive which finds itself most puissant; which consequently acts in a most coercive manner upon his will.

This example will serve to explain the whole phaenomena of the human will. This will, or rather the brain, finds itself in the same situation as a bowl, which although it has received an impulse that drives it forward in a straight line, is deranged in its course, whenever a force, superior to the first, obliges it to change its direction. The man who drinks the poisoned water, appears a madman; but the actions of fools are as necessary as those of the most prudent individuals. The motives that determine the voluptuary, that actuate the debauchee to risk their health, are as powerful, their actions are as necessary, as those which decide the wise man to manage his. But, it will be insisted, the debauchee may be prevailed on to change his conduct; this does not imply that he is a free agent; but, that motives may be found sufficiently powerful to annihilate the effect of those that previously acted upon him; then these new motives determine his will to the new mode of conduct he may adopt, as necessarily as the former did to the old mode. ...

Choice by no means proves the free-agency of man; he only deliberates when he does not yet know which to choose of the many objects that move him, he is then in an embarrassment, which does not terminate, until his will as decided by the greater advantage he believes he shall find in the object he chooses, or the action he undertakes. From whence it may be seen that choice is necessary, because he would not determine for an object, or for an action, if he did not believe that he should find in it some direct advantage. That man should have free-agency, it were needful that he should be able to will or choose without motive; or, that he could prevent motives coercing his will. Action always being the effect of his will once determined, as his will cannot be determined but by a motive, which is not in his own power, it follows that he is never the master of the

determination of his own peculiar will; that consequently he never acts as a free agent. It has been believed that man was a free agent, because he had a will with the power of choosing; but attention has not been paid to the fact, that even his will is moved by causes independent of himself, is owing to that which is inherent in his own organization, or which belongs to the nature of the beings acting on him. Indeed, man passes a great portion of his life without even willing. His will attends the motive by which it is determined. If he was to render an exact account of every thing he does in the course of each day, from rising in the morning to lying down at night, he would find, that not one of his actions have been in the least voluntary; that they have been mechanical, habitual, determined by causes he was not able to foresee, to which he was either obliged to, yield, or with which he was allured to acquiesce; he would discover, that all the motives of his labours, of his amusements, of his discourses, of his thoughts, have been necessary; that they have evidently either seduced him or drawn him along. Is he the master of willing, not to withdraw his hand from the fire when he fears it will be burnt? Or has he the power to take away from fire the property which makes him fear it? Is he the master of not choosing a dish of meat which he knows to be agreeable, or analogous to his palate; of not preferring it to that which he knows to be disagreeable or dangerous? It is always according to his sensations, to his own peculiar experience, or to his suppositions, that he judges of things either well or ill; but whatever way be his judgment, it depends necessarily on his mode of feeling, whether habitual or accidental, and the qualities he finds in the causes that move him, which exist in despite of himself.

All the causes which by his will is actuated, must act upon him in a manner sufficiently marked, to give him some sensation, some perception, some idea, whether complete or incomplete, true or false; as soon as his will is determined, he must have felt, either strongly or feebly; if this was not the case he would have determined without motive: thus, to speak correctly, there are no causes which are truly indifferent to the will: however faint the impulse he receives, whether on the part of the objects themselves, or on the part of their images or ideas, as soon as his will acts, the impulse has been competent to determine him. In consequence of a slight, of a feeble impulse, the will is weak, it is this weakness of the will that is called *indifference*. His brain with difficulty perceives the sensation, it has received; it consequently acts with less vigour, either to obtain or remove the object or the idea that has modified it. If the impulse is powerful, the will is strong, it makes him act vigorously, to obtain or to remove the object which appears to him either very agreeable or very incommodious.

It has been believed man was a free agent, because it has been imagined that his soul could at will recall ideas, which sometimes suffice to check his most unruly desires. Thus, the idea of a remote evil frequently prevents him from enjoying a present and actual good: thus, remembrance, which is an almost insensible, a slight modification of his brain, annihilates, at each instant, the real objects that act upon his will. But he is not master of recalling to himself his ideas at pleasure; their association is independent of him; they are arranged in his brain, in despite of him, without his own knowledge, where they have made an impression more or less profound; his memory itself depends upon his organization; its fidelity depends upon the habitual or momentary state in which he finds himself; when his will is vigorously determined to some object or idea that excites a very lively passion in him, those objects or ideas that would be able to arrest his action no longer present themselves to his mind; in those moments his eyes are shut to the dangers that menace him, of which the idea ought to make him forbear; he marches forward headlong towards the object by whose image he is hurried on; reflection cannot operate upon him in any way; he sees nothing but the object of his desires; the salutary ideas which might be able to arrest his progress disappear, or else display themselves either too faintly or too late to prevent his acting. Such is the case with all those who, blinded by some strong passion, are not in a condition to recal to themselves those motives, of which the idea alone, in cooler moments, would be sufficient to deter them from proceeding; the disorder in which they are, prevents their judging soundly; render them incapable of foreseeing the consequence of their actions; precludes them from applying to their experience; from making use of their reason; natural operations, which suppose a justness in the manner of associating their ideas; but to which their brain is then not more competent, in consequence of the momentary delirium it suffers, than their hand is to write whilst they are taking violent exercise.

Man's mode of thinking is necessarily determined by his manner of being; it must, therefore, depend on his natural organization, and the modification his system receives independently of his will. From this we are obliged to conclude, that his thoughts, his reflections, his manner of viewing things, of feeling, of judging, of combining ideas, is neither voluntary nor free. In a word, that his soul is neither mistress of the motion excited in it, nor of representing to itself, when wanted, those images or ideas that are capable of counterbalancing the impulse it receives. This is the reason why man, when in a passion, ceases to reason; at that moment reason is as impossible to be heard, as it is during an extacy, or in a fit of drunkenness. The wicked are never more than men who are either drunk or mad: if they reason, it is not until tranquillity is re-established in their

machine; then, and not till then, the tardy ideas that present themselves to their mind, enable them to see the consequence of their actions, and give birth to ideas, that bring on them that trouble, which is designated *shame, regret, remorse*.

The errors of philosophers on the free-agency of man, have arisen from their regarding his will as the *primum mobile*, the original motive of his actions; for want of recurring back, they have not perceived the multiplied, the complicated causes, which, independently of him, give motion to the will itself, or which dispose and modify his brain, whilst he himself is purely passive in the motion he receives. Is he the master of desiring or not desiring an object that appears desirable to him? Without doubt it will be answered, No: but he is the master of resisting his desire, if he reflects on the consequences. But, I ask, is he capable of reflecting on these consequences when his soul is hurried along by a very lively passion, which entirely depends upon his natural organization, and the causes by which he is modified? Is it in his power to add to these consequences all the weight necessary to counterbalance his desire? Is he the master of preventing the qualities which render an object desirable from residing in it? I shall be told, he ought to have learned to resist his passions; to contract a habit of putting a curb on his desires. I agree to it without any difficulty: but in reply, I again ask, Is his nature susceptible of this modification? Does his boiling blood, his unruly imagination, the igneous fluid that circulates in his veins, permit him to make, enable him to apply true experience in the moment when it is wanted? And, even when his temperament has capacitated him, has his education, the examples set before him, the ideas with which he has been inspired in early life, been suitable to make him contract this habit of repressing his desires? Have not all these things rather contributed to induce him to seek with avidity, to make him actually desire those objects which you say he ought to resist. ...

In short, the actions of man are never free; they are always the necessary consequence of his temperament, of the received ideas, of the notions, either true or false, which he has formed to himself of happiness: of his opinions, strengthened by example, forfeited by education, consolidated by daily experience. So many crimes are witnessed on the earth, only because every thing conspires to render man vicious, to make him criminal; very frequently, the superstitions he has adopted, his government, his education, the examples set before him, irresistibly drive him on to evil: under these circumstances morality preaches virtue to him in vain. In those societies where vice is esteemed, where crime is crowned, where venality is constantly recompensed, where the most dreadful disorders are punished, only in those who are too weak to enjoy the privilege of committing them with impunity; the practice of virtue is considered nothing more than a painful sacrifice of fancied

happiness. Such societies chastise, in the lower orders, those excesses which they respect in the higher ranks; and frequently have the injustice to condemn those in penalty of death, whom public prejudices, maintained by constant example, have rendered criminal.

Man, then, is not a free agent in any one instant of his life; he is necessarily guided in each step by those advantages, whether real or fictitious, that he attaches to the objects by which his passions are roused: these passions themselves are necessary in a being who, unceasingly tends towards his own happiness; their energy is necessary, since that depends on his temperament; his temperament is necessary, because it depends on the physical elements which enter into his composition; the modification of this temperament is necessary, as it is the infallible result, the inevitable consequence of the impulse he receives from the incessant action of moral and physical beings.

1. In despite of these proofs of the want of free-agency in man, so clear to unprejudiced minds, it will, perhaps, be insisted upon with no small feeling of triumph, that if it be proposed to any one to move or not to move his hand, an action in the number of those called *indifferent*, he evidently appears to be the master of choosing; from which it is concluded, evidence has been offered of his free-agency. The reply is, this example is perfectly simple; man in performing some action which he is resolved on doing, does not by any means prove his free-agency: the very desire of displaying this quality, excited by the dispute, becomes a necessary motive which decides his will either for the one or the other of these actions: what deludes him in this instance, or that which persuades him he is a free agent at this moment, is, that he does not discern the true motive which sets him in action; which is neither more nor less than the desire of convincing his opponent: if in the heat of the dispute he insists and asks, "Am I not the master of throwing myself out of the window?" I shall answer him, no; that whilst he preserves his reason, there is not even a probability that the desire of proving his free-agency, will become a motive sufficiently powerful, to make him sacrifice his life to the attempt; if, notwithstanding this, to prove he is a free agent, he should actually precipitate himself from the window, it would not be a sufficient warranty to conclude he acted freely, but rather that it was the violence of his temperament which spurred him on to this folly. Madness is a state that depends upon the heat of the blood, not upon the will. A fanatic or a hero, braves death as necessarily as a more phlegmatic man or a coward flies from it. There is, in point of fact, no difference between the man who is cast out of the window by another, and the man who throws himself out of it, except that the impulse in the first instance comes immediately from without, whilst that

which determines the fall in the second case, springs from within his own peculiar machine, having its more remote cause also exterior. When Mutius Scaevola held his hand in the fire, he was as much acting under the influence of necessity, caused by interior motives, that urged him to this strange action, as if his arm had been held by strong men; pride, despair, the desire of braving his enemy, a wish to astonish him, an anxiety to intimidate him, &c. were the invisible chains that held his hand bound to the fire. The love of glory, enthusiasm for their country, in like manner, caused Codrus and Decius to devote themselves for their fellow citizens. The Indian Calanus and the philosopher Peregrinus were equally obliged to burn themselves, by the desire of exciting the astonishment of the Grecian assembly.

It is said that free-agency is the absence of those obstacles competent to oppose themselves to the actions of man, or to the exercise of his faculties: it is pretended that he is a free agent, whenever, making use of these faculties, he produces the effect he has proposed to himself. In reply to this reasoning, it is sufficient to consider that it in no wise depends upon himself to place or remove the obstacles that either determine or resist him; the motive that causes his action is no more in his own power than the obstacle that impedes him, whether this obstacle or motive be within his own machine or exterior of his person: he is not master of the thought presented to his mind which determines his will; this thought is excited by some cause independent of himself.

To be undeceived on the system of his free-agency, man has simply to recur to the motive by which his will is determined, he will always find this motive is out of his own controul. It is said, that in consequence of an idea to which the mind gives birth, man acts freely if he encounters no obstacle. But the question is, what gives birth to this idea in his brain? has he the power either to prevent it from presenting itself, or from renewing itself in his brain? Does not this idea depend either upon objects that strike him exteriorly and in despite of himself, or upon causes that without his knowledge act within himself and modify his brain? Can he prevent his eyes, cast without design upon any object whatever, from giving him an idea of this object, from moving his brain? He is not more master of the obstacles; they are the necessary effects of either interior or exterior causes, which always act according to their given properties. A man insults a coward, who is necessarily irritated against his insulter, but his will cannot vanquish the obstacle that cowardice places to the object of his desire, which is, to resent the insult; because his natural conformation, which does not depend upon himself, prevents his having courage. In this case the coward is insulted in despite of himself, and against his will is obliged patiently to brook the insult he has received.

2. The partizans of the system of free-agency appear ever to have confounded constraint with necessity. Man believes he acts as a free agent, every time he does not see any thing that places obstacles to his actions; he does not perceive that the motive which causes him to will is always necessary, is ever independent of himself. A prisoner loaded with chains is compelled to remain in prison, but he is not a free agent, he is not able to resist the desire to emancipate himself; his chains prevent him from acting, but they do not prevent him from willing; he would save himself if they would loose his fetters, but he would not save himself as a free agent, fear or the idea of punishment would be sufficient motives for his action.

Man may therefore cease to be restrained, without, for that reason, becoming a free agent: in whatever manner he acts, he will act necessarily; according to motives by which he shall be determined. He may be compared to a heavy body, that finds itself arrested in its descent by any obstacle whatever: take away this obstacle, it will gravitate or continue to fall; but who shall say this dense body is free to fall or not? Is not its descent the necessary effect of its own specific gravity? The virtuous Socrates submitted to the laws of his country, although they were unjust; notwithstanding the doors of his gaol were left open to him he would not save himself; but in this he did not act as a free agent; the invisible chains of opinion, the secret love of decorum, the inward respect for the laws, even when they were iniquitous, the fear of tarnishing his glory, kept him in his prison: they were motives sufficiently powerful, with this enthusiast for virtue, to induce him to wait death with tranquility; it was not in his power to save himself, because he could find no potential motive to bring him to depart, even for an instant, from those principles to which his mind was accustomed.

Man, says he, frequently acts against his inclination, from whence he has falsely concluded he is a free agent; when he appears to act contrary to his inclination, he is determined to it by some motive sufficiently efficacious to vanquish this inclination. A sick man, with a view to his cure, arrives at conquering his repugnance to the most disgusting remedies: the fear of pain, the dread of death, then become necessary and intelligent motives; consequently, this sick man cannot be said, with truth, by any means, to act freely.

When it is said, that man is not a free agent, it is not pretended to compare him to a body moved by a simple impulsive cause: he contains within himself causes inherent to his existence; he is moved by an interior organ, which has its own peculiar laws; which is itself necessarily determined, in consequence of ideas formed from perceptions, resulting from sensations, which it receives from exterior objects. As the mechanism of these sensations, of these perceptions, and the

manner they engrave ideas on the brain of man, are not known to him, because he is unable to unravel all these motions; because he cannot perceive the chain of operations in his soul, or the motive-principle that acts within him, he supposes himself a free agent; which, literally translated, signifies that he moves himself by himself; that he determines himself without cause; when he rather ought to say, he is ignorant how or for why he acts in the manner he does. It is true the soul enjoys an activity peculiar to itself, but it is equally certain that this activity would never be displayed if some motive or some cause did not put it in a condition to exercise itself, at least it will not be pretended that the soul is able either to love or to hate without being moved, without knowing the objects, without having some idea of their qualities. Gunpowder has unquestionably a particular activity, but this activity will never display itself, unless fire be applied to it; this, however, immediately sets in motion.

3. It is the great complication of motion in man, it is the variety of his action, it is the multiplicity of causes that move him, whether simultaneously or in continual succession, that persuades him he is a free agent: if all his motions were simple, if the causes that move him did not confound themselves with each other, if they were distinct, if his machine was less complicated, he would perceive that all his actions were necessary, because he would be enabled to recur instantly to the cause that made him act. A man who should be always obliged to go towards the west would always go on that side, but he would feel extremely well, that in so going he was not a free agent: if he had another sense, as his actions or his motion augmented by a sixth would be still more varied, much more complicated, he would believe himself still more a free agent than he does with his five senses.

It is, then, for want of recurring to the causes that move him, for want of being able to analyse, from not being competent to decompose the complicated motion of his machine, that man believes himself a free agent; it is only upon his own ignorance that he founds the profound yet deceitful notion he has of his free-agency, that he builds those opinions which he brings forward as a striking proof of his pretended freedom of action. If, for a short time, each man was willing to examine his own peculiar actions, to search out their true motives, to discover their concatenation, he would remain convinced that the sentiment he has of his natural free-agency is a chimera that must speedily be destroyed by experience.

Nevertheless, it must be acknowledged that the multiplicity, the diversity of the causes which continually act upon man, frequently without even his knowledge, render it impossible, or at least extremely difficult, for him to recur to the

true principles of his own peculiar actions, much less the actions of others; they frequently depend upon causes so fugitive, so remote from their effects, and which, superficially examined, appear to have so little analogy, so slender a relation with them, that it requires singular sagacity to bring them into light. This is what renders the study of the moral man a task of such difficulty; this is the reason why his heart is an abyss, of which it is frequently impossible for him to fathom the depth. He is, then, obliged to content himself with a knowledge of the general and necessary laws by which the human heart is regulated; for the individuals of his own species these laws are pretty nearly the same, they vary only in consequence of the organization that is peculiar to each, and of the modification it undergoes; this, however, is not, cannot be rigorously the same in any two. It suffices to know that by his essence man tends to conserve himself, to render his existence happy: this granted, whatever may be his actions, if he recurs back to this first principle, to this general, this necessary tendency of his will, he never can be deceived with regard to his motives. Man, without doubt, for want of cultivating reason, being destitute of experience, frequently deceives himself upon the means of arriving at this end; sometimes the means he employs are unpleasant to his fellows, because they are prejudicial to their interests; or else those of which he avails himself appear irrational, because they remove him from the end to which he would approximate: but whatever may be these means, they have always necessarily and invariably for object, either an existing or imaginary happiness; are directed to preserve himself in a state analogous to his mode of existence, to his manner of feeling, to his way of thinking; whether durable or transitory. It is from having mistaken this truth, that the greater number of moral philosophers have made rather the romance, than the history of the human heart; they have attributed the actions of man to fictitious causes; at least they have not sought out the necessary motives of his conduct. Politicians and legislators have been in the same state of ignorance; or else impostors have found it much shorter to employ imaginary motive-powers, than those which really have existence: they have rather chosen to make man wander out of his way, to make him tremble under incommensurable phantoms, than guide him to virtue by the direct road to happiness; notwithstanding the conformity of the latter with the natural desires of his heart. So true it is, that *error can never possibly be useful, to the human species.* ...

If he understood the play of his organs, if he was able to recal to himself all the impulsions they have received, all the modifications they have undergone, all the effects they have produced, he would perceive, that all his actions are submitted to that *fatality* which regulates his own particular system, as it does the entire system of the universe: no one effect in him, any more

than in Nature, produce itself by *chance*; this, as has been before proved, is a word void of sense. All that passes in him, all that is done by him, as well as all that happens in Nature, or that is attributed to her, is derived from necessary laws, which produce necessary effects; from whence necessarily flow others.

Fatality is the eternal, the immutable, the necessary order established in Nature, or the indispensable connection of causes that act with the effects they operate. Conforming to this order, heavy bodies fall, light bodies rise; that which is analogous in matter, reciprocally attracts; that which is heterogeneous, mutually repels; man congregates himself in society, modifies each his fellow, becomes either virtuous or wicked; either contributes to his mutual happiness, or

reciprocates his misery; either loves his neighbour, or hates his companion necessarily; according to the manner in which the one acts upon the other. From whence it may be seen, that the same necessity which regulates the physical, also regulates the moral world: in which every thing is in consequence submitted to fatality. Man, in running over, frequently without his own knowledge, often in despite of himself, the route which Nature has marked out for him, resembles a swimmer who is obliged to follow the current that carries him along; he believes himself a free agent, because he sometimes consents, sometimes does not consent, to glide with the stream; which, notwithstanding, always hurries him forward; he believes himself the master of his condition, because he is obliged to use his arms under the fear of sinking.

Part V

Ethics

16. Utilitarianism

By John Stuart Mills

What is Utilitarianism

The creed which accepts as the foundation of morals, Utility, or the Greatest Happiness Principle, holds that actions are right in proportion as they tend to promote happiness, wrong as they tend to produce the reverse of happiness. By happiness is intended pleasure, and the absence of pain; by unhappiness, pain, and the privation of pleasure. To give a clear view of the moral standard set up by the theory, much more requires to be said; in particular, what things it includes in the ideas of pain and pleasure; and to what extent this is left an open question. But these supplementary explanations do not affect the theory of life on which this theory of morality is grounded—namely, that pleasure, and freedom from pain, are the only things desirable as ends; and that all desirable things (which are as numerous in the utilitarian as in any other scheme) are desirable either for the pleasure inherent in themselves, or as means to the promotion of pleasure and the prevention of pain.

Now, such a theory of life excites in many minds, and

among them in some of the most estimable in feeling and purpose, inveterate dislike. To suppose that life has (as they express it) no higher end than pleasure—no better and nobler object of desire and pursuit—they designate as utterly mean and grovelling; as a doctrine worthy only of swine, ...

But there is no known ... theory of life which does not assign to the pleasures of the intellect; of the feelings and imagination, and of the moral sentiments, a much higher value as pleasures than to those of mere sensation. It must be admitted, however, that utilitarian writers in general have placed the superiority of mental over bodily pleasures chiefly in the greater permanency, safety, uncostliness, &c., of the former—that is, in their circumstantial advantages rather than in their intrinsic nature. And on all these points utilitarians have fully proved their case; but they might have taken the other, and, as it may be called, higher ground, with entire consistency. It is quite compatible with the principle of utility to recognise the fact, that some *kinds* of pleasure are more desirable and more valuable than others. It would be absurd that while, in estimating all other

things, quality is considered as well as quantity, the estimation of pleasures should be supposed to depend on quantity alone.

If I am asked, what I mean by difference of quality in pleasures, or what makes one pleasure more valuable than another, merely as a pleasure, except its being greater in amount, there is but one possible answer. Of two pleasures, if there be one to which all or almost all who have experience of both give a decided preference, irrespective of any feeling of moral obligation to prefer it, that is the more desirable pleasure. If one of the two is, by those who are competently acquainted with both, placed so far above the other that they prefer it, even though knowing it to be attended with a greater amount of discontent, and would not resign it for any quantity of the other pleasure which their nature is capable of, we are justified in ascribing to the preferred enjoyment a superiority in quality, so far outweighing quantity as to render it, in comparison, of small account.

Now it is an unquestionable fact that those who are equally acquainted with, and equally capable of appreciating and enjoying, both, do give a most marked preference to the manner of existence which employs their higher faculties. Few human creatures would consent to be changed into any of the lower animals, for a promise of the fullest allowance of a beast's pleasures; no intelligent human being would consent to be a fool, no instructed person would be an ignoramus, no person of feeling and conscience would be selfish and base, even though they should be persuaded that the fool, the dunce, or the rascal is better satisfied with his lot than they are with theirs. They would not resign what they possess more than he, for the most complete satisfaction of all the desires which they have in common with him. If they ever fancy they would, it is only in cases of unhappiness so extreme, that to escape from it they would exchange their lot for almost any other, however undesirable in their own eyes. A being of higher faculties requires more to make him happy, is capable probably of more acute suffering, and is certainly accessible to it at more points, than one of an inferior type; but in spite of these liabilities, he can never really wish to sink into what he feels to be a lower grade of existence. ...

It may be objected, that many who are capable of the higher pleasures, occasionally, under the influence of temptation, postpone them to the lower. But this is quite compatible with a full appreciation of the intrinsic superiority of the higher. Men often, from infirmity of character, make their election for the nearer good, though they know it to be the less valuable; and this no less when the choice is between two bodily pleasures, than when it is between bodily and mental. They pursue sensual indulgences to the injury of health, though perfectly aware that

health is the greater good. It may be further objected, that many who begin with youthful enthusiasm for everything noble, as they advance in years sink into indolence and selfishness. But I do not believe that those who undergo this very common change, voluntarily choose the lower description of pleasures in preference to the higher. I believe that before they devote themselves exclusively to the one, they have already become incapable of the other. Capacity for the nobler feelings is in most natures a very tender plant, easily killed, not only by hostile influences, but by mere want of sustenance; and in the majority of young persons it speedily dies away if the occupations to which their position in life has devoted them, and the society into which it has thrown them, are not favourable to keeping that higher capacity in exercise. Men lose their high aspirations as they lose their intellectual tastes, because they have not time or opportunity for indulging them; and they addict themselves to inferior pleasures, not because they deliberately prefer them, but because they are either the only ones to which they have access, or the only ones which they are any longer capable of enjoying. It may be questioned whether any one who has remained equally susceptible to both classes of pleasures, ever knowingly and calmly preferred the lower; though many, in all ages, have broken down in an ineffectual attempt to combine both.

From this verdict of the only competent judges, I apprehend there can be no appeal. On a question which is the best worth having of two pleasures, or which of two modes of existence is the most grateful to the feelings, apart from its moral attributes and from its consequences, the judgment of those who are qualified by knowledge of both, or, if they differ, that of the majority among them, must be admitted as final. And there needs be the less hesitation to accept this judgment respecting the quality of pleasures, since there is no other tribunal to be referred to even on the question of quantity. What means are there of determining which is the acutest of two pains, or the intensest of two pleasurable sensations, except the general suffrage of those who are familiar with both? ...

I must again repeat, what the assailants of utilitarianism seldom have the justice to acknowledge, that the happiness which forms the utilitarian standard of what is right in conduct, is not the agent's own happiness, but that of all concerned. As between his own happiness and that of others, utilitarianism requires him to be as strictly impartial as a disinterested and benevolent spectator. In the golden rule of Jesus of Nazareth, we read the complete spirit of the ethics of utility. To do as one would be done by, and to love one's neighbor as oneself, constitute the ideal perfection of utilitarian morality. As the means of making the nearest approach to this ideal, utility would enjoin, first, that laws and social arrangements should place the happiness, or (as speaking practically it may be called) the

interest, of every individual, as nearly as possible in harmony with the interest of the whole; and secondly, that education and opinion, which have so vast a power over human character, should so use that power as to establish in the mind of every individual an indissoluble association between his own happiness and the good of the whole; especially between his own happiness and the practice of such modes of conduct, negative and positive, as regard for the universal happiness prescribes: so that not only he may be unable to conceive the possibility of happiness to himself, consistently with conduct opposed to the general good, but also that a direct impulse to promote the general good may be in every individual one of the habitual motives of action, and the sentiments connected therewith may fill a large and prominent place in every human being's sentient existence. If the impugners of the utilitarian morality represented it to their own minds in this its true character, I know not what recommendation possessed by any other morality they could possibly affirm to be wanting to it: what more beautiful or more exalted developments of human nature any other ethical system can be supposed to foster, or what springs of action, not accessible to the utilitarian, such systems rely on for giving effect to their mandates.

The objectors to utilitarianism cannot always be charged with representing it in a discreditable light. On the contrary, those among them who entertain anything like a just idea of its disinterested character, sometimes find fault with its standard as being too high for humanity. They say it is exacting too much to require that people shall always act from the inducement of promoting the general interests of society. But this is to mistake the very meaning of a standard of morals, and to confound the rule of action with the motive of it. It is the business of ethics to tell us what are our duties, or by what test we may know them; but no system of ethics requires that the sole motive of all we do shall be a feeling of duty; on the contrary, ninety-nine hundredths of all our actions are done from other motives, and rightly so done, if the rule of duty does not condemn them. It is the more unjust to utilitarianism that this particular misapprehension should be made a ground of objection to it, inasmuch as utilitarian moralists have gone beyond almost all others in affirming that the motive has nothing to do with the morality of the action, though much with the worth of the agent. He who saves a fellow creature from drowning does what is morally right, whether his motive be duty, or the hope of being paid for his trouble: he who betrays the friend that trusts him, is guilty of a crime, even if his object be to serve another friend to whom he is under greater obligations. But to speak only of actions done from the motive of duty, and in direct obedience to principle: it is a misapprehension of the utilitarian mode of thought, to conceive it as implying that

people should fix their minds upon so wide a generality as the world, or society at large. The great majority of good actions are intended, not for the benefit of the world, but for that of individuals, of which the good of the world is made up; and the thoughts of the most virtuous man need not on these occasions travel beyond the particular persons concerned, except so far as is necessary to assure himself that in benefiting them he is not violating the rights—that is, the legitimate and authorized expectations—of any one else. The multiplication of happiness is, according to the utilitarian ethics, the object of virtue: the occasions on which any person (except one in a thousand) has it in his power to do this on an extended scale, in other words, to be a public benefactor, are but exceptional; and on these occasions alone is he called on to consider public utility; in every other case, private utility, the interest or happiness of some few persons, is all he has to attend to. Those alone the influence of whose actions extends to society in general, need concern themselves habitually about so large an object. In the case of abstinences indeed—of things which people forbear to do, from moral considerations, though the consequences in the particular case might be beneficial—it would be unworthy of an intelligent agent not to be consciously aware that the action is of a class which, if practised generally, would be generally injurious, and that this is the ground of the obligation to abstain from it. The amount of regard for the public interest implied in this recognition, is no greater than is demanded by every system of morals; for they all enjoin to abstain from whatever is manifestly pernicious to society....

Again, Utility is often summarily stigmatized as an immoral doctrine by giving it the name of Expediency, and taking advantage of the popular use of that term to contrast it with Principle. But the Expedient, in the sense in which it is opposed to the Right, generally means that which is expedient for the particular interest of the agent himself: as when a minister sacrifices the interest of his country to keep himself in place. When it means anything better than this, it means that which is expedient for some immediate object, some temporary purpose, but which violates a rule whose observance is expedient in a much higher degree. The Expedient, in this sense, instead of being the same thing with the useful, is a branch of the hurtful. Thus, it would often be expedient, for the purpose of getting over some momentary embarrassment, or attaining some object immediately useful to ourselves or others, to tell a lie. But inasmuch as the cultivation in ourselves of a sensitive feeling on the subject of veracity, is one of the most useful, and the enfeeblement of that feeling one of the most hurtful, things to which our conduct can be instrumental; and inasmuch as any, even unintentional, deviation from truth, does that much towards weakening the trustworthiness of human assertion, which is not

only the principal support of all present social well-being, but the insufficiency of which does more than any one thing that can be named to keep back civilization, virtue, everything on which human happiness on the largest scale depends; we feel that the violation, for a present advantage, of a rule of such transcendent expediency, is not expedient, and that he who, for the sake of a convenience to himself or to some other individual, does what depends on him to deprive mankind of the good, and inflict upon them the evil, involved in the greater or less reliance which they can place in each other's word, acts the part of one of their worst enemies. Yet that even this rule, sacred as it is, admits of possible exceptions, is acknowledged by all moralists; the chief of which is when the withholding of some fact (as of information from a male-factor, or of bad news from a person dangerously ill) would preserve some one (especially a person other than oneself) from great and unmerited evil, and when the withholding can only be effected by denial. But in order that the exception may not extend itself beyond the need, and may have the least possible effect in weakening reliance on veracity, it ought to be recognized, and, if possible, its limits defined; and if the principle of utility is good for anything, it must be good for weighing these conflicting utilities against one another, and marking out the region within which one or the other preponderates.

Again, defenders of utility often find themselves called upon to reply to such objections as this—that there is not time, previous to action, for calculating and weighing the effects of any line of conduct on the general happiness. This is exactly as if any one were to say that it is impossible to guide our conduct by Christianity, because there is not time, on every occasion on which anything has to be done, to read through the Old and New Testaments. The answer to the objection is, that there has been ample time, namely, the whole past duration of the human species. During all that time mankind have been learning by experience the tendencies of actions; on which experience all the prudence, as well as all the morality of life, is dependent. People talk as if the commencement of this course of experience had hitherto been put off, and as if, at the moment when some man feels tempted to meddle with the property or life of another, he had to begin considering for the first time whether murder and theft are injurious to human happiness. Even then I do not think that he would find the question very puzzling; but, at all events, the matter is now done to his hand. It is truly a whimsical supposition, that if mankind were agreed in considering utility to be the test of morality, they would remain without any agreement as to what is useful, and would take no measures for having their notions on the subject taught to the young, and enforced by law and opinion. There is no difficulty in proving any ethical standard whatever to work ill, if we suppose

universal idiocy to be conjoined with it, but on any hypothesis short of that, mankind must by this time have acquired positive beliefs as to the effects of some actions on their happiness; and the beliefs which have thus come down are the rules of morality for the multitude, and for the philosopher until he has succeeded in finding better. That philosophers might easily do this, even now, on many subjects; that the received code of ethics is by no means of divine right; and that mankind have still much to learn as to the effects of actions on the general happiness, I admit, or rather, earnestly maintain. The corollaries from the principle of utility, like the precepts of every practical art, admit of indefinite improvement, and, in a progressive state of the human mind, their improvement is perpetually going on. But to consider the rules of morality as improvable, is one thing; to pass over the intermediate generalizations entirely, and endeavour to test each individual action directly by the first principle, is another. It is a strange notion that the acknowledgment of a first principle is inconsistent with the admission of secondary ones. To inform a traveller respecting the place of his ultimate destination, is not to forbid the use of landmarks and direction-posts on the way. The proposition that happiness is the end and aim of morality, does not mean that no road ought to be laid down to that goal, or that persons going thither should not be advised to take one direction rather than another. Men really ought to leave off talking a kind of nonsense on this subject, which they would neither talk nor listen to on other matters of practical concernment. Nobody argues that the art of navigation is not founded on astronomy, because sailors cannot wait to calculate the Nautical Almanack. Being rational creatures, they go to sea with it ready calculated; and all rational creatures go out upon the sea of life with their minds made up on the common questions of right and wrong, as well as on many of the far more difficult questions of wise and foolish. And this, as long as foresight is a human quality, it is to be presumed they will continue to do. Whatever we adopt as the fundamental principle of morality, we require subordinate principles to apply it by: the impossibility of doing without them, being common to all systems, can afford no argument against any one in particular: but gravely to argue as if no such secondary principles could be had, and as if mankind had remained till now, and always must remain, without drawing any general conclusions from the experience of human life, is as high a pitch, I think, as absurdity has ever reached in philosophical controversy. ...

Of What Sort of Proof the Principle of Utility Is Susceptible

Questions about ends are, in other words, questions what things are desirable. The utilitarian doctrine is, that happiness is desirable, and the only thing desirable, as an end; all other things being only desirable as means to that end. What ought to be required of this doctrine—what conditions is it requisite that the doctrine should fulfil—to make good its claim to be believed?

The only proof capable of being given that an object is visible, is that people actually see it. The only proof that a sound is audible, is that people hear it: and so of the other sources of our experience. In like manner, I apprehend, the sole evidence it is possible to produce that anything is desirable, is that people do actually desire it. If the end which the utilitarian doctrine proposes to itself were not, in theory and in practice, acknowledged to be an end, nothing could ever convince any person that it was so. No reason can be given why the general happiness is desirable, except that each person, so far as he believes it to be attainable, desires his own happiness. This, however, being a fact, we have not only all the proof which the case admits of, but all which it is possible to require, that happiness is a good: that each person's happiness is a good to that person, and the general happiness, therefore, a good to the aggregate of all persons. Happiness has made out its title as *one* of the ends of conduct, and consequently one of the criteria of morality.

But it has not, by this alone, proved itself to be the sole criterion. To do that, it would seem, by the same rule, necessary to show, not only that people desire happiness, but that they never desire anything else. Now it is palpable that they do desire things which, in common language, are decidedly distinguished from happiness. They desire, for example, virtue, and the absence of vice, no less really than pleasure and the absence of pain. The desire of virtue is not as universal, but it is as authentic a fact, as the desire of happiness. And hence the opponents of the utilitarian standard deem that they have a right to infer that there are other ends of human action besides happiness, and that happiness is not the standard of approbation and disapprobation.

But does the utilitarian doctrine deny that people desire virtue, or maintain that virtue is not a thing to be desired? The very reverse. It maintains not only that virtue is to be desired, but that it is to be desired disinterestedly, for itself. Whatever

may be the opinion of utilitarian moralists as to the original conditions by which virtue is made virtue; however they may believe (as they do) that actions and dispositions are only virtuous because they promote another end than virtue; yet this being granted, and it having been decided, from considerations of this description, what *is* virtuous, they not only place virtue at the very head of the things which are good as means to the ultimate end, but they also recognise as a psychological fact the possibility of its being, to the individual, a good in itself, without looking to any end beyond it; and hold, that the mind is not in a right state, not in a state conformable to Utility, not in the state most conducive to the general happiness, unless it does love virtue in this manner—as a thing desirable in itself, even although, in the individual instance, it should not produce those other desirable consequences which it tends to produce, and on account of which it is held to be virtue. This opinion is not, in the smallest degree, a departure from the Happiness principle. The ingredients of happiness are very various, and each of them is desirable in itself, and not merely when considered as swelling an aggregate. The principle of utility does not mean that any given pleasure, as music, for instance, or any given exemption from pain, as for example health, are to be looked upon as means to a collective something termed happiness, and to be desired on that account. They are desired and desirable in and for themselves; besides being means, they are a part of the end. Virtue, according to the utilitarian doctrine, is not naturally and originally part of the end, but it is capable of becoming so; and in those who love it disinterestedly it has become so, and is desired and cherished, not as a means to happiness, but as a part of their happiness.

To illustrate this farther, we may remember that virtue is not the only thing, originally a means, and which if it were not a means to anything else, would be and remain indifferent, but which by association with what it is a means to, comes to be desired for itself, and that too with the utmost intensity. What, for example, shall we say of the love of money? There is nothing originally more desirable about money than about any heap of glittering pebbles. Its worth is solely that of the things which it will buy; the desires for other things than itself, which it is a means of gratifying. Yet the love of money is not only one of the strongest moving forces of human life, but money is, in many cases, desired in and for itself; the desire to possess it is often stronger than the desire to use it, and goes on increasing when all the desires which point to ends beyond it, to be compassed by it, are falling off. It may be then said truly, that money is desired not for the sake of an end, but as part of the end. From being a means to happiness, it has come to be itself a principal ingredient of the individual's conception of happiness. The same may be said of the majority of the great objects of human life—

power, for example, or fame; except that to each of these there is a certain amount of immediate pleasure annexed, which has at least the semblance of being naturally inherent in them; a thing which cannot be said of money. Still, however, the strongest natural attraction, both of power and of fame, is the immense aid they give to the attainment of our other wishes; and it is the strong association thus generated between them and all our objects of desire, which gives to the direct desire of them the intensity it often assumes, so as in some characters to surpass in strength all other desires. In these cases the means have become a part of the end, and a more important part of it than any of the things which they are means to. What was once desired as an instrument for the attainment of happiness, has come to be desired for its own sake. In being desired for its own sake it is, however, desired as part of happiness. The person is made, or thinks he would be made, happy by its mere possession; and is made unhappy by failure to obtain it. The desire of it is not a different thing from the desire of happiness, any more than the love of music, or the desire of health. They are included in happiness. They are some of the elements of which the desire of happiness is made up. Happiness is not an abstract idea, but a concrete whole; and these are some of its parts. And the utilitarian standard sanctions and approves their being so. Life would be a poor thing, very ill provided with sources of happiness, if there were not this provision of nature, by which things originally indifferent, but conducive to, or otherwise associated with, the satisfaction of our primitive desires, become in themselves sources of pleasure more valuable than the primitive pleasures, both in permanency, in the space of human existence that they are capable of covering, and even in intensity. Virtue, according to the utilitarian conception, is a good of this description. There was no original desire of it, or motive to it, save its conduciveness to pleasure, and especially to protection

from pain. But through the association thus formed, it may be felt a good in itself, and desired as such with as great intensity as any other good; and with this difference between it and the love of money, of power, or of fame, that all of these may, and often do, render the individual noxious to the other members of the society to which he belongs, whereas there is nothing which makes him so much a blessing to them as the cultivation of the disinterested, love of virtue. And consequently, the utilitarian standard, while it tolerates and approves those other acquired desires, up to the point beyond which they would be more injurious to the general happiness than promotive of it, enjoins and requires the cultivation of the love of virtue up to the greatest strength possible, as being above all things important to the general happiness.

It results from the preceding considerations, that there is in reality nothing desired except happiness. Whatever is desired otherwise than as a means to some end beyond itself, and ultimately to happiness, is desired as itself a part of happiness, and is not desired for itself until it has become so. Those who desire virtue for its own sake, desire it either because the consciousness of it is a pleasure, or because the consciousness of being without it is a pain, or for both reasons united; as in truth the pleasure and pain seldom exist separately, but almost always together, the same person feeling pleasure in the degree of virtue attained, and pain in not having attained more. If one of these gave him no pleasure, and the other no pain, he would not love or desire virtue, or would desire it only for the other benefits which it might produce to himself or to persons whom he cared for.

We have now, then, an answer to the question, of what sort of proof the principle of utility is susceptible.

17. The Categorical Imperative

By Immanuel Kant

Nothing can possibly be conceived in the world, or even out of it, which can be called good, without qualification, except a good will. Intelligence, wit, judgement, and the other talents of the mind, however they may be named, or courage, resolution, perseverance, as qualities of temperament, are undoubtedly good and desirable in many respects; but these gifts of nature may also become extremely bad and mischievous if the will which is to make use of them, and which, therefore, constitutes what is called character, is not good. It is the same with the gifts of fortune. Power, riches, honour, even health, and the general well-being and contentment with one's condition which is called happiness, inspire pride, and often presumption, if there is not a good will to correct the influence of these on the mind, and with this also to rectify the whole principle of acting and adapt it to its end. The sight of a being who is not adorned with a single feature of a pure and good will, enjoying unbroken prosperity, can never give pleasure to an impartial rational spectator. Thus a good will appears to constitute the indispensable condition even of being worthy of happiness.

There are even some qualities which are of service to

this good will itself and may facilitate its action, yet which have no intrinsic unconditional value, but always presuppose a good will, and this qualifies the esteem that we justly have for them and does not permit us to regard them as absolutely good. Moderation in the affections and passions, self-control, and calm deliberation are not only good in many respects, but even seem to constitute part of the intrinsic worth of the person; but they are far from deserving to be called good without qualification, although they have been so unconditionally praised by the ancients. For without the principles of a good will, they may become extremely bad, and the coolness of a villain not only makes him far more dangerous, but also directly makes him more abominable in our eyes than he would have been without it.

A good will is good not because of what it performs or effects, not by its aptness for the attainment of some proposed end, but simply by virtue of the volition; that is, it is good in itself, and considered by itself is to be esteemed much higher than all that can be brought about by it in favour of any inclination, nay even of the sum total of all inclinations. Even if

it should happen that, owing to special disfavour of fortune, or the niggardly provision of a step-motherly nature, this will should wholly lack power to accomplish its purpose, if with its greatest efforts it should yet achieve nothing, and there should remain only the good will (not, to be sure, a mere wish, but the summoning of all means in our power), then, like a jewel, it would still shine by its own light, as a thing which has its whole value in itself. Its usefulness or fruitlessness can neither add nor take away anything from this value. It would be, as it were, only the setting to enable us to handle it the more conveniently in common commerce, or to attract to it the attention of those who are not yet connoisseurs, but not to recommend it to true connoisseurs, or to determine its value.

There is, however, something so strange in this idea of the absolute value of the mere will, in which no account is taken of its utility, that notwithstanding the thorough assent of even common reason to the idea, yet a suspicion must arise that it may perhaps really be the product of mere high-flown fancy, and that we may have misunderstood the purpose of nature in assigning reason as the governor of our will. Therefore we will examine this idea from this point of view.

...the will is a faculty to choose that only which reason independent of inclination recognises as practically necessary, i.e., as good. But if reason of itself does not sufficiently determine the will, if the latter is subject also to subjective conditions (particular impulses) which do not always coincide with the objective conditions; in a word, if the will does not in itself completely accord with reason (which is actually the case with men), then the actions which objectively are recognised as necessary are subjectively contingent, and the determination of such a will according to objective laws is obligation, that is to say, the relation of the objective laws to a will that is not thoroughly good is conceived as the determination of the will of a rational being by principles of reason, but which the will from its nature does not of necessity follow.

The conception of an objective principle, in so far as it is obligatory for a will, is called a command (of reason), and the formula of the command is called an imperative.

All imperatives are expressed by the word ought [or shall], and thereby indicate the relation of an objective law of reason to a will, which from its subjective constitution is not necessarily determined by it (an obligation). They say that something would be good to do or to forbear, but they say it to a will which does not always do a thing because it is conceived to be good to do it. That is practically good, however, which determines the will by means of the conceptions of reason, and consequently not from subjective causes, but objectively, that is on principles which are valid for every rational being as such. It

is distinguished from the pleasant, as that which influences the will only by means of sensation from merely subjective causes, valid only for the sense of this or that one, and not as a principle of reason, which holds for every one. A perfectly good will would therefore be equally subject to objective laws (viz., laws of good), but could not be conceived as obliged thereby to act lawfully, because of itself from its subjective constitution it can only be determined by the conception of good. Therefore no imperatives hold for the Divine will, or in general for a holy will; ought is here out of place, because the volition is already of itself necessarily in unison with the law. Therefore imperatives are only formulae to express the relation of objective laws of all volition to the subjective imperfection of the will of this or that rational being, e.g., the human will.

Now all imperatives command either hypothetically or categorically. The former represent the practical necessity of a possible action as means to something else that is willed (or at least which one might possibly will). The categorical imperative would be that which represented an action as necessary of itself without reference to another end, i.e., as objectively necessary.

Since every practical law represents a possible action as good and, on this account, for a subject who is practically determinable by reason, necessary, all imperatives are formulae determining an action which is necessary according to the principle of a will good in some respects. If now the action is good only as a means to something else, then the imperative is hypothetical; if it is conceived as good in itself and consequently as being necessarily the principle of a will which of itself conforms to reason, then it is categorical.

Thus the imperative declares what action possible by me would be good and presents the practical rule in relation to a will which does not forthwith perform an action simply because it is good, whether because the subject does not always know that it is good, or because, even if it know this, yet its maxims might be opposed to the objective principles of practical reason.

Accordingly the hypothetical imperative only says that the action is good for some purpose, possible or actual. In the first case it is a problematical, in the second an assertorial practical principle. The categorical imperative which declares an action to be objectively necessary in itself without reference to any purpose, i.e., without any other end, is valid as an apodeictic (practical) principle.

Whatever is possible only by the power of some rational being may also be conceived as a possible purpose of some will; and therefore the principles of action as regards the means necessary to attain some possible purpose are in fact infinitely numerous. All sciences have a practical part, consisting

of problems expressing that some end is possible for us and of imperatives directing how it may be attained. These may, therefore, be called in general imperatives of skill. Here there is no question whether the end is rational and good, but only what one must do in order to attain it. The precepts for the physician to make his patient thoroughly healthy, and for a poisoner to ensure certain death, are of equal value in this respect, that each serves to effect its purpose perfectly. Since in early youth it cannot be known what ends are likely to occur to us in the course of life, parents seek to have their children taught a great many things, and provide for their skill in the use of means for all sorts of arbitrary ends, of none of which can they determine whether it may not perhaps hereafter be an object to their pupil, but which it is at all events possible that he might aim at; and this anxiety is so great that they commonly neglect to form and correct their judgement on the value of the things which may be chosen as ends.

There is one end, however, which may be assumed to be actually such to all rational beings (so far as imperatives apply to them, viz., as dependent beings), and, therefore, one purpose which they not merely may have, but which we may with certainty assume that they all actually have by a natural necessity, and this is happiness. The hypothetical imperative which expresses the practical necessity of an action as means to the advancement of happiness is assertorial. We are not to present it as necessary for an uncertain and merely possible purpose, but for a purpose which we may presuppose with certainty and a priori in every man, because it belongs to his being. Now skill in the choice of means to his own greatest well-being may be called prudence, in the narrowest sense. And thus the imperative which refers to the choice of means to one's own happiness, i.e., the precept of prudence, is still always hypothetical; the action is not commanded absolutely, but only as means to another purpose.

Finally, there is an imperative which commands a certain conduct immediately, without having as its condition any other purpose to be attained by it. This imperative is categorical. It concerns not the matter of the action, or its intended result, but its form and the principle of which it is itself a result; and what is essentially good in it consists in the mental disposition, let the consequence be what it may. This imperative may be called that of morality. ...

When I conceive a hypothetical imperative, in general I do not know beforehand what it will contain until I am given the condition. But when I conceive a categorical imperative, I know at once what it contains. For as the imperative contains besides the law only the necessity that the maxims¹ shall conform to this

¹ A maxim is a subjective principle of action, and must be distinguished from

law, while the law contains no conditions restricting it, there remains nothing but the general statement that the maxim of the action should conform to a universal law, and it is this conformity alone that the imperative properly represents as necessary.

There is therefore but one categorical imperative, namely, this: *Act only on that maxim whereby thou canst at the same time will that it should become a universal law.*

Now if all imperatives of duty can be deduced from this one imperative as from their principle, then, although it should remain undecided what is called duty is not merely a vain notion, yet at least we shall be able to show what we understand by it and what this notion means.

Since the universality of the law according to which effects are produced constitutes what is properly called nature in the most general sense (as to form), that is the existence of things so far as it is determined by general laws, the imperative of duty may be expressed thus: Act as if the maxim of thy action were to become by thy will a universal law of nature.

We will now enumerate a few duties, adopting the usual division of them into duties to ourselves and ourselves and to others, and into perfect and imperfect duties.²

1. A man reduced to despair by a series of misfortunes feels wearied of life, but is still so far in possession of his reason that he can ask himself whether it would not be contrary to his duty to himself to take his own life. Now he inquires whether the maxim of his action could become a universal law of nature. His maxim is: "From self-love I adopt it as a principle to shorten my life when its longer duration is likely to bring more evil than satisfaction." It is asked then simply whether this principle founded on self-love can become a universal law of nature. Now we see at once that a system of nature of which it should be a law to destroy life by means of the very feeling whose special nature it is to impel to the improvement of life would contradict

the objective principle, namely, practical law. The former contains the practical rule set by reason according to the conditions of the subject (often its ignorance or its inclinations), so that it is the principle on which the subject acts; but the law is the objective principle valid for every rational being, and is the principle on which it ought to act that is an imperative.

² It must be noted here that I reserve the division of duties for a future metaphysics of morals; so that I give it here only as an arbitrary one (in order to arrange my examples). For the rest, I understand by a perfect duty one that admits no exception in favour of inclination and then I have not merely external but also internal perfect duties. This is contrary to the use of the word adopted in the schools; but I do not intend to justify there, as it is all one for my purpose whether it is admitted or not.

itself and, therefore, could not exist as a system of nature; hence that maxim cannot possibly exist as a universal law of nature and, consequently, would be wholly inconsistent with the supreme principle of all duty.

2. Another finds himself forced by necessity to borrow money. He knows that he will not be able to repay it, but sees also that nothing will be lent to him unless he promises stoutly to repay it in a definite time. He desires to make this promise, but he has still so much conscience as to ask himself: "Is it not unlawful and inconsistent with duty to get out of a difficulty in this way?" Suppose however that he resolves to do so: then the maxim of his action would be expressed thus: "When I think myself in want of money, I will borrow money and promise to repay it, although I know that I never can do so." Now this principle of self-love or of one's own advantage may perhaps be consistent with my whole future welfare; but the question now is, "Is it right?" I change then the suggestion of self-love into a universal law, and state the question thus: "How would it be if my maxim were a universal law?" Then I see at once that it could never hold as a universal law of nature, but would necessarily contradict itself. For supposing it to be a universal law that everyone when he thinks himself in a difficulty should be able to promise whatever he pleases, with the purpose of not keeping his promise, the promise itself would become impossible, as well as the end that one might have in view in it, since no one would consider that anything was promised to him, but would ridicule all such statements as vain pretences.

3. A third finds in himself a talent which with the help of some culture might make him a useful man in many respects. But he finds himself in comfortable circumstances and prefers to indulge in pleasure rather than to take pains in enlarging and improving his happy natural capacities. He asks, however, whether his maxim of neglect of his natural gifts, besides agreeing with his inclination to indulgence, agrees also with what is called duty. He sees then that a system of nature could indeed subsist with such a universal law although men (like the South Sea islanders) should let their talents rest and resolve to devote their lives merely to idleness, amusement, and propagation of their species- in a word, to enjoyment; but he cannot possibly will that this should be a universal law of nature, or be implanted in us as such by a natural instinct. For, as a rational being, he necessarily wills that his faculties be developed, since they serve him and have been given him, for all sorts of possible purposes.

4. A fourth, who is in prosperity, while he sees that others have to contend with great wretchedness and that he could help them, thinks: "What concern is it of mine? Let everyone be as happy as Heaven pleases, or as he can make himself; I will take nothing

from him nor even envy him, only I do not wish to contribute anything to his welfare or to his assistance in distress!" Now no doubt if such a mode of thinking were a universal law, the human race might very well subsist and doubtless even better than in a state in which everyone talks of sympathy and goodwill, or even takes care occasionally to put it into practice, but, on the other side, also cheats when he can, betrays the rights of men, or otherwise violates them. But although it is possible that a universal law of nature might exist in accordance with that maxim, it is impossible to will that such a principle should have the universal validity of a law of nature. For a will which resolved this would contradict itself, inasmuch as many cases might occur in which one would have need of the love and sympathy of others, and in which, by such a law of nature, sprung from his own will, he would deprive himself of all hope of the aid he desires.

These are a few of the many actual duties, or at least what we regard as such, which obviously fall into two classes on the one principle that we have laid down. We must be able to will that a maxim of our action should be a universal law. This is the canon of the moral appreciation of the action generally. Some actions are of such a character that their maxim cannot without contradiction be even conceived as a universal law of nature, far from it being possible that we should will that it should be so. In others this intrinsic impossibility is not found, but still it is impossible to will that their maxim should be raised to the universality of a law of nature, since such a will would contradict itself. It is easily seen that the former violate strict or rigorous (inflexible) duty; the latter only laxer (meritorious) duty. Thus it has been completely shown how all duties depend as regards the nature of the obligation (not the object of the action) on the same principle.

If now we attend to ourselves on occasion of any transgression of duty, we shall find that we in fact do not will that our maxim should be a universal law, for that is impossible for us; on the contrary, we will that the opposite should remain a universal law, only we assume the liberty of making an exception in our own favour or (just for this time only) in favour of our inclination. Consequently if we considered all cases from one and the same point of view, namely, that of reason, we should find a contradiction in our own will, namely, that a certain principle should be objectively necessary as a universal law, and yet subjectively should not be universal, but admit of exceptions. As however we at one moment regard our action from the point of view of a will wholly conformed to reason, and then again look at the same action from the point of view of a will affected by inclination, there is not really any contradiction, but an antagonism of inclination to the precept of reason, whereby the universality of the principle is changed into a mere

generality, so that the practical principle of reason shall meet the maxim half way. Now, although this cannot be justified in our own impartial judgement, yet it proves that we do really recognise the validity of the categorical imperative and (with all respect for it) only allow ourselves a few exceptions, which we think unimportant and forced from us.

We have thus established at least this much, that if duty is a conception which is to have any import and real legislative authority for our actions, it can only be expressed in categorical and not at all in hypothetical imperatives. We have also, which is of great importance, exhibited clearly and definitely for every practical application the content of the categorical imperative, which must contain the principle of all duty if there is such a thing at all. We have not yet, however, advanced so far as to prove a priori that there actually is such an imperative, that there is a practical law which commands absolutely of itself and without any other impulse, and that the following of this law is duty.

With the view of attaining to this, it is of extreme importance to remember that we must not allow ourselves to think of deducing the reality of this principle from the particular attributes of human nature. For duty is to be a practical, unconditional necessity of action; it must therefore hold for all rational beings (to whom an imperative can apply at all), and for this reason only be also a law for all human wills. On the contrary, whatever is deduced from the particular natural characteristics of humanity, from certain feelings and propensions, nay, even, if possible, from any particular tendency proper to human reason, and which need not necessarily hold for the will of every rational being; this may indeed supply us with a maxim, but not with a law; with a subjective principle on which we may have a propension and inclination to act, but not with an objective principle on which we should be enjoined to act, even though all our propensions, inclinations, and natural dispositions were opposed to it. In fact, the sublimity and intrinsic dignity of the command in duty are so much the more evident, the less the subjective impulses favour it and the more they oppose it, without being able in the slightest degree to weaken the obligation of the law or to diminish its validity.

Here then we see philosophy brought to a critical position, since it has to be firmly fixed, notwithstanding that it has nothing to support it in heaven or earth. Here it must show its purity as absolute director of its own laws, not the herald of those which are whispered to it by an implanted sense or who knows what tutelary nature. Although these may be better than nothing, yet they can never afford principles dictated by reason, which must have their source wholly a priori and thence their commanding authority, expecting everything from the

supremacy of the law and the due respect for it, nothing from inclination, or else condemning the man to self-contempt and inward abhorrence.

Thus every empirical element is not only quite incapable of being an aid to the principle of morality, but is even highly prejudicial to the purity of morals, for the proper and inestimable worth of an absolutely good will consists just in this, that the principle of action is free from all influence of contingent grounds, which alone experience can furnish. We cannot too much or too often repeat our warning against this lax and even mean habit of thought which seeks for its principle amongst empirical motives and laws; for human reason in its weariness is glad to rest on this pillow, and in a dream of sweet illusions (in which, instead of Juno, it embraces a cloud) it substitutes for morality a bastard patched up from limbs of various derivation, which looks like anything one chooses to see in it, only not like virtue to one who has once beheld her in her true form.³

The question then is this: "Is it a necessary law for all rational beings that they should always judge of their actions by maxims of which they can themselves will that they should serve as universal laws?" If it is so, then it must be connected (altogether a priori) with the very conception of the will of a rational being generally. ...

The will is conceived as a faculty of determining oneself to action in accordance with the conception of certain laws. And such a faculty can be found only in rational beings. Now that which serves the will as the objective ground of its self-determination is the end, and, if this is assigned by reason alone, it must hold for all rational beings. On the other hand, that which merely contains the ground of possibility of the action of which the effect is the end, this is called the means. The subjective ground of the desire is the spring, the objective ground of the volition is the motive; hence the distinction between subjective ends which rest on springs, and objective ends which depend on motives valid for every rational being. Practical principles are formal when they abstract from all subjective ends; they are material when they assume these, and therefore particular springs of action. The ends which a rational being proposes to himself at pleasure as effects of his actions (material ends) are all only relative, for it is only their relation to the particular desires of the subject that gives them their worth, which therefore cannot furnish principles universal and necessary for all rational beings and for every volition, that is to say practical

³ To behold virtue in her proper form is nothing else but to contemplate morality stripped of all admixture of sensible things and of every spurious ornament of reward or self-love. How much she then eclipses everything else that appears charming to the affections, every one may readily perceive with the least exertion of his reason, if it be not wholly spoiled for abstraction.

laws. Hence all these relative ends can give rise only to hypothetical imperatives.

Supposing, however, that there were something whose existence has in itself an absolute worth, something which, being an end in itself, could be a source of definite laws; then in this and this alone would lie the source of a possible categorical imperative, i.e., a practical law.

Now I say: man and generally any rational being exists as an end in himself, not merely as a means to be arbitrarily used by this or that will, but in all his actions, whether they concern himself or other rational beings, must be always regarded at the same time as an end. All objects of the inclinations have only a conditional worth, for if the inclinations and the wants founded on them did not exist, then their object would be without value. But the inclinations, themselves being sources of want, are so far from having an absolute worth for which they should be desired that on the contrary it must be the universal wish of every rational being to be wholly free from them. Thus the worth of any object which is to be acquired by our action is always conditional. Beings whose existence depends not on our will but on nature's, have nevertheless, if they are irrational beings, only a relative value as means, and are therefore called things; rational beings, on the contrary, are called persons, because their very nature points them out as ends in themselves, that is as something which must not be used merely as means, and so far therefore restricts freedom of action (and is an object of respect). These, therefore, are not merely subjective ends whose existence has a worth for us as an effect of our action, but objective ends, that is, things whose existence is an end in itself; an end moreover for which no other can be substituted, which they should subserve merely as means, for otherwise nothing whatever would possess absolute worth; but if all worth were conditioned and therefore contingent, then there would be no supreme practical principle of reason whatever.

If then there is a supreme practical principle or, in respect of the human will, a categorical imperative, it must be one which, being drawn from the conception of that which is necessarily an end for everyone because it is an end in itself, constitutes an objective principle of will, and can therefore serve as a universal practical law. The foundation of this principle is: rational nature exists as an end in itself. Man necessarily conceives his own existence as being so; so far then this is a subjective principle of human actions. But every other rational being regards its existence similarly, just on the same rational principle that holds for me:⁴ so that it is at the same time an objective principle, from which as a supreme practical law all

⁴ This proposition is here stated as a postulate. The ground of it will be found in the concluding section.

laws of the will must be capable of being deduced. Accordingly the practical imperative will be as follows: So act as to treat humanity, whether in thine own person or in that of any other, in every case as an end withal, never as means only. We will now inquire whether this can be practically carried out.

To abide by the previous examples:

Firstly, under the head of necessary duty to oneself: He who contemplates suicide should ask himself whether his action can be consistent with the idea of humanity as an end in itself. If he destroys himself in order to escape from painful circumstances, he uses a person merely as a mean to maintain a tolerable condition up to the end of life. But a man is not a thing, that is to say, something which can be used merely as means, but must in all his actions be always considered as an end in himself. I cannot, therefore, dispose in any way of a man in my own person so as to mutilate him, to damage or kill him. (It belongs to ethics proper to define this principle more precisely, so as to avoid all misunderstanding, e. g., as to the amputation of the limbs in order to preserve myself, as to exposing my life to danger with a view to preserve it, etc. This question is therefore omitted here.)

Secondly, as regards necessary duties, or those of strict obligation, towards others: He who is thinking of making a lying promise to others will see at once that he would be using another man merely as a mean, without the latter containing at the same time the end in himself. For he whom I propose by such a promise to use for my own purposes cannot possibly assent to my mode of acting towards him and, therefore, cannot himself contain the end of this action. This violation of the principle of humanity in other men is more obvious if we take in examples of attacks on the freedom and property of others. For then it is clear that he who transgresses the rights of men intends to use the person of others merely as a means, without considering that as rational beings they ought always to be esteemed also as ends, that is, as beings who must be capable of containing in themselves the end of the very same action.⁵

Thirdly, as regards contingent (meritorious) duties to oneself: It is not enough that the action does not violate humanity in our own person as an end in itself, it must also harmonize with it. Now there are in humanity capacities of greater perfection, which belong to the end that nature has in

⁵ Let it not be thought that the common "quod tibi non vis fieri, etc." could serve here as the rule or principle. For it is only a deduction from the former, though with several limitations; it cannot be a universal law, for it does not contain the principle of duties to oneself, nor of the duties of benevolence to others (for many a one would gladly consent that others should not benefit him, provided only that he might be excused from showing benevolence to them), nor finally that of duties of strict obligation to one another, for on this principle the criminal might argue against the judge who punishes him, and so on.

view in regard to humanity in ourselves as the subject: to neglect these might perhaps be consistent with the maintenance of humanity as an end in itself, but not with the advancement of this end.

Fourthly, as regards meritorious duties towards others: The natural end which all men have is their own happiness. Now humanity might indeed subsist, although no one should contribute anything to the happiness of others, provided he did not intentionally withdraw anything from it; but after all this would only harmonize negatively not positively with humanity as an end in itself, if every one does not also endeavour, as far as in him lies, to forward the ends of others. For the ends of any subject which is an end in himself ought as far as possible to be my ends also, if that conception is to have its full effect with me.

This principle, that humanity and generally every rational nature is an end in itself (which is the supreme limiting condition of every man's freedom of action), is not borrowed from experience, firstly, because it is universal, applying as it does to all rational beings whatever, and experience is not capable of determining anything about them; secondly, because it does not present humanity as an end to men (subjectively), that is as an object which men do of themselves actually adopt as an end; but as an objective end, which must as a law constitute the supreme limiting condition of all our subjective ends, let them be what we will; it must therefore spring from pure reason. In fact the objective principle of all practical legislation lies (according to the first principle) in the rule and its form of universality which makes it capable of being a law (say, e. g., a law of nature); but the subjective principle is in the end; now by the second principle the subject of all ends is each rational being, inasmuch as it is an end in itself. Hence follows the third practical principle of the will, which is the ultimate condition of its harmony with universal practical reason, viz.: the idea of the will of every rational being as a universally legislative will.

On this principle all maxims are rejected which are inconsistent with the will being itself universal legislator. Thus the will is not subject simply to the law, but so subject that it must be regarded as itself giving the law and, on this ground only, subject to the law (of which it can regard itself as the author). ...

Thus, then, without quitting the moral knowledge of common human reason, we have arrived at its principle. And although, no doubt, common men do not conceive it in such an abstract and universal form, yet they always have it really before their eyes and use it as the standard of their decision. Here it would be easy to show how, with this compass in hand, men are well able to distinguish, in every case that occurs, what is good, what bad, conformably to duty or inconsistent with it, if, without

in the least teaching them anything new, we only, like Socrates, direct their attention to the principle they themselves employ; and that, therefore, we do not need science and philosophy to know what we should do to be honest and good, yea, even wise and virtuous. Indeed we might well have conjectured beforehand that the knowledge of what every man is bound to do, and therefore also to know, would be within the reach of every man, even the commonest. Here we cannot forbear admiration when we see how great an advantage the practical judgement has over the theoretical in the common understanding of men. In the latter, if common reason ventures to depart from the laws of experience and from the perceptions of the senses, it falls into mere inconceivabilities and self-contradictions, at least into a chaos of uncertainty, obscurity, and instability. But in the practical sphere it is just when the common understanding excludes all sensible springs from practical laws that its power of judgement begins to show itself to advantage. It then becomes even subtle, whether it be that it chicanes with its own conscience or with other claims respecting what is to be called right, or whether it desires for its own instruction to determine honestly the worth of actions; and, in the latter case, it may even have as good a hope of hitting the mark as any philosopher whatever can promise himself. Nay, it is almost more sure of doing so, because the philosopher cannot have any other principle, while he may easily perplex his judgement by a multitude of considerations foreign to the matter, and so turn aside from the right way. Would it not therefore be wiser in moral concerns to acquiesce in the judgement of common reason, or at most only to call in philosophy for the purpose of rendering the system of morals more complete and intelligible, and its rules more convenient for use (especially for disputation), but not so as to draw off the common understanding from its happy simplicity, or to bring it by means of philosophy into a new path of inquiry and instruction?

Innocence is indeed a glorious thing; only, on the other hand, it is very sad that it cannot well maintain itself and is easily seduced. On this account even wisdom- which otherwise consists more in conduct than in knowledge- yet has need of science, not in order to learn from it, but to secure for its precepts admission and permanence. Against all the commands of duty which reason represents to man as so deserving of respect, he feels in himself a powerful counterpoise in his wants and inclinations, the entire satisfaction of which he sums up under the name of happiness. Now reason issues its commands unyieldingly, without promising anything to the inclinations, and, as it were, with disregard and contempt for these claims, which are so impetuous, and at the same time so plausible, and which will not allow themselves to be suppressed by any command. Hence there arises a natural dialectic, i.e., a

disposition, to argue against these strict laws of duty and to question their validity, or at least their purity and strictness; and, if possible, to make them more accordant with our wishes and inclinations, that is to say, to corrupt them at their very source, and entirely to destroy their worth- a thing which even common practical reason cannot ultimately call good.

Thus is the common reason of man compelled to go out of its sphere, and to take a step into the field of a practical philosophy, not to satisfy any speculative want (which never occurs to it as long as it is content to be mere sound reason), but

even on practical grounds, in order to attain in it information and clear instruction respecting the source of its principle, and the correct determination of it in opposition to the maxims which are based on wants and inclinations, so that it may escape from the perplexity of opposite claims and not run the risk of losing all genuine moral principles through the equivocation into which it easily falls. Thus, when practical reason cultivates itself, there insensibly arises in it a dialectic which forces it to seek aid in philosophy, just as happens to it in its theoretic use; and in this case, therefore, as well as in the other, it will find rest nowhere but in a thorough critical examination of our reason.

18. Virtue Ethics

By Aristotle

... We speak of that which is sought after for its own sake as more final than that which is sought after as a means to something else ; we speak of that which is never desired as a means to something else as more final than the things which are desired both in themselves and as means to something else ; and we speak of a thing as absolutely final, if it is always desired in itself and never as a means to something else.

We speak of that which is sought after for its own sake as more final than that which is sought after as a means to something else ; we speak of that which is never desired as a means to something else as more final than the things which are desired both in themselves and as means to something else ; and we speak of a thing as absolutely final, if it is always desired in itself and never as a means to something else.

It seems that happiness preeminently answers to the description, as we always desire happiness for its own sake and never as a means to something else, whereas we desire honor, pleasure, intellect, and every virtue, partly for their own sakes (for we should desire them independently of what might result from them) but partly also as being means to happiness, because we suppose they will prove the instruments of happiness.

Happiness, on the other hand, nobody desires for the sake of these things, nor indeed as a means to anything else at all. ... if we define the function of Man as a kind of life, and this life as an activity of soul, or a course of action in conformity with reason, if the function of a good man is such activity or action of a good and noble kind, and if everything is successfully performed when it is performed in accordance with its proper excellence, it follows that the good of Man is an activity of soul of Man in accordance with virtue or, if there are more virtues than one, in accordance with the best and most complete virtue. But it is necessary to add the words "in a complete life." For as one swallow or one day does not make a spring, so one day or a short time does not make a fortunate or happy man. ...

Inasmuch as happiness is an activity of soul in accordance with complete or perfect virtue, it is necessary to consider virtue, as this will perhaps be the best way of studying happiness. ...

Virtue or excellence being twofold, partly intellectual and partly moral, intellectual virtue is both originated and

fostered mainly by teaching ; it therefore demands experience and time. Moral virtue, on the other hand, is the outcome of habit, and accordingly its name is derived by a slight deflexion from habit. From this fact it is clear that no moral virtue is implanted in us by nature ; a law of nature cannot be altered by habituation. Thus a stone naturally tends to fall downwards, and it cannot be habituated or trained to rise upwards, even if we were to habituate it by throwing it upwards ten thousand times ; nor again can fire be trained to sink downwards, nor anything else that follows one natural law be habituated or trained to follow another. It is neither by nature then nor in defiance of nature that virtues are implanted in us. Nature gives us the capacity of receiving them, and that capacity is perfected by habit. Again, if we take the various natural powers which belong to us, we first acquire the proper faculties and afterwards display the activities. It is clearly so with the senses. It was not by seeing frequently or hearing frequently that we acquired the senses of seeing or hearing ; on the contrary it was because we possessed the senses that we made use of them, not by making use of them that we obtained them. But the virtues we acquire by first exercising them, as is the case with all the arts, for it is by doing what we ought to do when we have learnt the arts that we learn the arts themselves ; we become e.g. builders by building and harpists by playing the harp. Similarly it is by doing just acts that we become just, by doing temperate acts that we become temperate, by doing courageous acts that we become courageous. ...

It is by acting in such transactions as take place between man and man that we become either just or unjust. It is by acting in the face of danger and by habituating ourselves to fear or courage that we become either cowardly or courageous. It is much the same with our desires and angry passions. Some people become temperate and gentle, others become licentious and passionate, according as they conduct themselves in one way or another way in particular circumstances. In a word moral states are the results of activities corresponding to the moral states themselves. It is our duty therefore to give a certain character to the activities, as the moral states depend upon the differences of the activities. Accordingly the difference between one training of the habits and another from early days is not a light matter, but is serious or rather all-important. ...

But it may be asked what we mean by saying that people must become just by doing what is just and temperate by doing what is temperate. For if they virtues and do what is just and temperate, they are ipso facto proved, it will be said, to be just and temperate in the same way as, if they practice grammar and music, they are proved to be grammarians and musicians. ...

But actions in accordance with virtue are not e.g. justly

or temperately performed because they are in themselves just or temperate. It is necessary that the agent at the time of performing them should satisfy certain conditions, i.e. in the first place that he should know what he is doing, secondly that he should deliberately choose to do it and to do it for its own sake, and thirdly that he should do it as an instance of a settled and immutable moral state. If it be a question whether a person possesses any art, these conditions, except indeed the condition of knowledge, are not taken into account ; but if it be a question of possessing the virtues, the mere knowledge in of little or no avail, and it is the other conditions, which are the results of frequently performing just and temperate actions, that are not of slight but of absolute importance. Accordingly deeds are said to be just and temperate, when they are such as a just or temperate person would do, and a just and temperate person is not merely one who does these deeds but one who does them in the spirit of the just and the temperate.

...the virtues are neither emotions nor faculties, they must be moral states ... But it is not enough to state merely that moral state virtue is a moral state, we must also describe the moral character of that moral state. ...

It must be laid down then that every virtue or excellence has the effect of producing a good condition of that of which it is a virtue or excellence, and of enabling it to perform its function well. Thus the excellence of the eye makes the eye good and its function good, as it is by the excellence of the eye that we see well. Similarly, the excellence of the horse makes a horse excellent and good at racing, at carrying its rider and at facing the enemy.

If then this is universally true, the virtue or excellence of man will be such a moral state as makes a man good and able to perform his proper function well. We have already explained how this will be the case, but another way of making it clear will be to study the nature or character of this virtue.

Now in everything, whether it be continuous or Doctrine of discrete, it is possible to take a greater, a smaller, or an equal amount, and this either absolutely or in relation to ourselves, the equal being a mean between excess and deficiency. By the mean in respect of the thing itself, or the absolute mean, I understand that which is equally distinct from both extremes ; and this is one and the same thing for everybody. By the mean considered relatively to ourselves I understand that which is neither too much nor too little ; but this is not one thing, nor is it the same for everybody. Thus if 10 be too much and 2 too little we take 6 as a mean in respect of the thing itself ; for 6 is as much greater than 2 as it is less than 10, and this is a mean in arithmetical proportion. But the mean considered relatively to ourselves must not be ascertained in this way. It does not follow

that if 10 pounds of meat be too much and 2 be too little for a man to eat, a trainer will order him 6 pounds, as this may itself be too much or too little for the person who is to take it; it will be too little e.g. for Milo 2 , but too much for a beginner in gymnastics. It will be the same with running and wrestling ; the right amount will vary with the individual. This being so, everybody who understands his business avoids alike excess and deficiency ; he seeks and chooses the mean, not the absolute mean, but the mean considered relatively to ourselves.

Every science then performs its function well, if it regards the mean and refers the works which it produces to the mean. This is the reason why it is usually said of successful works that it is impossible to take anything from them or to add anything to them, which implies that excess or deficiency is fatal to excellence but that the mean state ensures it Good artists too, as we say, have an eye to the mean in their works. But virtue, like Nature herself, is more accurate and better than any art; virtue therefore will aim at the mean ; I speak of moral virtue, as it is moral virtue which is concerned with emotions and actions, and it is these which admit of excess and deficiency and the mean. Thus it is possible to go too far, or not to go far enough, in respect of fear, courage, desire, anger, pity, and pleasure and pain generally and the excess the deficiency are alike wrong; but to experience these emotions at the right times and on the right occasions and towards the right persons and for the right causes and in the right manner is the mean or the supreme good, which is characteristic of virtue. Similarly there may be excess, deficiency, or the mean, in regard to actions. But virtue is concerned with emotions and actions, and here excess is an error and deficiency a fault, whereas the mean is successful and laudable, and success and merit are both characteristics of virtue.

It appears then that virtue is a mean state, so far at least as it aims at the mean.

Again, there are many different ways of going wrong; for evil is in its nature infinite, to use the Pythagorean figure, but good is finite. But there is only one possible way of going right Accordingly the former is easy and the latter difficult ; it is easy to miss the mark but difficult to hit it This again is a reason why excess and deficiency are characteristics of vice and the mean state a characteristic of virtue.

"For good is simple, evil manifold."

Virtue then is a state of deliberate moral purpose consisting in a mean that is relative to ourselves, the mean being determined by reason, or as a prudent man would determine it. It is a mean state firstly as lying between two vices, the vice of excess on the one hand, and the vice of deficiency on the other,

and secondly because, whereas the vices either fall short of or go beyond what is proper in the emotions and actions, virtue not only discovers but embraces the mean.

Accordingly, virtue, if regarded in its essence or Virtue theoretical conception, is a mean state, but, if regarded from the point of view of the highest good, or of excellence, it is an extreme. ...

It is not every action or every emotion that admits of a mean state. ... There are some whose very name implies wickedness, as e.g. malice, shamelessness, and envy, among emotions, or adultery, theft, and murder, among actions. All these, and others like them, are censured as being intrinsically wicked, not merely the excesses or deficiencies of them. It is never possible then to be right in respect of them ; they are always sinful. Right or wrong in such actions as adultery does not depend on our committing them with the right person, at the right time or in the right manner ; on the contrary it is sinful to do anything of the kind at all. It would be equally wrong then to suppose that there can be a mean state or an excess or deficiency in unjust, cowardly or licentious conduct ; for, if it were so, there would be a mean state of an excess or of a deficiency, an excess of an excess and a deficiency of a deficiency. But as in temperance and courage there can be no excess or deficiency because the mean is, in a sense, an extreme, so too in these cases there cannot be a mean or an excess or deficiency, but, however the acts may be done, they are wrong. For it is a general rule that an excess or deficiency does not admit of a mean state, nor a mean state of an excess or deficiency.

But it is not enough to lay down this as a general rule ; it is necessary to apply it to particular cases, as in reasonings upon actions general statements, although they are broader 1 , are less exact than particular statements. For all action refers to particulars, and it is essential that our theories should harmonize with the particular cases to which they apply. We must take particular virtues then from the catalog of virtues.

In regard to feeling of fear and confidence, courage is a mean state. On the side of excess, he particular whose fearlessness is excessive has no name, as often happens, but he whose confidence is excessive is foolhardy, while he whose timidity is excessive and whose confidence is deficient is a coward.

In respect of pleasures and pains, although not Temperance indeed of all pleasures and pains, and to a less extent in respect of pains than of pleasures, the mean state is temperance, the excess is licentiousness. We never find people who are deficient in regard to pleasures; accordingly such people again have not

received a name, but we may call them insensible.

As regards the giving and taking of money, the Literacy mean state is liberality, the excess and deficiency are prodigality and illiberality. Here the excess and deficiency take opposite forms ; for while the prodigal man is excessive in spending and deficient in taking, the illiberal man is excessive in taking and deficient in spending.

(For the present we are giving only a rough and summary account of the virtues, and that is sufficient for our purpose; we will hereafter determine their character more exactly.)

In respect of money there are other dispositions as well. There is the mean state which is magnificence; for the magnificent man, as having to do with large sums of money, differs from the liberal man who has to do only with small sums; and the excess corresponding to it is bad taste or vulgarity, the deficiency is meanness. These are different from the excess and deficiency of liberality; what the difference is will be explained hereafter.

In respect of honor and dishonor the mean state is highmindedness, the excess is what is called vanity, the deficiency littlemindedness. Corresponding to liberality, which, as we said, differs from magnificence as having to do not with great but with small sums of money, there is a moral state which has to do with petty honor and is related to highmindedness which has to do with great honor ; for it is possible to aspire to honor in the right way, or in a way which is excessive or insufficient, and if a person's aspirations are excessive, he is called ambitious, if they are deficient, he is called unambitious, while if they are between the two, he has no name. The dispositions too are nameless, except that the disposition of the ambitious person is called ambition. The consequence is that the extremes lay claim to the mean or intermediate place. We ourselves speak of one who observes the mean sometimes as ambitious, and at other times as unambitious; we sometimes praise an ambitious, and at other times an unambitious person. The reason for our doing so will be stated in due course, but let us now discuss the other virtues in accordance with the method which we have followed hitherto.

Anger, like other emotions, has its excess, its Auger. deficiency, and its mean state. It may be said that they have no names, but as we call one who observes the mean gentle, we will call the mean state gentleness. Among the extremes, if a person errs on the side of excess, he may be called passionate and his vice passionateness, if on that of deficiency, he may be called impassive and his deficiency impassivity. ...

In the matter of truth then, he who observes the mean

may be called truthful, and the mean state truthfulness. Pretence, if it takes the form of exaggeration, is boastfulness, and one who is guilty of pretence is a boaster; but if it takes the form of depreciation it is irony, and he who is guilty of it is ironical.

As regards pleasantness in amusement, he who observes the mean is witty, and his disposition wittiness ; the excess is buffoonery, and he who is guilty of it a buffoon, whereas he who is deficient in wit may be called a boor and his moral state boorishness.

As to the other kind of pleasantness, viz. pleasantness in life, he who is pleasant in a proper way is friendly, and his mean state friendliness ; but he who goes too far, if he has no ulterior object in view, is obsequious, while if his object is self interest, he is a flatterer, and he who does not go far enough and always makes himself unpleasant is a quarrelsome and morose sort of person.

There are also mean states in the emotions and emotions, in the expression of the emotions. For although Modesty, modesty is not a virtue, yet a modest person is praised as if he were virtuous ; for here too one person is said to observe the mean and another to exceed it, as e.g. the bashful man who is never anything but modest, whereas a person who has insufficient modesty or no modesty at all is called shameless, and one who observes the mean modest.

Righteous indignation, again, is a mean state between envy and malice. They are all concerned with the pain and pleasure which we feel at the fortunes of our neighbors. A Person who is righteously indignant is pained at the prosperity of the undeserving ; but the envious person goes further and is pained at anybody's prosperity, and the malicious person is so for from being pained that lie actually rejoices at misfortune...

It is in some cases the deficiency and in others the excess which is the more opposed to the mean. Thus it is not foolhardiness the excess, but cowardice the deficiency which is the more opposed to courage, nor is it insensibility the deficiency, but licentiousness the excess which is the more opposed to temperance. There are two reasons why this should be so. One lies in the nature of the thing itself; for as one of the two extremes is the nearer and more similar to the mean, it is not this extreme, but its opposite, that we chiefly set against the mean. For instance, as it appears that foolhardiness is more similar and nearer to courage than cowardice, it is cowardice that we chiefly set against courage ; for things which are further removed from the mean seem to be more opposite to it This being one reason which lies in the nature of the thing itself, there is a second which lies in our own nature. It is the things to which we ourselves are naturally more inclined that appear more

opposed to the mean. Thus we are ourselves naturally more inclined to pleasures than to their opposites, and are more prone therefore to licentiousness than to decorum. Accordingly we speak of those things, in which we are more likely to run to great lengths, as being more opposed to the mean. Hence it follows that licentiousness which is an excess is more opposed to temperance than insensibility.

It has now been sufficiently shown that virtue is a mean state, and in what sense it is a mean state ; it is a mean state as lying between two vices, mean a vice of excess on the one side and a vice of deficiency on the other, and as aiming at the mean in the emotions and action.

That is the reason why it is so hard to be virtuous ; Difficulty for it is always hard work to find the mean in virtuous anything, e.g. it is not everybody, but only a man of science, who can find the mean or center of a circle. So too anybody can get angry that is an easy matter and anybody can give or spend money, but to give it to the right persons, to give the right amount of it and to give it at the right time and for the right cause and in the right way, this is not what anybody can do, nor is it easy. That is the reason why it is rare and laudable and noble to do well. Accordingly one who aims at the mean must begin by departing from that extreme which is the more contrary to the mean; he must act in the spirit of Calypso's advice,

" Far from this smoke and swell keep thou thy bark,"

for of the two extremes one is more sinful than the other. As it is difficult then to hit the mean exactly, we must take the second best course 8 , as the saying is, and choose the lesser of two evils, and this we shall best do in the way that we have described, i.e. by steering clear of the evil which is further from the mean. We must also observe the things to which we are ourselves particularly prone, an different natures have different

inclinations, and we may ascertain what these are by a consideration of our feelings of pleasure and pain. And then we must drag ourselves in the direction opposite to them ; for it is by removing ourselves as far as possible from what is wrong that we shall arrive at the mean, as we do when we pull a crooked stick straight.

But in all cases we must especially be on our guard against what is pleasant and against pleasure, as we are not impartial judges of pleasure. Hence our attitude towards pleasure must be like that of the elders of the people in the Iliad towards Helen, and we must never be afraid of applying the words they use; for if we dismiss pleasure as they dismissed Helen, we shall be less likely to go wrong. It is by action of this kind, to put it summarily, that we shall best succeed in hitting the mean.

It may be admitted that this is a difficult task, especially in particular cases. It is not easy to determine e.g. the right manner, objects, occasions, and duration of anger. There are times when we ourselves praise people who are deficient in anger, and call them gentle, and there are other times when we speak of people who exhibit a savage temper as spirited. It is not however one who deviates a little from what is right, but one who deviates a great deal, whether on the side of excess or of deficiency, that is censured ; for ho is sure to be found out. Again, it is not easy to decide theoretically how far and to what extent a man may go before lie becomes censurable, but neither is it easy to define theoretically anything else within the region of perception ; such things fall under the head of particulars, and our judgment of them depends upon our perception....

So much then is plain, that the mean state is everywhere laudable, but that we ought to incline at one time towards the excess and at another towards the deficiency ; for this will be our easiest manner of hitting the mean, or in other words of attaining excellence.