# *READINGS IN PHILOSOPHY*

STEPHEN HICKS, PH.D.

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# Introduction to Philosophy

Philosophy 103


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Philosophy asks the big questions of life: What is it to be a fully developed human being? Am I in control of my destiny? What kind of world are we living in—for example, do gods or a God exist? How do we know these things—should we believe based on tradition, feelings, faith, evidence? And what difference does it make—what is the best kind of life to live? We will grapple with fundamental philosophical issues and discuss the views of major thinkers in the Western intellectual tradition.

## Readings

"Arachne and Athena" (Course Reader)
Daniel Dennett, "Where Am I?" (Course Reader)
René Descartes, *Meditations on First Philosophy* (Hackett)
Sigmund Freud, *Civilization and Its Discontents* (W. W. Norton)
John Paul II, *Encyclical* (Course Reader)
Søren Kierkegaard, "A Panegyric upon Abraham" (Course Reader)
C. S. Lewis, *Mere Christianity* (HarperCollins)
Plato, *Four Texts on Socrates* (Cornell)
Ayn Rand, *The Fountainhead* (NAL/Signet)
Various authors, "Eight short pieces on the meaning of life" (Course Reader)
(The Course Reader is also available at www.StephenHicks.org/Courses, as is this syllabus.)

## Assignments and Grading

Six optional essays (500 words each)
Exam (December ??)

| *Number of essays done* | *Weighting of the essays* | *Weighting of the exam* | *Total* |
|---|---|---|---|
| 0 | 0 | 100 | 100 |
| 1 | 10 | 90 | 100 |
| 2 | 20 | 80 | 100 |
| 3 | 30 | 70 | 100 |
| 4 | 40 | 60 | 100 |
| 5 | 50 | 50 | 100 |
| 6 | 60 | 40 | 100 |

Note: When submitting your essays, email them to SHicks@Rockford.edu. Please do *not* attach your essay but instead cut-and-paste it into the body of your email.

# Schedule and Readings

| *Dates and Topics* | *Readings* |
|---|---|
| Aug 19: What philosophy is and why it matters | |
| Aug 21: Morality and the Greek gods | "Arachne and Athena" (class handout) |
| Aug 24: First optional essay due. Class does not meet. | |
| Aug 26: Read Plato's *Apology*. Class does not meet. | Plato, *Apology* |
| Aug 28: Guest: Professor Douglas Rasmussen, St. John's University, New York | |
| Aug 31: Socrates on democracy and the philosophical life. | |
| Sep 2: Should Socrates have been found guilty? | Plato, *Apology* |
| Sep 4: Second optional essay. Class does not meet. | |
| Sep 7: Labor Day. Class does not meet | |
| Sep 9: Should Socrates have escaped from prison when he had the opportunity? | Plato, *Crito* |
| Sep 11: What should the relationship between citizen and government be? | |
| Sep 14: Is independence possible? | |
| Sep 16: Is independence a top virtue? | Rand, *The Fountainhead*, Part 1 |
| Sep 18: Third optional essay due. Class does not meet. | |
| Sep 21: Is integrity possible? | Rand, *The Fountainhead*, Part 1 |
| Sep 23: Is integrity a top virtue? | |
| Sep 25: Is it practical to be moral? | |
| Sep 28: Can the existence of God be proven? | |
| Sep 30: Is the Design Argument sound? | Aquinas, "The Five Ways" |
| Oct 2: Is the First Cause Argument sound? | |
| Oct 5: Is the Argument from Evil sound? | |
| Oct 7: Should Abraham have been willing to sacrifice Isaac? | Kierkegaard, "A Panegyric on Abraham" |

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|---|---|
| Oct 9: Are reason and faith compatible? | John Paul II, *Encyclical* |
| Oct 12: Fourth optional essay due. Class does not meet. | |
| Oct 14: Fall Break. Class does not meet. | |
| Oct 16: Fall Break. Class does not meet. | |
| Oct 19: | |
| Oct 21: Does traditional religion conflict with modern science? | Galileo, *Letter to the Grand Duchess Christina* |
| Oct 23: Can science and religion be compatible? | |
| Oct 26: Do we really know anything? | Descartes, *Meditations* I |
| Oct 28: "I think, therefore I am." | Descartes, *Meditations* II |
| Oct 30: Is the Ontological Argument sound? | Descartes, *Meditations* III |
| Nov 2: Fifth optional essay due. Class does not meet. | |
| Nov 4: Is the soul separate from the body? | Daniel Dennett, "Where Am I?" |
| Nov 6: Is artificial intelligence possible? | |
| Nov 9: What does Christian morality mean in modern times? | Lewis, *Mere Christianity*, Book 3 |
| Nov 11: What is the greatest sin? | |
| Nov 13: What is true humility? | |
| Nov 16: Is religion a psychological issue? | |
| Nov 18: Even if religion is false, is it a good idea? | Freud, *Civilization and Its Discontents* |
| Nov 20: Is human nature in conflict with civilization? | |
| Nov 23: Sixth optional essay due. Class does not meet. | |
| Nov 25: Thanksgiving. Class does not meet. | |
| Nov 27: Thanksgiving. Class does not meet. | |
| Nov 30: What is the meaning of life? | "Eight short pieces on the meaning of life" |
| Dec 2: What is the meaning of life? | |
| Dec 4: Conclusions | |
| Dec 6 or 7, 10:15 a.m.: Final exam | |
| Final exam question: *What is the meaning of life?* | |
| Final exam instructions: You will have two hours to answer the question. The only specific | |

requirement is that you discuss each of the readings for the semester.

A copy of this syllabus and schedule can be found online at www.StephenHicks.org. For Honor Code and Disability issues, please consult the College's website.

## The Story of Arachne and Athena

Arachne was a beautiful young woman and the most wonderful weaver. People traveled great distances to see her work at her loom. Her skilled fingers wove detailed multicolored tapestries and rugs. Her skill was truly a work of art, and people paid large amounts of money for her creations. Eventually, all of the attention went to her head. Arachne started to brag and become boastful of her talents.

"Athena, the great goddess, has given you an amazing gift, Arachne," the villagers would often say.

This comment made Arachne angry. "Athena did no such thing. I taught myself to weave. No one can weave as well as I—not even Athena, who invented weaving!"

Athena, the goddess of wisdom, watched the boastful Arachne from her throne high on Mount Olympus. One day she decided that she'd had enough of Arachne. Athena disguised herself as an old woman and went to visit Arachne.

"I hear that Athena has given you great gift—the skill of weaving," said the old woman.

"I am the best weaver, but Athena has nothing to do with how good I am. Her skill is no match for mine," stated Arachne.

"You are a talented weaver, Arachne, but you are a foolish girl. You should ask Athena for forgiveness," the old lady said becoming angry.

"What? Ask for forgiveness! You are the foolish one! I am telling the truth, and if Athena is offended by my claims, she is more than welcome to pay me a visit. I would be more than willing to show her what real weaving looks like. I know that she could learn a thing or two from me," Arachne said confidently.

With that, the old woman filled with rage and in the blink of an eye, transformed back into the magnificent goddess—Athena. All of the village people gathered around the powerful goddess and fell to their knees to honor her. All of the people except Arachne, for she seemed unimpressed by Athena's presence.

"You think you are better than I, Arachne? Well, let the competition begin," Athena proclaimed.

Droves gathered to watch the weaving contest. Arachne and Athena both began to weave. Their fingers moved fluidly across the colorful threads.

Athena wove glorious pictures of the gods and goddesses performing kind and heroic deeds. They were the most beautiful images the mere mortals had ever seen.

Arachne's weavings were also gorgeous and perfectly constructed. Her cloths were also images of the gods, but they portrayed them as angry and foolish.

Athena was enraged when she saw how Arachne had depicted the gods. She was even more infuriated when she realized that her own skill was only marginally better than Arachne's.

"You are too boastful and rude, Arachne. How dare you make fun of the gods!" Athena, beside herself, ripped Arachne's weavings to shreds. Then she grabbed a stick and hit the girl repeatedly with it.

At that moment, Arachne ran from Athena. "Oh, no you won't run from me," Athena shouted. "I will make sure that you, your children, and your children's children suffer."

She magically altered Arachne. Arachne began to shrink until her body was a small black bead. She sprouted eight legs and grew black hair. Arachne became the world's first spider. She scurried to the highest place she could find and began weaving a web.

"Now you will be able to weave all day long," Athena said proudly. "But from now on, no one will care about your talents. In fact, your delicate woven webs will be destroyed when people see them."

[Based on a version told by Nicole Shelby.]

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# St. Thomas Aquinas, *Summa Theologicae*

[First part, a, Question 2, Article 3. Translated by Fathers of the English Dominican Province, 1920. Public domain.]

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.

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# Søren Kierkegaard, "A Panegyric upon Abraham"

[From *Fear and Trembling*]

**I**f there were no eternal consciousness in a man, if at the foundation of all there lay only a wildly seething power which writhing with obscure passions produced everything that is great and everything that is insignificant, if a bottomless void never satiated lay hidden beneath all—what then would life be but despair? If such were the case, if there were no sacred bond which united mankind, if one generation arose after another like the leafage in the forest, if the one generation replaced the other like the song of birds in the forest, if the human race passed through the world as the ship goes through the sea, like the wind through the desert, a thoughtless and fruitless activity, if an eternal oblivion were always lurking hungrily for its prey and there was no power strong enough to wrest it from its maw—how empty then and comfortless life would be! But therefore it is not thus, but as God created man and woman, so too He fashioned the hero and the poet or orator. The poet cannot do what that other does, he can only admire, love and rejoice in the hero. Yet he too is happy, and not less so, for the hero is as it were his better nature, with which he is in love, rejoicing in the fact that this after all is not himself, that his love can be admiration. He is the genius of recollection, can do nothing except call to mind what has been done, do nothing but admire what has been done; he contributes nothing of his own, but is jealous of the intrusted treasure. He follows the option of his heart, but when he has found what he sought, he wanders before every man's door with his song and with his oration, that all may admire the hero as he does, be proud of the hero as he is. This is his achievement, his humble work, this is his faithful service in the house of the hero. If he thus remains true to his love, he strives day and night against the cunning of oblivion which would trick him out of his hero, then he has completed his work, then he is gathered to the hero, who has loved him just as faithfully, for the poet is as it were the hero's better nature, powerless it may be as a memory is, but also transfigured as a memory is. Hence no one shall be forgotten who was great, and though time tarries long, though a cloud of misunderstanding takes the hero away, his lover comes nevertheless, and the longer the time that has passed, the more faithfully will he cling to him.

No, not one shall be forgotten who was great in the world. But each was great in his own way, and each in proportion to the greatness of that which he *loved.* For he who loved himself became great by himself, and he who loved other men became great by his selfless devotion, but he who loved God became greater than all. Everyone shall be remembered, but each became great in proportion to his *expectation.* One became great by expecting the possible, another by expecting the eternal, but he who expected the impossible became greater than all. Everyone shall be remembered, but each was great in proportion to the greatness of that with which he *strove.* For he who strove with the world became great by overcoming the world, and he who strove with himself became great by overcoming himself, but he who strove with God became greater than all. So there was strife in the world, man against man, one against a thousand, but he who strove with God was greater than all. So there was strife upon earth: there was one who overcame all by his power, and there was one who overcame God by his impotence. There was one who relied upon himself and gained all, there was one who secure in his strength sacrificed all, but he who believed God was greater than all. There was one who was great by reason of his power, and one who was great by reason of his wisdom, and one who was great by reason of his hope, and one who was great by reason of his love; but Abraham was greater than all, great by reason of his power whose strength is impotence, great by reason of his wisdom whose secret is foolishness, great by reason of his hope whose form is madness, great by reason of the love which is hatred of oneself.

By faith Abraham went out from the land of his fathers and became a sojourner in the land of promise. He left one thing behind, took one thing with him: he left his earthly understanding behind and took faith with him—otherwise he would not have wandered forth but would have thought this unreasonable. By faith he was a stranger in the land of promise, and there was nothing to recall what was dear to him, but by its novelty everything tempted his soul to melancholy yearning—and yet he was God's elect, in whom the Lord was well pleased! Yea, if he had been disowned, cast off from God's grace, he could have comprehended it better; but now it was like a mockery of him and of his faith. There was in the world one too who lived in banishment from the fatherland he loved. He is not forgotten, nor his Lamentation when he sorrowfully sought and found what he had lost. There is no song of Lamentations by Abraham. It is human to lament, human to weep with them that weep, but it is greater to believe, more blessed to contemplate the believer.

By faith Abraham received the promise that in his seed all races of the world would be blessed. Time passed, the possibility was there, Abraham believed; time passed, it became unreasonable, Abraham believed. There was in the world one who had an expectation, time passed, the evening drew nigh, he was not paltry enough to have forgotten his expectation, therefore he too shall not be forgotten. Then he sorrowed, and sorrow did not deceive him as life had done, it did for him all it could, in the sweetness of sorrow he possessed his delusive expectation. It is human to sorrow, human to sorrow with them that sorrow, but it is greater to believe, more blessed to contemplate the believer. There is no song of Lamentations by Abraham. He did not mournfully count the days while time passed, he did not look at Sarah with a suspicious glance, wondering whether she were growing old, he did not arrest the

course of the sun, that Sarah might not grow old, and his expectation with her. He did not sing lullingly before Sarah his mournful lay. Abraham became old, Sarah became a laughing-stock in the land, and yet he was God's elect and inheritor of the promise that in his seed all the races of the world would be blessed. So were it not better if he had not been God's elect? What is it to be God's elect? It is to be denied in youth the wishes of youth, so as with great pains to get them fulfilled in old age. But Abraham believed and held fast the expectation. If Abraham had wavered, he would have given it up. If he had said to God, "Then perhaps it is not after all Thy will that it should come to pass, so I will give up the wish. It was my only wish, it was my bliss. My soul is sincere, I hide no secret malice because Thou didst deny it to me"—he would not have been forgotten, he would have saved many by his example, yet he would not be the father of faith. For it is great to give up one's wish, but it is greater to hold it fast after having given it up, it is great to grasp the eternal, but it is greater to hold fast to the temporal after having given it up.

Then came the fulness of time. If Abraham had not believed, Sarah surely would have been dead of sorrow, and Abraham, dulled by grief, would not have understood the fulfilment but would have smiled at it as at a dream of youth. But Abraham believed, therefore he was young; for he who always hopes for the best becomes old, and he who is always prepared for the worst grows old early, but he who believes preserves an eternal youth. Praise therefore to that story! For Sarah, though stricken in years, was young enough to desire the pleasures of motherhood, and Abraham, though gray-haired, was young enough to wish to be a father. In an outward respect the marvel consists in the fact that it came to pass according to their expectation, in a deeper sense the miracle of faith consists in the fact that Abraham and Sarah were young enough to wish, and that faith had preserved their wish and therewith their youth. He accepted the fulfilment of the promise, he accepted it by faith, and it came to pass according to the promise and according to his faith—for Moses smote the rock with his rod, but he did not believe.

Then there was joy in Abraham's house, when Sarah became a bride on the day of their golden wedding.

But it was not to remain thus. Still once more Abraham was to be tried. He had fought with that cunning power which invents everything, with that alert enemy which never slumbers, with that old man who outlives all things—he had fought with Time and preserved his faith. Now all the terror of the strife was concentrated in one instant. "And God tempted Abraham and said unto him, Take Isaac, thine only son, whom thou lovest, and get thee into the land of Moriah, and offer him there for a burnt offering upon the mountain which I will show thee."

So all was lost—more dreadfully than if it had never come to pass! So the Lord was only making sport of Abraham! He made miraculously the preposterous actual, and now in turn He would annihilate it. It was indeed foolishness, but Abraham did not laugh at it like Sarah when the promise was announced. All was lost! Seventy years of faithful expectation, the brief joy at the fulfilment of faith. Who then is he that plucks away the old man's staff, who is it that requires that he himself shall break it? Who is he that would make a man's

gray hairs comfortless, who is it that requires that he himself shall do it? Is there no compassion for the venerable oldling, none for the innocent child? And yet Abraham was God's elect, and it was the Lord who imposed the trial. All would now be lost. The glorious memory to be preserved by the human race, the promise in Abraham's seed—this was only a whim, a fleeting thought which the Lord had had, which Abraham should now obliterate. That glorious treasure which was just as old as faith in Abraham's heart, many, many years older than Isaac, the fruit of Abraham's life, sanctified by prayers, matured in conflict—the blessing upon Abraham's lips, the fruit was now to be plucked prematurely and remain without significance. For what significance had it when Isaac was to be sacrificed? That sad and yet blissful hour when Abraham was to take leave of all that was dear to him when yet once more he was to lift up his head, when his countenance would shine like that of the Lord, when he would concentrate his whole soul in a blessing which was potent to make Isaac blessed all his days—this time would not come! For he would indeed take leave of Isaac, but in such a way that he himself would remain behind; death would separate them, but in such a way that Isaac remained its prey. The old man would not be joyful in death as he laid his hands in blessing upon Isaac, but he would be weary of life as he laid violent hands upon Isaac. And it was God who tried him. Yea, woe, woe unto the messenger who had come before Abraham with such tidings! Who would have ventured to be the emissary of this sorrow? But it was God who tried Abraham.

Yet Abraham believed, and believed for this life. Yea, if his faith had been only for a future life, he surely would have cast everything away in order to hasten out of this world to which he did not belong. But Abraham's faith was not of this sort, if there be such a faith; for really this is not faith but the furthest possibility of faith which has a presentiment of its object at the extremest limit of the horizon, yet is separated from it by a yawning abyss within which despair carries on its game. But Abraham believed precisely for this life, that he was to grow old in the land, honored by the people, blessed in his generation, remembered forever in Isaac, his dearest thing in life, whom he embraced with a love for which it would be a poor expression to say that he loyally fulfilled the father's duty of loving the son, as indeed is evinced in the words of the summons, "the son whom thou lovest." Jacob had twelve sons, and one of them he loved; Abraham had only one, the son whom he loved.

Yet Abraham believed and did not doubt, he believed the preposterous. If Abraham had doubted—then he would have done something else, something glorious; for how could Abraham do anything but what is great and glorious! He would have marched up to Mount Moriah, he would have cleft the fire-wood, lit the pyre, drawn the knife—he would have cried out to God, "Despise not this sacrifice, it is not the best thing I possess, that I know well, for what is an old man in comparison with the child of promise; but it is the best I am able to give Thee. Let Isaac never come to know this, that he may console himself with his youth." He would have plunged the knife into his own breast. He would have been admired in the world, and his name would not have been forgotten; but it is one thing to be admired, and another to be the guiding star which saves the anguished.

But Abraham believed. He did not pray for himself, with the hope of moving the Lord—it was only when the righteous punishment was decreed upon Sodom and Gomorrha that Abraham came forward with his prayers.

We read in those holy books: "And God tempted Abraham, and said unto him, Abraham, Abraham, where art thou? And he said, Here am I." Thou to whom my speech is addressed, was such the case with thee? When afar off thou didst see the heavy dispensation of providence approaching thee, didst thou not say to the mountains, Fall on me, and to the hills, Cover me? Or if thou wast stronger, did not thy foot move slowly along the way, longing as it were for the old path? When a call was issued to thee, didst thou answer, or didst thou not answer perhaps in a low voice, whisperingly? Not so Abraham: joyfully, buoyantly, confidently, with a loud voice, he answered, "Here am I." We read further: "And Abraham rose early in the morning" as though it were to a festival, so he hastened, and early in the morning he had come to the place spoken of, to Mount Moriah. He said nothing to Sarah, nothing to Eleazar. Indeed who could understand him? Had not the temptation by its very nature exacted of him an oath of silence? He cleft the wood, he bound Isaac, lie lit the pyre, he drew the knife. My hearer, there was many a father who believed that with his son he lost everything that was dearest to him in the world, that he was deprived of every hope for the future, but yet there was none that was the child of promise in the sense that Isaac was for Abraham. There was many a father who lost his child; but then it was God, it was the unalterable, the unsearchable will of the Almighty, it was His hand took the child. Not so with Abraham. For him was reserved a harder trial, and Isaac's fate was laid along with the knife in Abraham's hand. And there he stood, the old man, with his only hope! But he did not doubt, he did not look anxiously to the right or to the left, he did not challenge heaven with his prayers. He knew that it was God the Almighty who was trying him, he knew that it was the hardest sacrifice that could be required of him; but he knew also that no sacrifice was too hard when God required it—and he drew the knife.

Who gave strength to Abraham's arm? Who held his right hand up so that it did not fall limp at his side? He who gazes at this becomes paralyzed. Who gave strength the Abraham's soul, so that his eyes did not grow dim, so that he saw neither Isaac nor the ram? He who gazes at this becomes blind.—And yet rare enough perhaps is the man who becomes paralyzed and blind, still more rare one who worthily recounts what happened. We all know it—it was only a trial.

If Abraham when he stood upon Mount Moriah had doubted, if he had gazed about him irresolutely, if when he drew the knife he had by chance discovered the ram, if God had permitted him to offer it instead of Isaac—then he would have betaken himself home, everything would have been the same, he has Sarah, he retained Isaac, and yet how changed! For his retreat would have been a flight, his salvation an accident, his reward dishonor, his future perhaps perdition. Then he would have borne witness neither to his faith nor to God's grace, but would have testified only how dreadful it is to march out to Mount Moriah. Then Abraham would not have been forgotten, nor would Mount Moriah, this mountain would

then be mentioned, not like Ararat where the Ark landed, but would be spoken of as a consternation, because it was here that Abraham doubted.

Venerable Father Abraham! In marching home from Mount Moriah thou hadst no need of a panegyric which might console thee for thy loss; for thou didst gain all and didst retain Isaac. Was it not so? Never again did the Lord take him from thee, but thou didst sit at table joyfully with him in thy tent, as thou dost in the beyond to all eternity. Venerable Father Abraham! Thousands of years have run their course since those days, but thou hast no tardy lover to snatch the memorial of thee from the power of oblivion, for every language calls thee to remembrance—and yet thou dost reward thy lover more gloriously than does any other; hereafter thou dost make him blessed in thy bosom; here thou dost enthral his eyes and his heart by the marvel of thy deed. Venerable Father Abraham! Thou who first wast sensible of and didst first bear witness to that prodigious passion which disdains the dreadful conflict with the rage of the elements and with the powers of creation in order to strive with God; thou who first didst know that highest passion, the holy, pure and humble expression of the divine madness which the pagans admired—forgive him who would speak in praise of thee, if he does not do it fittingly. He spoke humbly, as if it were the desire of his own heart, he spoke briefly, as if becomes him to do, but he will never forget that thou hadst need of a hundred years to obtain a son of old age against expectation, that thou didst have to draw the knife before retaining Isaac; he will never forget that in a hundred and thirty years thou didst not get further than to faith.

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# John Paul II, *Fides et Ratio* (On Faith and Reason)

[*Theme*: "Faith and reason are like two wings on which the human spirit rises to the contemplation of truth."]

CHAPTER IV: THE RELATIONSHIP BETWEEN FAITH AND REASON

## *Important moments in the encounter of faith and reason*

36. The Acts of the Apostles provides evidence that Christian proclamation was engaged from the very first with the philosophical currents of the time. In Athens, we read, Saint Paul entered into discussion with "certain Epicurean and Stoic philosophers" (17:18); and exegetical analysis of his speech at the Areopagus has revealed frequent allusions to popular beliefs deriving for the most part from Stoicism. This is by no means accidental. If pagans were to understand them, the first Christians could not refer only to "Moses and the prophets" when they spoke. They had to point as well to natural knowledge of God and to the voice of conscience in every human being (cf. Rom 1:19-21; 2:14-15; Acts 14:16-17). Since in pagan religion this natural knowledge had lapsed into idolatry (cf. Rom 1:21-32), the Apostle judged it wiser in his speech to make the link with the thinking of the philosophers,

who had always set in opposition to the myths and mystery cults notions more respectful of divine transcendence.

One of the major concerns of classical philosophy was to purify human notions of God of mythological elements. We know that Greek religion, like most cosmic religions, was polytheistic, even to the point of divinizing natural things and phenomena. Human attempts to understand the origin of the gods and hence the origin of the universe find their earliest expression in poetry; and the theogonies remain the first evidence of this human search. But it was the task of the fathers of philosophy to bring to light the link between reason and religion. As they broadened their view to include universal principles, they no longer rested content with the ancient myths, but wanted to provide a rational foundation for their belief in the divinity. This opened a path which took its rise from ancient traditions but allowed a development satisfying the demands of universal reason. This development sought to acquire a critical awareness of what they believed in, and the concept of divinity was the prime beneficiary of this. Superstitions were recognized for what they were and religion was, at least in part, purified by rational analysis. It was on this basis that the Fathers of the Church entered into fruitful dialogue with ancient philosophy, which offered new ways of proclaiming and understanding the God of Jesus Christ.

37. In tracing Christianity's adoption of philosophy, one should not forget how cautiously Christians regarded other elements of the cultural world of paganism, one example of which is gnosticism. It was easy to confuse philosophy—understood as practical wisdom and an education for life—with a higher and esoteric kind of knowledge, reserved to those few who were perfect. It is surely this kind of esoteric speculation which Saint Paul has in mind when he puts the Colossians on their guard: "See to it that no-one takes you captive through philosophy and empty deceit, according to human tradition, according to the elemental spirits of the universe and not according to Christ" (2:8). The Apostle's words seem all too pertinent now if we apply them to the various kinds of esoteric superstition widespread today, even among some believers who lack a proper critical sense. Following Saint Paul, other writers of the early centuries, especially Saint Irenaeus and Tertullian, sound the alarm when confronted with a cultural perspective which sought to subordinate the truth of Revelation to the interpretation of the philosophers.

38. Christianity's engagement with philosophy was therefore neither straight-forward nor immediate. The practice of philosophy and attendance at philosophical schools seemed to the first Christians more of a disturbance than an opportunity. For them, the first and most urgent task was the proclamation of the Risen Christ by way of a personal encounter which would bring the listener to conversion of heart and the request for Baptism. But that does not mean that they ignored the task of deepening the understanding of faith and its motivations. Quite the contrary. That is why the criticism of Celsus—that Christians were "illiterate and uncouth"—is unfounded and untrue. Their initial disinterest is to be explained on other grounds. The encounter with the Gospel offered such a satisfying answer to the hitherto unresolved question of life's meaning that delving into the philosophers seemed to them something remote and in some ways outmoded.

That seems still more evident today, if we think of Christianity's contribution to the affirmation of the right of everyone to have access to the truth. In dismantling barriers of race, social status and gender, Christianity proclaimed from the first the equality of all men and women before God. One prime implication of this touched the theme of truth. The elitism which had characterized the ancients' search for truth was clearly abandoned. Since access to the truth enables access to God, it must be denied to none. There are many paths which lead to truth, but since Christian truth has a salvific value, any one of these paths may be taken, as long as it leads to the final goal, that is to the Revelation of Jesus Christ.

A pioneer of positive engagement with philosophical thinking—albeit with cautious discernment—was Saint Justin. Although he continued to hold Greek philosophy in high esteem after his conversion, Justin claimed with power and clarity that he had found in Christianity "the only sure and profitable philosophy". Similarly, Clement of Alexandria called the Gospel "the true philosophy", and he understood philosophy, like the Mosaic Law, as instruction which prepared for Christian faith and paved the way for the Gospel. Since "philosophy yearns for the wisdom which consists in rightness of soul and speech and in purity of life, it is well disposed towards wisdom and does all it can to acquire it. We call philosophers those who love the wisdom that is creator and mistress of all things, that is knowledge of the Son of God". For Clement, Greek philosophy is not meant in the first place to bolster and complete Christian truth. Its task is rather the defence of the faith: "The teaching of the Saviour is perfect in itself and has no need of support, because it is the strength and the wisdom of God. Greek philosophy, with its contribution, does not strengthen truth; but, in rendering the attack of sophistry impotent and in disarming those who betray truth and wage war upon it, Greek philosophy is rightly called the hedge and the protective wall around the vineyard".

39. It is clear from history, then, that Christian thinkers were critical in adopting philosophical thought. Among the early examples of this, Origen is certainly outstanding. In countering the attacks launched by the philosopher Celsus, Origen adopts Platonic philosophy to shape his argument and mount his reply. Assuming many elements of Platonic thought, he begins to construct an early form of Christian theology. The name "theology" itself, together with the idea of theology as rational discourse about God, had to this point been tied to its Greek origins. In Aristotelian philosophy, for example, the name signified the noblest part and the true summit of philosophical discourse. But in the light of Christian Revelation what had signified a generic doctrine about the gods assumed a wholly new meaning, signifying now the reflection undertaken by the believer in order to express the true doctrine about God. As it developed, this new Christian thought made use of philosophy, but at the same time tended to distinguish itself clearly from philosophy. History shows how Platonic thought, once adopted by theology, underwent profound changes, especially with regard to concepts such as the immortality of the soul, the divinization of man and the origin of evil.

40. In this work of christianizing Platonic and Neo-Platonic thought, the Cappadocian Fathers, Dionysius called the Areopagite and especially Saint Augustine were important. The

great Doctor of the West had come into contact with different philosophical schools, but all of them left him disappointed. It was when he encountered the truth of Christian faith that he found strength to undergo the radical conversion to which the philosophers he had known had been powerless to lead him. He himself reveals his motive: "From this time on, I gave my preference to the Catholic faith. I thought it more modest and not in the least misleading to be told by the Church to believe what could not be demonstrated—whether that was because a demonstration existed but could not be understood by all or whether the matter was not one open to rational proof—rather than from the Manichees to have a rash promise of knowledge with mockery of mere belief, and then afterwards to be ordered to believe many fabulous and absurd myths impossible to prove true". Though he accorded the Platonists a place of privilege, Augustine rebuked them because, knowing the goal to seek, they had ignored the path which leads to it: the Word made flesh. The Bishop of Hippo succeeded in producing the first great synthesis of philosophy and theology, embracing currents of thought both Greek and Latin. In him too the great unity of knowledge, grounded in the thought of the Bible, was both confirmed and sustained by a depth of speculative thinking. The synthesis devised by Saint Augustine remained for centuries the most exalted form of philosophical and theological speculation known to the West. Reinforced by his personal story and sustained by a wonderful holiness of life, he could also introduce into his works a range of material which, drawing on experience, was a prelude to future developments in different currents of philosophy.

41. The ways in which the Fathers of East and West engaged the philosophical schools were, therefore, quite different. This does not mean that they identified the content of their message with the systems to which they referred. Consider Tertullian's question: "What does Athens have in common with Jerusalem? The Academy with the Church?". This clearly indicates the critical consciousness with which Christian thinkers from the first confronted the problem of the relationship between faith and philosophy, viewing it comprehensively with both its positive aspects and its limitations. They were not naive thinkers. Precisely because they were intense in living faith's content they were able to reach the deepest forms of speculation. It is therefore minimalizing and mistaken to restrict their work simply to the transposition of the truths of faith into philosophical categories. They did much more. In fact they succeeded in disclosing completely all that remained implicit and preliminary in the thinking of the great philosophers of antiquity. As I have noted, theirs was the task of showing how reason, freed from external constraints, could find its way out of the blind alley of myth and open itself to the transcendent in a more appropriate way. Purified and rightly tuned, therefore, reason could rise to the higher planes of thought, providing a solid foundation for the perception of being, of the transcendent and of the absolute.

It is here that we see the originality of what the Fathers accomplished. They fully welcomed reason which was open to the absolute, and they infused it with the richness drawn from Revelation. This was more than a meeting of cultures, with one culture perhaps succumbing to the fascination of the other. It happened rather in the depths of human souls, and it was a meeting of creature and Creator. Surpassing the goal towards which it unwittingly tended by dint of its nature, reason attained the supreme good and ultimate truth in the person of the

Word made flesh. Faced with the various philosophies, the Fathers were not afraid to acknowledge those elements in them that were consonant with Revelation and those that were not. Recognition of the points of convergence did not blind them to the points of divergence.

42. In Scholastic theology, the role of philosophically trained reason becomes even more conspicuous under the impulse of Saint Anselm's interpretation of the *intellectus fidei*. For the saintly Archbishop of Canterbury the priority of faith is not in competition with the search which is proper to reason. Reason in fact is not asked to pass judgement on the contents of faith, something of which it would be incapable, since this is not its function. Its function is rather to find meaning, to discover explanations which might allow everyone to come to a certain understanding of the contents of faith. Saint Anselm underscores the fact that the intellect must seek that which it loves: the more it loves, the more it desires to know. Whoever lives for the truth is reaching for a form of knowledge which is fired more and more with love for what it knows, while having to admit that it has not yet attained what it desires: "To see you was I conceived; and I have yet to conceive that for which I was conceived (*Ad te videndum factus sum; et nondum feci propter quod factus sum*)". The desire for truth, therefore, spurs reason always to go further; indeed, it is as if reason were overwhelmed to see that it can always go beyond what it has already achieved. It is at this point, though, that reason can learn where its path will lead in the end: "I think that whoever investigates something incomprehensible should be satisfied if, by way of reasoning, he reaches a quite certain perception of its reality, even if his intellect cannot penetrate its mode of being ... But is there anything so incomprehensible and ineffable as that which is above all things? Therefore, if that which until now has been a matter of debate concerning the highest essence has been established on the basis of due reasoning, then the foundation of one's certainty is not shaken in the least if the intellect cannot penetrate it in a way that allows clear formulation. If prior thought has concluded rationally that one cannot comprehend (*rationabiliter comprehendit incomprehensibile esse*) how supernal wisdom knows its own accomplishments..., who then will explain how this same wisdom, of which the human being can know nothing or next to nothing, is to be known and expressed?"

The fundamental harmony between the knowledge of faith and the knowledge of philosophy is once again confirmed. Faith asks that its object be understood with the help of reason; and at the summit of its searching reason acknowledges that it cannot do without what faith presents.

## *The enduring originality of the thought of Saint Thomas Aquinas*

43. A quite special place in this long development belongs to Saint Thomas, not only because of what he taught but also because of the dialogue which he undertook with the Arab and Jewish thought of his time. In an age when Christian thinkers were rediscovering the treasures of ancient philosophy, and more particularly of Aristotle, Thomas had the great merit of giving pride of place to the harmony which exists between faith and reason. Both the light of reason and the light of faith come from God, he argued; hence there can be no contradiction between them.

More radically, Thomas recognized that nature, philosophy's proper concern, could contribute to the understanding of divine Revelation. Faith therefore has no fear of reason, but seeks it out and has trust in it. Just as grace builds on nature and brings it to fulfilment, so faith builds upon and perfects reason. Illumined by faith, reason is set free from the fragility and limitations deriving from the disobedience of sin and finds the strength required to rise to the knowledge of the Triune God. Although he made much of the supernatural character of faith, the Angelic Doctor did not overlook the importance of its reasonableness; indeed he was able to plumb the depths and explain the meaning of this reasonableness. Faith is in a sense an "exercise of thought"; and human reason is neither annulled nor debased in assenting to the contents of faith, which are in any case attained by way of free and informed choice.

This is why the Church has been justified in consistently proposing Saint Thomas as a master of thought and a model of the right way to do theology. In this connection, I would recall what my Predecessor, the Servant of God Paul VI, wrote on the occasion of the seventh centenary of the death of the Angelic Doctor: "Without doubt, Thomas possessed supremely the courage of the truth, a freedom of spirit in confronting new problems, the intellectual honesty of those who allow Christianity to be contaminated neither by secular philosophy nor by a prejudiced rejection of it. He passed therefore into the history of Christian thought as a pioneer of the new path of philosophy and universal culture. The key point and almost the kernel of the solution which, with all the brilliance of his prophetic intuition, he gave to the new encounter of faith and reason was a reconciliation between the secularity of the world and the radicality of the Gospel, thus avoiding the unnatural tendency to negate the world and its values while at the same time keeping faith with the supreme and inexorable demands of the supernatural order".

44. Another of the great insights of Saint Thomas was his perception of the role of the Holy Spirit in the process by which knowledge matures into wisdom. From the first pages of his Summa Theologiae, Aquinas was keen to show the primacy of the wisdom which is the gift of the Holy Spirit and which opens the way to a knowledge of divine realities. His theology allows us to understand what is distinctive of wisdom in its close link with faith and knowledge of the divine. This wisdom comes to know by way of connaturality; it presupposes faith and eventually formulates its right judgement on the basis of the truth of faith itself: "The wisdom named among the gifts of the Holy Spirit is distinct from the wisdom found among the intellectual virtues. This second wisdom is acquired through study, but the first 'comes from on high', as Saint James puts it. This also distinguishes it from faith, since faith accepts divine truth as it is. But the gift of wisdom enables judgement according to divine truth".

Yet the priority accorded this wisdom does not lead the Angelic Doctor to overlook the presence of two other complementary forms of wisdom—philosophical wisdom, which is based upon the capacity of the intellect, for all its natural limitations, to explore reality, and theological wisdom, which is based upon Revelation and which explores the contents of faith, entering the very mystery of God.

Profoundly convinced that "whatever its source, truth is of the Holy Spirit" (*omne verum a quocumque dicatur a Spiritu Sancto est*) Saint Thomas was impartial in his love of truth. He sought truth wherever it might be found and gave consummate demonstration of its universality. In him, the Church's Magisterium has seen and recognized the passion for truth; and, precisely because it stays consistently within the horizon of universal, objective and transcendent truth, his thought scales "heights unthinkable to human intelligence". Rightly, then, he may be called an "apostle of the truth". Looking unreservedly to truth, the realism of Thomas could recognize the objectivity of truth and produce not merely a philosophy of "what seems to be" but a philosophy of "what is".

## *The drama of the separation of faith and reason*

45. With the rise of the first universities, theology came more directly into contact with other forms of learning and scientific research. Although they insisted upon the organic link between theology and philosophy, Saint Albert the Great and Saint Thomas were the first to recognize the autonomy which philosophy and the sciences needed if they were to perform well in their respective fields of research. From the late Medieval period onwards, however, the legitimate distinction between the two forms of learning became more and more a fateful separation. As a result of the exaggerated rationalism of certain thinkers, positions grew more radical and there emerged eventually a philosophy which was separate from and absolutely independent of the contents of faith. Another of the many consequences of this separation was an ever deeper mistrust with regard to reason itself. In a spirit both sceptical and agnostic, some began to voice a general mistrust, which led some to focus more on faith and others to deny its rationality altogether.

In short, what for Patristic and Medieval thought was in both theory and practice a profound unity, producing knowledge capable of reaching the highest forms of speculation, was destroyed by systems which espoused the cause of rational knowledge sundered from faith and meant to take the place of faith.

46. The more influential of these radical positions are well known and high in profile, especially in the history of the West. It is not too much to claim that the development of a good part of modern philosophy has seen it move further and further away from Christian Revelation, to the point of setting itself quite explicitly in opposition. This process reached its apogee in the last century. Some representatives of idealism sought in various ways to transform faith and its contents, even the mystery of the Death and Resurrection of Jesus, into dialectical structures which could be grasped by reason. Opposed to this kind of thinking were various forms of atheistic humanism, expressed in philosophical terms, which regarded faith as alienating and damaging to the development of a full rationality. They did not hesitate to present themselves as new religions serving as a basis for projects which, on the political and social plane, gave rise to totalitarian systems which have been disastrous for humanity.

In the field of scientific research, a positivistic mentality took hold which not only abandoned the Christian vision of the world, but more especially rejected every appeal to a metaphysical

or moral vision. It follows that certain scientists, lacking any ethical point of reference, are in danger of putting at the centre of their concerns something other than the human person and the entirety of the person's life. Further still, some of these, sensing the opportunities of technological progress, seem to succumb not only to a market-based logic, but also to the temptation of a quasi-divine power over nature and even over the human being.

As a result of the crisis of rationalism, what has appeared finally is nihilism. As a philosophy of nothingness, it has a certain attraction for people of our time. Its adherents claim that the search is an end in itself, without any hope or possibility of ever attaining the goal of truth. In the nihilist interpretation, life is no more than an occasion for sensations and experiences in which the ephemeral has pride of place. Nihilism is at the root of the widespread mentality which claims that a definitive commitment should no longer be made, because everything is fleeting and provisional.

47. It should also be borne in mind that the role of philosophy itself has changed in modern culture. From universal wisdom and learning, it has been gradually reduced to one of the many fields of human knowing; indeed in some ways it has been consigned to a wholly marginal role. Other forms of rationality have acquired an ever higher profile, making philosophical learning appear all the more peripheral. These forms of rationality are directed not towards the contemplation of truth and the search for the ultimate goal and meaning of life; but instead, as "instrumental reason", they are directed—actually or potentially—towards the promotion of utilitarian ends, towards enjoyment or power.

In my first Encyclical Letter I stressed the danger of absolutizing such an approach when I wrote: "The man of today seems ever to be under threat from what he produces, that is to say from the result of the work of his hands and, even more so, of the work of his intellect and the tendencies of his will. All too soon, and often in an unforeseeable way, what this manifold activity of man yields is not only subject to 'alienation', in the sense that it is simply taken away from the person who produces it, but rather it turns against man himself, at least in part, through the indirect consequences of its effects returning on himself. It is or can be directed against him. This seems to make up the main chapter of the drama of present-day human existence in its broadest and universal dimension. Man therefore lives increasingly in fear. He is afraid of what he produces—not all of it, of course, or even most of it, but part of it and precisely that part that contains a special share of his genius and initiative—can radically turn against himself".

In the wake of these cultural shifts, some philosophers have abandoned the search for truth in itself and made their sole aim the attainment of a subjective certainty or a pragmatic sense of utility. This in turn has obscured the true dignity of reason, which is no longer equipped to know the truth and to seek the absolute.

48. This rapid survey of the history of philosophy, then, reveals a growing separation between faith and philosophical reason. Yet closer scrutiny shows that even in the philosophical thinking of those who helped drive faith and reason further apart there are found at times precious and seminal insights which, if pursued and developed with mind and heart rightly tuned, can lead to the discovery of truth's way. Such insights are found, for

instance, in penetrating analyses of perception and experience, of the imaginary and the unconscious, of personhood and intersubjectivity, of freedom and values, of time and history. The theme of death as well can become for all thinkers an incisive appeal to seek within themselves the true meaning of their own life. But this does not mean that the link between faith and reason as it now stands does not need to be carefully examined, because each without the other is impoverished and enfeebled. Deprived of what Revelation offers, reason has taken side-tracks which expose it to the danger of losing sight of its final goal. Deprived of reason, faith has stressed feeling and experience, and so run the risk of no longer being a universal proposition. It is an illusion to think that faith, tied to weak reasoning, might be more penetrating; on the contrary, faith then runs the grave risk of withering into myth or superstition. By the same token, reason which is unrelated to an adult faith is not prompted to turn its gaze to the newness and radicality of being.

This is why I make this strong and insistent appeal—not, I trust, untimely—that faith and philosophy recover the profound unity which allows them to stand in harmony with their nature without compromising their mutual autonomy. The parrhesia of faith must be matched by the boldness of reason.

*NOTES:*

(29) "[Galileo] declared explicitly that the two truths, of faith and of science, can never contradict each other, 'sacred Scripture and the natural world proceeding equally from the divine Word, the first as dictated by the Holy Spirit, the second as a very faithful executor of the commands of God', as he wrote in his letter to Father Benedetto Castelli on 21 December 1613. The Second Vatican Council says the same thing, even adopting similar language in its teaching: 'Methodical research, in all realms of knowledge, if it respects ... moral norms, will never be genuinely opposed to faith: the reality of the world and of faith have their origin in the same God' (*Gaudium et Spes*, 36). Galileo sensed in his scientific research the presence of the Creator who, stirring in the depths of his spirit, stimulated him, anticipating and assisting his intuitions": John Paul II, *Address to the Pontifical Academy of* Sciences (10 November 1979): *Insegnamenti*, II, 2 (1979), 1111-1112.

[Source: *L'Osservatore Romano*, 14 October 1998.]

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## Galileo Galilei, *Letter to the Grand Duchess Christina* (1615)

The reason produced for condemning the opinion that the earth moves and the sun stands still is that in many places in the Bible one may read that the sun moves and the earth stands still. Since the Bible cannot err, it follows as a necessary consequence that anyone takes an erroneous and heretical position who maintains that the sun is inherently motionless and the earth movable.

With regard to this argument, I think in the first place that it is very pious to say and prudent to affirm that the holy Bible can never speak untruth—whenever its true meaning is

understood. But I believe nobody will deny that it is often very abstruse, and may say things which are quite different from what its bare words signify. Hence in expounding the Bible if one were always to confine oneself to the unadorned grammatical meaning, one might fall into error. Not only contradictions and propositions far from true might thus be made to appear in the Bible, but even grave heresies and follies. Thus it would be necessary to assign to God feet, hands, and eyes, as well as corporeal and human affections, such as anger, repentance, hatred, and sometimes even the forgetting of things past and ignorance of those to come. These propositions uttered by the Holy Ghost were set down in that manner by the sacred scribes in order to accommodate them to the capacities of the common people, who are rude and unlearned. For the sake of those who deserve to be separated from the herd, it is necessary that wise expositors should produce the true senses of such passages, together with the special reasons for which they were set down in these words. This doctrine is so widespread and so definite with all theologians that it would be superfluous to adduce evidence for it.

Hence I think that I may reasonably conclude that whenever the Bible has occasion to speak of any physical conclusion (especially those which are very abstruse and hard to understand), the rule has been observed of avoiding confusion in the minds of the common people which would render them contumacious toward the higher mysteries. Now the Bible, merely to condescend to popular capacity, has not hesitated to obscure some very important pronouncements, attributing to God himself some qualities extremely remote from (and even contrary to) His essence. Who, then, would positively declare that this principle has been set aside, and the Bible has confined itself rigorously to the bare and restricted sense of its words, when speaking but casually of the earth, of water, of the sun, or of any other created thing? Especially in view of the fact that these things in no way concern the primary purpose of the sacred writings, which is the service of God and the salvation of souls—matters infinitely beyond the comprehension of the common people.

This being granted, I think that in discussions of physical problems we ought to begin not from the authority of scriptural passages, but from sense-experiences and necessary demonstrations; for the holy Bible and the phenomena of nature proceed alike from the divine Word, the former as the dictate of the Holy Ghost and the latter as the observant executrix of God's commands. It is necessary for the Bible, in order to be accommodated to the understanding of every man, to speak many things which appear to differ from the absolute truth so far as the bare meaning of the words is concerned. But Nature, on the other hand, is inexorable and immutable; she never transgresses the laws imposed upon her, or cares a whit whether her abstruse reasons and methods of operation are understandable to men. For that reason it appears that nothing physical which sense-experience sets before our eyes, or which necessary demonstrations prove to us, ought to be called in question (much less condemned) upon the testimony of biblical passages which may have some different meaning beneath their words. For the Bible is not chained in every expression to conditions as strict as those which govern all physical effects; nor is God any less excellently revealed in Nature's actions than in the sacred statements of the Bible. Perhaps this is what Tertullian meant by these words:

"We conclude that God is known first through Nature, and then again, more particularly, by doctrine; by Nature in His works, and by doctrine in His revealed word."

From this I do not mean to infer that we need not have an extraordinary esteem for the passages of holy Scripture. On the contrary, having arrived at any certainties in physics, we ought to utilize these as the most appropriate aids in the true exposition of the Bible and in the investigation of those meanings which are necessarily contained therein, for these must be concordant with demonstrated truths. I should judge that the authority of the Bible was designed to persuade men of those articles and propositions which, surpassing all human reasoning, could not be made credible by science, or by any other means than through the very mouth of the Holy Spirit.

Yet even in those propositions which are not matters of faith, this authority ought to be preferred over that of all human writings which are supported only by bare assertions or probable arguments, and not set forth in a demonstrative way. This I hold to be necessary and proper to the same extent that divine wisdom surpasses all human judgment and conjecture.

But I do not feel obliged to believe that that same God who has endowed us with senses, reason, and intellect has intended to forgo their use and by some other means to give us knowledge which we can attain by them. He would not require us to deny sense and reason in physical matters which are set before our eyes and minds by direct experience or necessary demonstrations. This must be especially true in those sciences of which but the faintest trace (and that consisting of conclusions) is to be found in the Bible. Of astronomy, for instance, so little is found that none of the planets except Venus are so much as mentioned, and this only once or twice under the name of "Lucifer." If the sacred scribes had had any intention of teaching people certain arrangements and motions of the heavenly bodies, or had they wished us to derive such knowledge from the Bible, then in my opinion they would not have spoken of these matters so sparingly in comparison with the infinite number of admirable conclusions which are demonstrated in that science. Far from pretending to teach us the constitution and motions of the heavens and the stars, with their shapes, magnitudes, and distances, the authors of the Bible intentionally forbore to speak of these things, though all were quite well known to them. . . .

From these things it follows as a necessary consequence that, since the Holy Ghost did not intend to teach us whether heaven moves or stands still, whether its shape is spherical or like a discus or extended in a plane, nor whether the earth is located at its center or off to one side, then so much the less was it intended to settle for us any other conclusion of the same kind. And the motion or rest of the earth and the sun is so closely linked with the things just named, that without a determination of the one, neither side can be taken in the other matters. Now if the Holy Spirit has purposely neglected to teach us propositions of this sort as irrelevant to the highest goal (that is, to our salvation), how can anyone affirm that it is obligatory to take sides on them, and that one belief is required by faith, while the other side is erroneous? Can an opinion be heretical and yet have no concern with the salvation of souls? Can the Holy Ghost be asserted not to have intended teaching us something that does

concern our salvation? I would say here something that was heard from an ecclesiastic of the most eminent degree: "That the intention of the Holy Ghost is to teach us how one goes to heaven, not how heaven goes." . . .

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# René Descartes, *Meditations on First Philosophy*

[*The first three of six meditations are below.*]

## MEDITATION I: OF THE THINGS OF WHICH WE MAY DOUBT

1. 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.

2. 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.

3. 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.

4. 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.

5. 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.

6. 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.

7. 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.

8. 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].

9. 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.

10. 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.

11. 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.

12. 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

1. 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.

2. 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.

3. 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.

4. 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.

5. 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 subtile, 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.

6. 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.

7. 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 (*efffingo*), 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.

8. 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.

9. 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.

10. 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.

11. 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.

12. 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.

13. 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.

14. 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.

15. 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.

16. 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.

## MEDITATION III: OF GOD: THAT HE EXISTS

1. I WILL now close my eyes, I will stop my ears, I will turn away my senses from their objects, I will even efface from my consciousness all the images of corporeal things; or at least, because this can hardly be accomplished, I will consider them as empty and false; and thus, holding converse only with myself, and closely examining my nature, I will endeavor to obtain by degrees a more intimate and familiar knowledge of myself. I am a thinking (conscious) thing, that is, a being who doubts, affirms, denies, knows a few objects, and is ignorant of many,—who loves, hates, wills, refuses, who imagines likewise, and perceives; for, as I before remarked, although the things which I perceive or imagine are perhaps nothing at all apart from me and in themselves], I am nevertheless assured that those modes of consciousness which I call perceptions and imaginations, in as far only as they are modes of consciousness, exist in me.

2. And in the little I have said I think I have summed up all that I really know, or at least all that up to this time I was aware I knew. Now, as I am endeavoring to extend my knowledge more widely, I will use circumspection, and consider with care whether I can still discover in myself anything further which I have not yet hitherto observed. I am certain that I am a thinking thing; but do I not therefore likewise know what is required to render me certain of a truth? In this first knowledge, doubtless, there is nothing that gives me assurance of its truth except the clear and distinct perception of what I affirm, which would not indeed be sufficient to give me the assurance that what I say is true, if it could ever happen that anything I thus clearly and distinctly perceived should prove false; and accordingly it seems

to me that I may now take as a general rule, that all that is very clearly and distinctly apprehended (conceived) is true.

3. Nevertheless I before received and admitted many things as wholly certain and manifest, which yet I afterward found to be doubtful. What, then, were those? They were the earth, the sky, the stars, and all the other objects which I was in the habit of perceiving by the senses. But what was it that I clearly and distinctly] perceived in them? Nothing more than that the ideas and the thoughts of those objects were presented to my mind. And even now I do not deny that these ideas are found in my mind. But there was yet another thing which I affirmed, and which, from having been accustomed to believe it, I thought I clearly perceived, although, in truth, I did not perceive it at all; I mean the existence of objects external to me, from which those ideas proceeded, and to which they had a perfect resemblance; and it was here I was mistaken, or if I judged correctly, this assuredly was not to be traced to any knowledge I possessed (the force of my perception, Lat.).

4. But when I considered any matter in arithmetic and geometry, that was very simple and easy, as, for example, that two and three added together make five, and things of this sort, did I not view them with at least sufficient clearness to warrant me in affirming their truth? Indeed, if I afterward judged that we ought to doubt of these things, it was for no other reason than because it occurred to me that a God might perhaps have given me such a nature as that I should be deceived, even respecting the matters that appeared to me the most evidently true. But as often as this preconceived opinion of the sovereign power of a God presents itself to my mind, I am constrained to admit that it is easy for him, if he wishes it, to cause me to err, even in matters where I think I possess the highest evidence; and, on the other hand, as often as I direct my attention to things which I think I apprehend with great clearness, I am so persuaded of their truth that I naturally break out into expressions such as these: Deceive me who may, no one will yet ever be able to bring it about that I am not, so long as I shall be conscious that I am, or at any future time cause it to be true that I have never been, it being now true that I am, or make two and three more or less than five, in supposing which, and other like absurdities, I discover a manifest contradiction. And in truth, as I have no ground for believing that Deity is deceitful, and as, indeed, I have not even considered the reasons by which the existence of a Deity of any kind is established, the ground of doubt that rests only on this supposition is very slight, and, so to speak, metaphysical. But, that I may be able wholly to remove it, I must inquire whether there is a God, as soon as an opportunity of doing so shall present itself; and if I find that there is a God, I must examine likewise whether he can be a deceiver; for, without the knowledge of these two truths, I do not see that I can ever be certain of anything. And that I may be enabled to examine this without interrupting the order of meditation I have proposed to myself which is, to pass by degrees from the notions that I shall find first in my mind to those I shall afterward discover in it], it is necessary at this stage to divide all my thoughts into certain classes, and to consider in which of these classes truth and error are, strictly speaking, to be found.

5. Of my thoughts some are, as it were, images of things, and to these alone properly belongs the name IDEA; as when I think represent to my mind ] a man, a chimera, the sky, an angel or God. Others, again, have certain other forms; as when I will, fear, affirm, or deny, I always, indeed, apprehend something as the object of my thought, but I also embrace in thought something more than the representation of the object; and of this class of thoughts some are called volitions or affections, and others judgments.

6. Now, with respect to ideas, if these are considered only in themselves, and are not referred to any object beyond them, they cannot, properly speaking, be false; for, whether I imagine a goat or chimera, it is not less true that I imagine the one than the other. Nor need we fear that falsity may exist in the will or affections; for, although I may desire objects that are wrong, and even that never existed, it is still true that I desire them. There thus only remain our judgments, in which we must take diligent heed that we be not deceived. But the chief and most ordinary error that arises in them consists in judging that the ideas which are in us are like or conformed to the things that are external to us; for assuredly, if we but considered the ideas themselves as certain modes of our thought (consciousness), without referring them to anything beyond, they would hardly afford any occasion of error.

7. But among these ideas, some appear to me to be innate, others adventitious, and others to be made by myself (factitious); for, as I have the power of conceiving what is called a thing, or a truth, or a thought, it seems to me that I hold this power from no other source than my own nature; but if I now hear a noise, if I see the sun, or if I feel heat, I have all along judged that these sensations proceeded from certain objects existing out of myself; and, in fine, it appears to me that sirens, hippogryphs, and the like, are inventions of my own mind. But I may even perhaps come to be of opinion that all my ideas are of the class which I call adventitious, or that they are all innate, or that they are all factitious; for I have not yet clearly discovered their true origin.

8. What I have here principally to do is to consider, with reference to those that appear to come from certain objects without me, what grounds there are for thinking them like these objects. The first of these grounds is that it seems to me I am so taught by nature; and the second that I am conscious that those ideas are not dependent on my will, and therefore not on myself, for they are frequently presented to me against my will, as at present, whether I will or not, I feel heat; and I am thus persuaded that this sensation or idea (*sensum vel ideam*) of heat is produced in me by something different from myself, viz., by the heat of the fire by which I sit. And it is very reasonable to suppose that this object impresses me with its own likeness rather than any other thing.

9. But I must consider whether these reasons are sufficiently strong and convincing. When I speak of being taught by nature in this matter, I understand by the word nature only a certain spontaneous impetus that impels me to believe in a resemblance between ideas and their objects, and not a natural light that affords a knowledge of its truth. But these two things are widely different; for what the natural light shows to be true can be in no degree doubtful, as, for example, that I am because I doubt, and other truths of the like kind; inasmuch as I possess no other faculty whereby to distinguish truth from error, which can

teach me the falsity of what the natural light declares to be true, and which is equally trustworthy; but with respect to seemingly] natural impulses, I have observed, when the question related to the choice of right or wrong in action, that they frequently led me to take the worse part; nor do I see that I have any better ground for following them in what relates to truth and error.

10. Then, with respect to the other reason, which is that because these ideas do not depend on my will, they must arise from objects existing without me, I do not find it more convincing than the former, for just as those natural impulses, of which I have lately spoken, are found in me, notwithstanding that they are not always in harmony with my will, so likewise it may be that I possess some power not sufficiently known to myself capable of producing ideas without the aid of external objects, and, indeed, it has always hitherto appeared to me that they are formed during sleep, by some power of this nature, without the aid of aught external.

11. And, in fine, although I should grant that they proceeded from those objects, it is not a necessary consequence that they must be like them. On the contrary, I have observed, in a number of instances, that there was a great difference between the object and its idea. Thus, for example, I find in my mind two wholly diverse ideas of the sun; the one, by which it appears to me extremely small draws its origin from the senses, and should be placed in the class of adventitious ideas; the other, by which it seems to be many times larger than the whole earth, is taken up on astronomical grounds, that is, elicited from certain notions born with me, or is framed by myself in some other manner. These two ideas cannot certainly both resemble the same sun; and reason teaches me that the one which seems to have immediately emanated from it is the most unlike.

12. And these things sufficiently prove that hitherto it has not been from a certain and deliberate judgment, but only from a sort of blind impulse, that I believed existence of certain things different from myself, which, by the organs of sense, or by whatever other means it might be, conveyed their ideas or images into my mind and impressed it with their likenesses].

13. But there is still another way of inquiring whether, of the objects whose ideas are in my mind, there are any that exist out of me. If ideas are taken in so far only as they are certain modes of consciousness, I do not remark any difference or inequality among them, and all seem, in the same manner, to proceed from myself; but, considering them as images, of which one represents one thing and another a different, it is evident that a great diversity obtains among them. For, without doubt, those that represent substances are something more, and contain in themselves, so to speak, more objective reality that is, participate by representation in higher degrees of being or perfection], than those that represent only modes or accidents; and again, the idea by which I conceive a God sovereign], eternal, infinite, immutable], all-knowing, all-powerful, and the creator of all things that are out of himself, this, I say, has certainly in it more objective reality than those ideas by which finite substances are represented.

14. Now, it is manifest by the natural light that there must at least be as much reality in the efficient and total cause as in its effect; for whence can the effect draw its reality if not from its cause? And how could the cause communicate to it this reality unless it possessed it in itself? And hence it follows, not only that what is cannot be produced by what is not, but likewise that the more perfect, in other words, that which contains in itself more reality, cannot be the effect of the less perfect; and this is not only evidently true of those effects, whose reality is actual or formal, but likewise of ideas, whose reality is only considered as objective. Thus, for example, the stone that is not yet in existence, not only cannot now commence to be, unless it be produced by that which possesses in itself, formally or eminently, all that enters into its composition, in other words, by that which contains in itself the same properties that are in the stone, or others superior to them]; and heat can only be produced in a subject that was before devoid of it, by a cause that is of an order, degree or kind], at least as perfect as heat; and so of the others. But further, even the idea of the heat, or of the stone, cannot exist in me unless it be put there by a cause that contains, at least, as much reality as I conceive existent in the heat or in the stone for although that cause may not transmit into my idea anything of its actual or formal reality, we ought not on this account to imagine that it is less real; but we ought to consider that, as every idea is a work of the mind], its nature is such as of itself to demand no other formal reality than that which it borrows from our consciousness, of which it is but a mode that is, a manner or way of thinking]. But in order that an idea may contain this objective reality rather than that, it must doubtless derive it from some cause in which is found at least as much formal reality as the idea contains of objective; for, if we suppose that there is found in an idea anything which was not in its cause, it must of course derive this from nothing. But, however imperfect may be the mode of existence by which a thing is objectively or by representation] in the understanding by its idea, we certainly cannot, for all that, allege that this mode of existence is nothing, nor, consequently, that the idea owes its origin to nothing.

15. Nor must it be imagined that, since the reality which considered in these ideas is only objective, the same reality need not be formally (actually) in the causes of these ideas, but only objectively: for, just as the mode of existing objectively belongs to ideas by their peculiar nature, so likewise the mode of existing formally appertains to the causes of these ideas (at least to the first and principal), by their peculiar nature. And although an idea may give rise to another idea, this regress cannot, nevertheless, be infinite; we must in the end reach a first idea, the cause of which is, as it were, the archetype in which all the reality or perfection that is found objectively or by representation in these ideas is contained formally and in act. I am thus clearly taught by the natural light that ideas exist in me as pictures or images, which may, in truth, readily fall short of the perfection of the objects from which they are taken, but can never contain anything greater or more perfect.

16. And in proportion to the time and care with which I examine all those matters, the conviction of their truth brightens and becomes distinct. But, to sum up, what conclusion shall I draw from it all? It is this: if the objective reality or perfection] of any one of my ideas be such as clearly to convince me, that this same reality exists in me neither formally nor eminently, and if, as follows from this, I myself cannot be the cause of it, it is a necessary

consequence that I am not alone in the world, but that there is besides myself some other being who exists as the cause of that idea; while, on the contrary, if no such idea be found in my mind, I shall have no sufficient ground of assurance of the existence of any other being besides myself, for, after a most careful search, I have, up to this moment, been unable to discover any other ground.

17. But, among these my ideas, besides that which represents myself, respecting which there can be here no difficulty, there is one that represents a God; others that represent corporeal and inanimate things; others angels; others animals; and, finally, there are some that represent men like myself.

18. But with respect to the ideas that represent other men, or animals, or angels, I can easily suppose that they were formed by the mingling and composition of the other ideas which I have of myself, of corporeal things, and of God, although they were, apart from myself, neither men, animals, nor angels.

19. And with regard to the ideas of corporeal objects, I never discovered in them anything so great or excellent which I myself did not appear capable of originating; for, by considering these ideas closely and scrutinizing them individually, in the same way that I yesterday examined the idea of wax, I find that there is but little in them that is clearly and distinctly perceived. As belonging to the class of things that are clearly apprehended, I recognize the following, *viz*, magnitude or extension in length, breadth, and depth; figure, which results from the termination of extension; situation, which bodies of diverse figures preserve with reference to each other; and motion or the change of situation; to which may be added substance, duration, and number. But with regard to light, colors, sounds, odors, tastes, heat, cold, and the other tactile qualities, they are thought with so much obscurity and confusion, that I cannot determine even whether they are true or false; in other words, whether or not the ideas I have of these qualities are in truth the ideas of real objects. For although I before remarked that it is only in judgments that formal falsity, or falsity properly so called, can be met with, there may nevertheless be found in ideas a certain material falsity, which arises when they represent what is nothing as if it were something. Thus, for example, the ideas I have of cold and heat are so far from being clear and distinct, that I am unable from them to discover whether cold is only the privation of heat, or heat the privation of cold; or whether they are or are not real qualities: and since, ideas being as it were images there can be none that does not seem to us to represent some object, the idea which represents cold as something real and positive will not improperly be called false, if it be correct to say that cold is nothing but a privation of heat; and so in other cases.

20. To ideas of this kind, indeed, it is not necessary that I should assign any author besides myself: for if they are false, that is, represent objects that are unreal, the natural light teaches me that they proceed from nothing; in other words, that they are in me only because something is wanting to the perfection of my nature; but if these ideas are true, yet because they exhibit to me so little reality that I cannot even distinguish the object represented from nonbeing, I do not see why I should not be the author of them.

21. With reference to those ideas of corporeal things that are clear and distinct, there are some which, as appears to me, might have been taken from the idea I have of myself, as those of substance, duration, number, and the like. For when I think that a stone is a substance, or a thing capable of existing of itself, and that I am likewise a substance, although I conceive that I am a thinking and non-extended thing, and that the stone, on the contrary, is extended and unconscious, there being thus the greatest diversity between the two concepts, yet these two ideas seem to have this in common that they both represent substances. In the same way, when I think of myself as now existing, and recollect besides that I existed some time ago, and when I am conscious of various thoughts whose number I know, I then acquire the ideas of duration and number, which I can afterward transfer to as many objects as I please. With respect to the other qualities that go to make up the ideas of corporeal objects, *viz*, extension, figure, situation, and motion, it is true that they are not formally in me, since I am merely a thinking being; but because they are only certain modes of substance, and because I myself am a substance, it seems possible that they may be contained in me eminently.

22. There only remains, therefore, the idea of God, in which I must consider whether there is anything that cannot be supposed to originate with myself. By the name God, I understand a substance infinite, eternal, immutable], independent, all-knowing, all-powerful, and by which I myself, and every other thing that exists, if any such there be, were created. But these properties are so great and excellent, that the more attentively I consider them the less I feel persuaded that the idea I have of them owes its origin to myself alone. And thus it is absolutely necessary to conclude, from all that I have before said, that God exists.

23. For though the idea of substance be in my mind owing to this, that I myself am a substance, I should not, however, have the idea of an infinite substance, seeing I am a finite being, unless it were given me by some substance in reality infinite.

24. And I must not imagine that I do not apprehend the infinite by a true idea, but only by the negation of the finite, in the same way that I comprehend repose and darkness by the negation of motion and light: since, on the contrary, I clearly perceive that there is more reality in the infinite substance than in the finite, and therefore that in some way I possess the perception (notion) of the infinite before that of the finite, that is, the perception of God before that of myself, for how could I know that I doubt, desire, or that something is wanting to me, and that I am not wholly perfect, if I possessed no idea of a being more perfect than myself, by comparison of which I knew the deficiencies of my nature?

25. And it cannot be said that this idea of God is perhaps materially false, and consequently that it may have arisen from nothing in other words, that it may exist in me from my imperfections as I before said of the ideas of heat and cold, and the like: for, on the contrary, as this idea is very clear and distinct, and contains in itself more objective reality than any other, there can be no one of itself more true, or less open to the suspicion of falsity. The idea, I say, of a being supremely perfect, and infinite, is in the highest degree true; for although, perhaps, we may imagine that such a being does not exist, we cannot, nevertheless, suppose that his idea represents nothing real, as I have already said of the idea of cold. It is likewise clear and distinct in the highest degree, since whatever the mind clearly and distinctly

conceives as real or true, and as implying any perfection, is contained entire in this idea. And this is true, nevertheless, although I do not comprehend the infinite, and although there may be in God an infinity of things that I cannot comprehend, nor perhaps even compass by thought in any way; for it is of the nature of the infinite that it should not be comprehended by the finite; and it is enough that I rightly understand this, and judge that all which I clearly perceive, and in which I know there is some perfection, and perhaps also an infinity of properties of which I am ignorant, are formally or eminently in God, in order that the idea I have of him may become the most true, clear, and distinct of all the ideas in my mind.

26. But perhaps I am something more than I suppose myself to be, and it may be that all those perfections which I attribute to God, in some way exist potentially in me, although they do not yet show themselves, and are not reduced to act. Indeed, I am already conscious that my knowledge is being increased and perfected by degrees; and I see nothing to prevent it from thus gradually increasing to infinity, nor any reason why, after such increase and perfection, I should not be able thereby to acquire all the other perfections of the Divine nature; nor, in fine, why the power I possess of acquiring those perfections, if it really now exist in me, should not be sufficient to produce the ideas of them.

27. Yet, on looking more closely into the matter, I discover that this cannot be; for, in the first place, although it were true that my knowledge daily acquired new degrees of perfection, and although there were potentially in my nature much that was not as yet actually in it, still all these excellences make not the slightest approach to the idea I have of the Deity, in whom there is no perfection merely potentially but all actually] existent; for it is even an unmistakable token of imperfection in my knowledge, that it is augmented by degrees. Further, although my knowledge increase more and more, nevertheless I am not, therefore, induced to think that it will ever be actually infinite, since it can never reach that point beyond which it shall be incapable of further increase. But I conceive God as actually infinite, so that nothing can be added to his perfection. And, in fine, I readily perceive that the objective being of an idea cannot be produced by a being that is merely potentially existent, which, properly speaking, is nothing, but only by a being existing formally or actually.

28. And, truly, I see nothing in all that I have now said which it is not easy for any one, who shall carefully consider it, to discern by the natural light; but when I allow my attention in some degree to relax, the vision of my mind being obscured, and, as it were, blinded by the images of sensible objects, I do not readily remember the reason why the idea of a being more perfect than myself, must of necessity have proceeded from a being in reality more perfect. On this account I am here desirous to inquire further, whether I, who possess this idea of God, could exist supposing there were no God.

29. And I ask, from whom could I, in that case, derive my existence? Perhaps from myself, or from my parents, or from some other causes less perfect than God; for anything more perfect, or even equal to God, cannot be thought or imagined.

30. But if I were independent of every other existence, and] were myself the author of my being, I should doubt of nothing, I should desire nothing, and, in fine, no perfection would be wanting to me; for I should have bestowed upon myself every perfection of which I possess

the idea, and I should thus be God. And it must not be imagined that what is now wanting to me is perhaps of more difficult acquisition than that of which I am already possessed; for, on the contrary, it is quite manifest that it was a matter of much higher difficulty that I, a thinking being, should arise from nothing, than it would be for me to acquire the knowledge of many things of which I am ignorant, and which are merely the accidents of a thinking substance; and certainly, if I possessed of myself the greater perfection of which I have now spoken in other words, if I were the author of my own existence, I would not at least have denied to myself things that may be more easily obtained as that infinite variety of knowledge of which I am at present destitute]. I could not, indeed, have denied to myself any property which I perceive is contained in the idea of God, because there is none of these that seems to me to be more difficult to make or acquire; and if there were any that should happen to be more difficult to acquire, they would certainly appear so to me (supposing that I myself were the source of the other things I possess), because I should discover in them a limit to my power.

31. And though I were to suppose that I always was as I now am, I should not, on this ground, escape the force of these reasonings, since it would not follow, even on this supposition, that no author of my existence needed to be sought after. For the whole time of my life may be divided into an infinity of parts, each of which is in no way dependent on any other; and, accordingly, because I was in existence a short time ago, it does not follow that I must now exist, unless in this moment some cause create me anew as it were, that is, conserve me. In truth, it is perfectly clear and evident to all who will attentively consider the nature of duration, that the conservation of a substance, in each moment of its duration, requires the same power and act that would be necessary to create it, supposing it were not yet in existence; so that it is manifestly a dictate of the natural light that conservation and creation differ merely in respect of our mode of thinking and not in reality.

32. All that is here required, therefore, is that I interrogate myself to discover whether I possess any power by means of which I can bring it about that I, who now am, shall exist a moment afterward: for, since I am merely a thinking thing (or since, at least, the precise question, in the meantime, is only of that part of myself), if such a power resided in me, I should, without doubt, be conscious of it; but I am conscious of no such power, and thereby I manifestly know that I am dependent upon some being different from myself.

33. But perhaps the being upon whom I am dependent is not God, and I have been produced either by my parents, or by some causes less perfect than Deity. This cannot be: for, as I before said, it is perfectly evident that there must at least be as much reality in the cause as in its effect; and accordingly, since I am a thinking thing and possess in myself an idea of God, whatever in the end be the cause of my existence, it must of necessity be admitted that it is likewise a thinking being, and that it possesses in itself the idea and all the perfections I attribute to Deity. Then it may again be inquired whether this cause owes its origin and existence to itself, or to some other cause. For if it be self-existent, it follows, from what I have before laid down, that this cause is God; for, since it possesses the perfection of self-existence, it must likewise, without doubt, have the power of actually possessing every perfection of

which it has the idea—in other words, all the perfections I conceive to belong to God. But if it owe its existence to another cause than itself, we demand again, for a similar reason, whether this second cause exists of itself or through some other, until, from stage to stage, we at length arrive at an ultimate cause, which will be God.

34. And it is quite manifest that in this matter there can be no infinite regress of causes, seeing that the question raised respects not so much the cause which once produced me, as that by which I am at this present moment conserved.

35. Nor can it be supposed that several causes concurred in my production, and that from one I received the idea of one of the perfections I attribute to Deity, and from another the idea of some other, and thus that all those perfections are indeed found somewhere in the universe, but do not all exist together in a single being who is God; for, on the contrary, the unity, the simplicity, or inseparability of all the properties of Deity, is one of the chief perfections I conceive him to possess; and the idea of this unity of all the perfections of Deity could certainly not be put into my mind by any cause from which I did not likewise receive the ideas of all the other perfections; for no power could enable me to embrace them in an inseparable unity, without at the same time giving me the knowledge of what they were and of their existence in a particular mode].

36. Finally, with regard to my parents from whom it appears I sprung ], although all that I believed respecting them be true, it does not, nevertheless, follow that I am conserved by them, or even that I was produced by them, in so far as I am a thinking being. All that, at the most, they contributed to my origin was the giving of certain dispositions ( modifications ) to the matter in which I have hitherto judged that I or my mind, which is what alone I now consider to be myself, is inclosed; and thus there can here be no difficulty with respect to them, and it is absolutely necessary to conclude from this alone that I am, and possess the idea of a being absolutely perfect, that is, of God, that his existence is most clearly demonstrated.

37. There remains only the inquiry as to the way in which I received this idea from God; for I have not drawn it from the senses, nor is it even presented to me unexpectedly, as is usual with the ideas of sensible objects, when these are presented or appear to be presented to the external organs of the senses; it is not even a pure production or fiction of my mind, for it is not in my power to take from or add to it; and consequently there but remains the alternative that it is innate, in the same way as is the idea of myself.

38. And, in truth, it is not to be wondered at that God, at my creation, implanted this idea in me, that it might serve, as it were, for the mark of the workman impressed on his work; and it is not also necessary that the mark should be something different from the work itself; but considering only that God is my creator, it is highly probable that he in some way fashioned me after his own image and likeness, and that I perceive this likeness, in which is contained the idea of God, by the same faculty by which I apprehend myself, in other words, when I make myself the object of reflection, I not only find that I am an incomplete, imperfect] and dependent being, and one who unceasingly aspires after something better and greater than he is; but, at the same time, I am assured likewise that he upon whom I am dependent

possesses in himself all the goods after which I aspire and the ideas of which I find in my mind], and that not merely indefinitely and potentially, but infinitely and actually, and that he is thus God. And the whole force of the argument of which I have here availed myself to establish the existence of God, consists in this, that I perceive I could not possibly be of such a nature as I am, and yet have in my mind the idea of a God, if God did not in reality exist—this same God, I say, whose idea is in my mind—that is, a being who possesses all those lofty perfections, of which the mind may have some slight conception, without, however, being able fully to comprehend them, and who is wholly superior to all defect and has nothing that marks imperfection]: whence it is sufficiently manifest that he cannot be a deceiver, since it is a dictate of the natural light that all fraud and deception spring from some defect.

39. But before I examine this with more attention, and pass on to the consideration of other truths that may be evolved out of it, I think it proper to remain here for some time in the contemplation of God himself—that I may ponder at leisure his marvelous attributes—and behold, admire, and adore the beauty of this light so unspeakably great, as far, at least, as the strength of my mind, which is to some degree dazzled by the sight, will permit. For just as we learn by faith that the supreme felicity of another life consists in the contemplation of the Divine majesty alone, so even now we learn from experience that a like meditation, though incomparably less perfect, is the source of the highest satisfaction of which we are susceptible in this life.

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## *Three Quotations on Dualism*

Martin Luther in 1520: "Man has a twofold nature, a spiritual one and a bodily one. According to the spiritual nature, which men refer to as the soul, he is called a spiritual, inner, or new man. According to the bodily nature, which men refer to as flesh, he is called a carnal, outward, or old man, of whom the Apostle writes in 2 Cor. 4 [:16], 'Though our outer nature is wasting away, our inner nature is being renewed every day.' Because of this diversity of nature the Scriptures assert contradictory things concerning the same man, since these two men in the same man contradict each other, 'for the desires of the flesh are against the spirit, and the desires of the Spirit are against the flesh,' according to Gal. 5 [:17]."

Pope Innocent III (1160-1216) and disgust at human body: "impure begetting, disgusting means of nutrition in his mother's womb, baseness of matter out of which man evolves, hideous stink, secretion of saliva, urine, and filth."

St. Paul: "I am physical, sold into slavery to sin. I do not understand what I am doing, for I do not do what I want to do; I do the things that I hate ... . What a wretched man I am! Who can save me from this doomed body?"

* * *

# Daniel C. Dennett, *Where Am I?*

Now that I've won my suit under the Freedom of Information Act, I am at liberty to reveal for the first time a curious episode in my life that may be of interest not only to those engaged in research in the philosophy of mind, artificial intelligence, and neuroscience but also to the general public.

Several years ago I was approached by Pentagon officials who asked me to volunteer for a highly dangerous and secret mission. In collaboration with NASA and Howard Hughes, the Department of Defense was spending billions to develop a Supersonic Tunneling Underground Device, or STUD. It was supposed to tunnel through the Earth's core at great speed and deliver a specially designed atomic warhead "right up the Red's missile silos," as one of the Pentagon brass put it.

The problem was that in an early test they had succeeded in lodging a warhead about a mile deep under Tulsa, Oklahoma, and they wanted me to retrieve it for them. "Why me?" I asked. Well, the mission involved some pioneering applications of current brain research, and they had heard of my interest in brains and of course my Faustian curiosity and great courage and so forth ... . Well, how could I refuse? The difficulty that brought the Pentagon to my door was that the device I'd been asked to recover was fiercely radioactive, in a new way. According to monitoring instruments, something about the nature of the device and its complex interactions with pockets of material deep in the earth had produced radiation that could cause severe abnormalities in certain tissues of the brain. No way had been found to shield the brain from these deadly rays, which were apparently harmless to other tissues and organs of the body. So it had been decided that the person sent to recover the device should *leave his brain behind.* It would be kept in a safe place where it could execute its normal control functions by elaborate radio links. Would I submit to a surgical procedure that would completely remove my brain, which would then be placed in a life-support system at the Manned Spacecraft Center in Houston? Each input and output pathway, as it was severed, would be restored by a pair of micro-miniaturized radio transceivers, one attached precisely to the brain, the other to the nerve stumps in the empty cranium. No information would be lost, all the connectivity would be preserved. At first I was a bit reluctant. Would it really work? The Houston brain surgeons encouraged me. "Think of it," they said, "as a mere *stretching* of the nerves. If your brain were just moved over an inch in your skull, that would not alter or impair your mind. We're simply going to *make* the nerves indefinitely elastic by splicing radio links into them."

I was shown around the life-support lab in Houston and saw the sparkling new vat in which my brain would be placed, were I to agree. I met the large and brilliant support team of neurologists, hematologists, biophysicists, and electrical engineers, and after several days of discussions and demonstrations, I agreed to give it a try. I was subjected to an enormous array of blood tests, brain scans, experiments, interviews, and the like. They took down my autobiography at great length, recorded tedious lists of my beliefs, hopes, fears, and tastes.

They even listed my favorite stereo recordings and gave me a crash session of psychoanalysis.

The day for surgery arrived at last and of course I was anesthetized and remember nothing of the operation itself. When I came out of anesthesia, I opened my eyes, looked around, and asked the inevitable, the traditional, the lamentably hackneyed postoperative question: "Where am I?" The nurse smiled down at me. "You're in Houston," she said, and I reflected that this still had a good chance of being the truth one way or another. She handed me a mirror. Sure enough, there were the tiny antennae poling up through their titanium ports cemented into my skull.

"I gather the operation was a success," I said. "I want to go see my brain." They led me (I was a bit dizzy and unsteady) down a long corridor and into the life-support lab. A cheer went up from the assembled support team, and I responded with what I hoped was a jaunty salute. Still feeling lightheaded, I was helped over to the life-support vat. I peered through the glass. There, floating in what looked like ginger ale, was undeniably a human brain, though it was almost covered with printed circuit chips, plastic tubules, electrodes, and other paraphernalia. "Is that mine?" I asked. "Hit the output transmitter switch there on the side of the vat and see for yourself," the project director replied. I moved the switch to OFF, and immediately slumped, groggy and nauseated, into the arms of the technicians, one of whom kindly restored the switch to its ON position. While I recovered my equilibrium and composure, I thought to myself, "Well, here I am sitting on a folding chair, staring through a piece of plate glass at my own brain ... . But wait," I said to myself, "shouldn't I have thought, 'Here I am, suspended in a bubbling fluid, being stared at by my own eyes'?" I tried to think this latter thought. I tried to project it into the tank, offering it hopefully to my brain, but I failed to carry off the exercise with any conviction. I tried again. "Here am I, Daniel Dennett, suspended in a bubbling fluid, being stared at by my own eyes." No, it just didn't work. Most puzzling and confusing. Being a philosopher of firm physicalist conviction, I believed unswervingly that the tokening of my thoughts was occurring somewhere in my brain: yet, when I thought "Here I am," where the thought occurred to me was *here,* outside the vat, where I, Dennett, was standing staring at my brain.

I tried and tried to think myself into the vat, but to no avail. I tried to build up to the task by doing mental exercises. I thought to myself, "The sun is shining *over there*," five times in rapid succession, each time mentally ostending a different place: in order, the sunlit corner of the lab, the visible front lawn of the hospital, Houston, Mars, and Jupiter. I found I had little difficulty in getting my "theres" to hop all over the celestial map with their proper references. I could loft a "there" in an instant rough the farthest reaches of space, and then aim the next "there" with accuracy at the upper left quadrant of a freckle on my arm. Why such trouble with "here"? "Here in Houston" worked well so did "here in the lab," and even "here in this part of the lab," but "here in the vat" always seemed merely an unmeant mental mouthing. I tried closing my eyes while thinking it. This seemed to help, I couldn't manage to pull it off, except perhaps for a fleeting instant. I couldn't be sure. The discovery that I couldn't be sure was also unsettling. How did I know *where I* meant by "here" when I thought "here"? Could

I *think* I meant one place when in fact I meant another? I didn't see how that could be admitted without untying the few bonds of intimacy between a person and his own mental life that had survived the onslaught of the brain scientists and philosophers, the physicalists and behaviorists. Perhaps I was incorrigible about where I *meant* when I "here." But in my present circumstances it seemed that either I was doomed by sheer force of mental habit to thinking systematically false indexical thoughts, or where a person is (and hence where his thoughts are tokened for purposes of semantic analysis) is not necessarily where his brain, the physical seat of his soul, resides. Nagged by confusion, I attempted to orient myself by falling back on a favorite philosopher's ploy. I began naming things.

"Yorick," I said aloud to my brain, "you are my brain. The rest of my body, seated in this chair, I dub 'Hamlet.'" So here we all are: Yorick's my brain, Hamlet's my body, and I am Dennett. Now, where am I? And when I think "where am I?" where's that thought tokened? Is it tokened in my brain, lounging about in the vat, or right here between my ears where it *seems* to be tokened? Or nowhere? Its temporal coordinates give me no trouble; must it not have spatial coordinates as well? I began making a list of the alternatives.

*1. Where Hamlet goes, there goes Dennett.* This principle was easily refuted by appeal to the familiar brain-transplant thought experiments so enjoyed by philosophers. If Tom and Dick switch brains, Tom is the fellow with Dick's former body—just ask him; he'll claim to be Tom, and tell you the most intimate details of Tom's autobiography. It was clear enough, then, that my current body and I could part company, but not likely that I could be separated from my brain. The rule of thumb that emerged so plainly from the thought experiments was that in a brain transplant operation, one wanted to be the *donor,* not the recipient. Better to call such an operation a *body* transplant, in fact. So perhaps the truth was,

*2. Where Yorick goes, there goes Dennett.* This was not at all appealing, however. How could I be in the vat and not about to go anywhere, when I was so obviously outside the vat looking in and beginning to make guilty plans to return to my room for a substantial lunch? This begged the question I realized, but it still seemed to be getting at something important. Casting about for some support for my intuition, I hit upon a legalistic sort of argument that might have appealed to Locke.

Suppose, I argued to myself, I were now to fly to California, rob a bank, and be apprehended. In which state would I be tried: in California, where the robbery took place, or in Texas, where the brains of the outfit were located? Would I be a California felon with an out-of-state brain, or a Texas felon remotely controlling an accomplice of sorts in California? It seemed possible that I might beat such a rap just on the undecidability of that jurisdictional question, though perhaps it would be deemed an interstate, and hence Federal, offense. In any event, suppose I were convicted. Was it likely that California would be satisfied to throw Hamlet into the brig, knowing that Yorick was living the good life and luxuriously taking the waters in Texas? Would Texas incarcerate Yorick, leaving Hamlet free to take the next boat to Rio? This alternative appealed to me. Barring capital punishment or other cruel and unusual punishment, the state would be obliged to maintain the life-support system for Yorick though they might move him from Houston to Leavenworth, and aside from the

unpleasantness of the opprobrium, I, for one, would not mind at all and would consider myself a free man under those circumstances. If the state has an interest in forcibly relocating persons in institutions, it would fail to relocate me in any institution by locating Yorick there. If this were true, it suggested a third alternative.

*3. Dennett is wherever he thinks he is.* Generalized, the claim was as follows: At any given time a person has a *point of view,* and the location of the point of view (which is determined internally by the content of the point of view) is also the location of the person.

Such a proposition is not without its perplexities, but to me it seemed a step in the right direction. The only trouble was that it seemed to place one in a heads-I-win/tails-you-lose situation of unlikely infallibility as regards location. Hadn't I myself often been wrong about where I was, and at least as often uncertain? Couldn't one get lost? Of course, but getting lost *geographically* is not the only way one might get lost. If one were lost in the woods one could attempt to reassure oneself with the consolation that at least one knew where one was: one was right *here* in the familiar surroundings of one's own body. Perhaps in this case one would not have drawn one's attention to much to be thankful for. Still, there were worse plights imaginable, and I wasn't sure I wasn't in such a plight right now.

Point of view clearly had something to do with personal location, but it was itself an unclear notion. It was obvious that the content of one's point of view was not the same as or determined by the content of one's beliefs or thoughts. For example, what should we say about the point of view of the Cinerama viewer who shrieks and twists in his seat as the roller-coaster footage overcomes his psychic distancing? Has he forgotten that he is safety seated in the theater? Here I was inclined to say that the person is experiencing an illusory shift in point of view. In other cases, my inclination to call such shifts illusory was less strong. The workers in laboratories and plants who handle dangerous materials by operating feedback-controlled mechanical arms and hands undergo a shift in point of view that is crisper and more pronounced than anything Cinerama can provoke. They can feel the heft and slipperiness of the containers they manipulate with their metal fingers. They know perfectly well where they are and are not fooled into false beliefs by the experience, yet it is as if they were inside the isolation chamber they are peering into. With mental effort, they can manage to shift their point of view back and forth, rather like making a transparent Necker cube or an Escher drawing change orientation before one's eyes. It does seem extravagant to suppose that in performing this bit of mental gymnastics, they are transporting *themselves* back and forth.

Still their example gave me hope. If I was in fact in the vat in spite of my intuitions, I might be able to train myself to adopt that point of view even as a matter of habit. I should dwell on images of myself comfortably floating in my vat, beaming volitions to that familiar body *out there.* I reflected that the ease or difficulty of this task was presumably independent of the truth about the location of one's brain. Had I been practicing before the operation, I might now be finding it second nature. You might now yourself try such a *trompe l'oeil*. Imagine you have written an inflammatory letter which has been published in the *Times,* the result of which is that the government has chosen to impound your brain for a probationary period of

three years in its Dangerous Brain Clinic in Bethesda, Maryland. Your body of course is allowed freedom to earn a salary and thus to continue its function of laying up income to be taxed. At this moment, however, your body is seated in an auditorium listening to a peculiar account by Daniel Dennett of his own similar experience. Try it. Think yourself to Bethesda, and then hark back longingly to your body, far away, and yet *seeming* so near. It is only with long-distance restraint (yours? the government's?) that you can control your impulse to get those hands clapping in polite applause before navigating the old body to the rest room and a well-deserved glass of evening sherry in the lounge. The task of imagination is certainly difficult, but if you achieve your goal the results might be consoling.

Anyway, there I was in Houston, lost in thought as one might say, but not for long. My speculations were soon interrupted by the Houston doctors, who wished to test out my new prosthetic nervous system before sending me off on my hazardous mission. As I mentioned before, I was a bit dizzy at first, and not surprisingly, although I soon habituated myself to my new circumstances (which were, after all, well nigh indistinguishable from my old circumstances). My accommodation was not perfect, however, and to this day I continue to be plagued by minor coordination difficulties. The speed of light is fast, but finite, and as my brain and body move farther and farther apart, the delicate interaction of my feedback systems is thrown into disarray by the time lags. Just as one is rendered close to speechless by a delayed or echoic hearing of one's speaking voice so, for instance, I am virtually unable to track a moving object with my eyes whenever my brain and my body are more than a few miles apart. In most matters my impairment is scarcely detectable, though I can no longer hit a slow curve ball with the authority of yore. There are some compensations of course. Though liquor tastes as good as ever, and warms my gullet while corroding my liver, I can drink it in any quantity I please, without becoming the slightest bit inebriated, a curiosity some of my close friends may have noticed (though I occasionally have feigned inebriation, so as not to draw attention to my unusual circumstances). For similar reasons, I take aspirin orally for a sprained wrist, but if the pain persists I ask Houston to administer codeine to me *in vitro.* In times of illness the phone bill can be staggering.

But to return to my adventure. At length, both the doctors and I were satisfied that I was ready to undertake my subterranean mission. And so I left my brain in Houston and headed by helicopter for Tulsa. Well, in any case, that's the way it seemed to me. That's how I would put it, just off the top of my head as it were. On the trip I reflected further about my earlier anxieties and decided that my first postoperative speculations had been tinged with panic. The matter was not nearly as strange or metaphysical as I had been supposing. Where was I? In two places, clearly: both inside the vat and outside it. Just as one can stand with one foot in Connecticut and the other in Rhode Island, I was in two places at once. I had become one of those scattered individuals we used to hear so much about. The more I considered this answer, the more obviously true it appeared. But, strange to say, the more true it appeared, the less important the question to which it could be the true answer seemed, a sad, but not unprecedented, fate for a philosophical question to suffer. This answer did not completely satisfy me, of course. There lingered some question to which I should have liked an answer, which was neither "Where are all my various and sundry parts?" nor "What is my current

point of view?" Or at least there seemed to be such a question. For it did seem undeniable that in some sense I and not merely *most of me* was descending into the earth under Tulsa in search of an atomic warhead.

When I found the warhead, I was certainly glad I had left my brain behind, for the pointer on the specially built Geiger counter I had brought with me was off the dial. I called Houston on my ordinary radio and told the operation control center of my position and my progress. In return, they gave me instructions for dismantling the vehicle, based upon my on-site observations. I had set to work with my cutting torch when all of a sudden a terrible thing happened. I went stone deaf. At first I thought it was only my radio earphones that had broken, but when I tapped on my helmet, I heard nothing. Apparently the auditory transceivers had gone on the fritz. I could no longer hear Houston or my own voice, but I could speak, so I started telling them what had happened. In midsentence, I knew something else had gone wrong. My vocal apparatus had become paralyzed. Then my right hand went limp—another transceiver had gone. I was truly in deep trouble. But worse was to follow. After a few more minutes, I went blind. I cursed my luck, and then I cursed the scientists who had led me into this grave peril. There I was, deaf, dumb, and blind, in a radioactive hole more than a mile under Tulsa. Then the last of my cerebral radio links broke, and suddenly I was faced with a new and even more shocking problem: whereas an instant before I had been buried alive in Oklahoma, now I was disembodied in Houston. My recognition of my new status was not immediate. It took me several very, anxious minutes before it dawned on me that my poor body lay several hundred miles away, with heart pulsing and lungs respirating, but otherwise as dead as the body of any heart-transplant donor, its skull packed with useless, broken electronic gear. The shift in perspective I had earlier found well nigh impossible now seemed quite natural. Though I could think myself back into my body in the tunnel under Tulsa, it took some effort to sustain the illusion. For surely it was an illusion to suppose I was still in Oklahoma: I had lost all contact with that body.

It occurred to me then, with one of those rushes of revelation of which we should be suspicious, that I had stumbled upon an impressive demonstration of the immateriality of the soul based upon physicalist principles and premises. For as the last radio signal between Tulsa and Houston died away, had I not changed location from Tulsa to Houston at the speed of light? And had I not accomplished this without any increase in mass? What moved from A to B at such speed was surely myself, or at any rate my soul or mind—the massless center of my being and home of my consciousness. My *point of view* had lagged somewhat behind, but I had already noted the indirect bearing of point of view on personal location. I could not see how a physicalist philosopher could quarrel with this except by taking the dire and counterintuitive route of banishing all talk of persons. Yet the notion of personhood was so well entrenched in everyone's world view, or so it seemed to me, that any denial would be as curiously unconvincing, as systematically disingenuous, as the Cartesian negation, "non sum."

The joy of philosophic discovery thus tided me over some very bad minutes or perhaps hours as the helplessness and hopelessness of my situation became more apparent to me. Waves of panic and even nausea swept over me, made all the more horrible by the absence of their normal body-dependent phenomenology. No adrenaline rush of tingles in the arms, no pounding heart, no premonitory salivation. I did feel a dread sinking feeling in my bowels at one point, and this tricked me momentarily into the false hope that I was undergoing a reversal of the process that landed me in this fix—a gradual undisembodiment. But the isolation and uniqueness of that twinge soon convinced me that it was simply the first of a plague of phantom body hallucinations that 1, like any other amputee, would be all too likely to suffer.

My mood then was chaotic. On the one hand, I was fired up with elation of my philosophic discovery and was wracking my brain (one of the few familiar things I could still do), trying to figure out how to communicate my discovery to the journals; while on the other, I was bitter, lonely, and filled with dread and uncertainty. Fortunately, this did not last long, for my technical support team sedated me into a dreamless steep from which I awoke, hearing with magnificent fidelity the familiar opening strains of my favorite Brahms piano trio. So that was why they had wanted a list of my favorite recordings! It did not take me long to Idealize that I was hearing the music without ears. The output from the stereo stylus was being fed through some fancy rectification circuitry directly into my auditory nerve. I was mainlining Brahms, an unforgettable experience for any stereo buff. At the end of the record it did not surprise me to hear the reassuring voice of the project director speaking into a microphone that was now my prosthetic ear. He confirmed my analysis of what had gone wrong and assured me that steps were being taken to re-embody me. He did not elaborate, and after a few more recordings, I found myself drifting off to sleep. My sleep lasted, I later learned, for the better part of a year, and when I awoke, it was to find myself fully restored to my senses. When I looked into the mirror, though, I was a bit startled to see an unfamiliar face. Bearded and a bit heavier, bearing no doubt a family resemblance to my former face, and with the same look of spritely intelligence and resolute character, but definitely a new face. Further self-explorations of an intimate nature left me no doubt that this was a new body, and the project director confirmed my conclusions. He did not volunteer any information on the past history of my new body and I decided (wisely, I think in retrospect) not to pry. As many philosophers unfamiliar with my ordeal have more recently speculated, the acquisition of a new body leaves one's *person* intact. And after a period of adjustment to a new voice, new muscular strengths and weaknesses, and so forth, one's *personality* is by and large also preserved. More dramatic changes in personality have been routinely observed in people who have undergone extensive plastic surgery, to say nothing of sex-change operations, and I think no one contests the survival of the person in such cases. In any event I soon accommodated to my new body, to the point of being unable to recover any of its novelties to my consciousness or even memory. The view in the mirror soon became utterly familiar. That view, by the way, still revealed antennae, and so I was not surprised to learn that my brain had not been moved from its haven in the life-support lab.

I decided that good old Yorick deserved a visit. I and my new body, whom we might as well call Fortinbras, strode into the familiar lab to another round of applause from the technicians, who were of course congratulating themselves, not me. Once more I stood before the vat and contemplated poor Yorick, and on a whim I once again cavalierly flicked off the output transmitter switch. Imagine my surprise when nothing unusual happened. No fainting spell, no nausea, no noticeable change. A technician hurried to restore the switch to ON, but still I felt nothing. I demanded an explanation, which the project director hastened to provide. It seems that before they had even operated on the first occasion, they had constructed a computer duplicate of my brain, reproducing both the complete information-processing structure and the computational speed of my brain in a giant computer program. After the operation, but before they had dared to send me off on my mission to Oklahoma, they had run this computer system and Yorick side by side. The incoming signals from Hamlet were sent simultaneously to Yorick's transceivers and to the computer's array of inputs. And the outputs from Yorick were not only beamed back to Hamlet, my body; they were recorded and checked against the simultaneous output of the computer program, which was called "Hubert" for reasons obscure to me. Over days and even weeks, the outputs were identical and synchronous, which of course did not prove that they had succeeded in copying the brain's functional structure, but the empirical support was greatly encouraging.

Hubert's input, and hence activity, had been kept parallel with Yorick's during my disembodied days. And now, to demonstrate this, they had actually thrown the master switch that put Hubert for the first time in on-line control of my body—not Hamlet, of course, but Fortinbras. (Hamlet, I learned, had never been recovered from its underground tomb and could be assumed by this time to have largely returned to the dust. At the head of my grave still lay the magnificent bulk of the abandoned device, with the word STUD emblazoned on its side in large letters—a circumstance which may provide archeologists of the next century with a curious insight into the burial rites of their ancestors.)

The laboratory technicians now showed me the master switch, which had two positions, labeled *B*, for Brain (they didn't know my brain's name was Yorick) and H, for Hubert. The switch did indeed point to *H*, and they explained to me that if I wished, I could switch it back to *B*. With my heart in my mouth (and my brain in its vat), I did this. Nothing happened. A click, that was all. To test their claim, and with the master switch now set at *B*, I hit Yorick's output transmitter switch on the vat and sure enough, I began to faint. Once the output switch was turned back on and I had recovered my wits, so to speak, I continued to play with the master switch, flipping it back and forth. I found that with the exception of the transitional click, I could detect no trace of a difference. I could switch in mid-utterance, and the sentence I had begun speaking under the control of Yorick was finished without a pause or hitch of any kind under the control of Hubert. I had a spare brain, a prosthetic device which might some day stand me in very good stead, were some mishap to befall Yorick. Or alternatively, I could keep Yorick as a spare and use Hubert. It didn't seem to make any difference which I chose, for the wear and tear and fatigue on my body did not have any debilitating effect on either brain, whether or not it was actually causing the motions of my body, or merely spilling its output into thin air.

The one truly unsettling aspect of this new development was the prospect, which was not long in dawning on me, of someone detaching the spare Hubert or Yorick, as the case might be, from Fortinbras and hitching it to yet another body—some johnny-come-lately Rosencrantz or Guildenstern. Then (if not before) there would be *two* people, that much was clear. One would be me, and the other would be a sort of super-twin brother. If there were two bodies, one under the control of Hubert and the other being controlled by Yorick, then which would the world recognize as the true Dennett? And whatever the rest of the world decided, which one would be *me?* Would I be the Yorick-brained one, in virtue of Yorick's causal priority and former intimate relationship with the original Dennett body, Hamlet? That seemed a bit legalistic, a bit too redolent of the arbitrariness of consanguinity and legal possession, to be convincing at the metaphysical level. For suppose that before the arrival of the second body on the scene, I had been keeping Yorick as the spare for years, and letting Hubert's output drive my body—that is, Fortinbras—all that time. The Hubert-Fortinbras couple would seem then by squatter's rights (to combat one legal intuition with another) to be the true Dennett and the lawful inheritor of everything that was Dennett's. This was an interesting question, certainly, but not nearly so pressing as another question that bothered me. My strongest intuition was that in such an eventuality I would survive so long as *either* brain-body couple remained intact, but I had mixed emotions about whether I should want both to survive.

I discussed my worries with the technicians and the project director. The prospect of two Dennetts was abhorrent to me, I explained, largely for social reasons. I didn't want to be my own rival for the affections of my wife, nor did I like the prospect of the two Dennetts sharing my modest professor's salary. Still more vertiginous and distasteful, though, was the idea of knowing *that much* about another person, while he had the very same goods on me. How could we ever face each other? My colleagues in the lab argued that I was ignoring the bright side of the matter. Weren't there many things I wanted to do but, being only *one* person, had been unable to do? Now one Dennett could stay at home and be the professor and family man, while the other could strike out on a life of travel and adventure—missing the family of course, but happy in the knowledge that the other Dennett was keeping the home fires burning. I could be faithful and adulterous at the same time. I could even cuckold myself—to say nothing of other more lurid possibilities my colleagues were all too ready to force upon my overtaxed imagination. But my ordeal in Oklahoma (or was it Houston?) had made me less adventurous, and I shrank from this opportunity that was being offered (though of course I was never quite sure it was being offered to *me* in the first place).

There was another prospect even more disagreeable: that the spare, Hubert or Yorick as the case might be, would be detached from any input from Fortinbras and just left detached. Then, as in the other case, there would be two Dennetts, or at least two claimants to my name and possessions, one embodied in Fortinbras, and the other sadly, miserably disembodied. Both selfishness and altruism bade me take steps to prevent this from happening. So I asked that measures be taken to ensure that no one could ever tamper with the transceiver Connections or the master switch without my (our? no, my) knowledge and consent. Since I had no desire to spend my life guarding the equipment in Houston, it was mutually decided

that all the electronic connections in the lab would be carefully locked. Both those that controlled the life-support system for Yorick and those that controlled the power supply for Hubert would be guarded with fail-safe devices, and I would take the only master switch, outfitted for radio remote control, with me wherever I went. I carry it strapped around my waist and—wait a moment—*here it is.* Every few months I reconnoiter the situation by switching channels. I do this only in the presence of friends, *of course,* for if the other channel were, heaven forbid, either dead or otherwise occupied, there would have to be somebody who had my interests at heart to switch it back, to bring me back from the void. For while I could feel, see, hear, and otherwise sense whatever befell my body, subsequent to such a switch, I'd be unable to control it. By the way, the two positions on the switch are intentionally unmarked, so I never have the faintest idea whether I am switching from Hubert to Yorick or vice versa. (Some of you may think that in this case I really don't know *who* I am, let alone where I am. But such reflections no longer make much of a dent on my essential Dennettness, on my own sense of who I *am.* If it is true that in one sense I don't know who I am then that's another one of your philosophical truths of underwhelming significance.)

In any case, every time I've flipped the switch so far, nothing has happened. *So let's give it a try*....

"THANK GOD! I THOUGHT YOU'D NEVER FLIP THAT SWITCH! You can't imagine how horrible it's been these last two weeks—but now you know; it's your turn in purgatory. How I've longed for this moment! You see, about two weeks ago-excuse me, ladies and gentlemen, but I've got to explain this to my ... um, brother, I guess you could say, but he's just told you the facts, so you'll understand—about two weeks ago our two brains drifted just a bit out of synch. I don't know whether my brain is now Hubert or Yorick, any more than you do, but in any case, the two brains drifted apart, and of course once the process started, it snowballed, for I was in a slightly different receptive state for the input we both received, a difference that was soon magnified. In no time at all the illusion that I was in control of my body—our body—was completely dissipated. There was nothing I could do—no way to call you. YOU DIDN'T EVEN KNOW I EXISTED! It's been like being carried around in a cage, or better, like being possessed—hearing my own voice say things I didn't mean to say, watching in frustration as my own hands performed deeds I hadn't intended. You'd scratch our itches, but not the way I would have, and you kept me awake, with your tossing and turning. I've been totally exhausted, on the verge of a nervous breakdown, carried around helplessly by your frantic round of activities, sustained only by the knowledge that some day you'd throw the switch.

"Now it's your turn, but at least you'll have the comfort of knowing I know you're in there. Like an expectant mother, I'm eating—or at any rate tasting, smelling, seeing—for *two* now, and I'll try to make it easy for you. Don't worry. just as soon as this colloquium is over, you and I will fly to Houston, and we'll see what can be done to get one of us another body. You can have a female body—your body could be any color you like. But let's think it over. I tell you what—to be fair, if we both want this body, I promise I'll let the project director flip a

coin to settle which of us gets to keep it and which then gets to choose a new body. That should guarantee justice, shouldn't it? In any case, I'll take care of you, I promise. These people are my witnesses.

"Ladies and gentlemen, this talk we have just heard is not exactly the talk I would have given, but I assure you that everything he said was perfectly true. And now if you'll excuse me, I think I'd—we'd —better sit down."

[From *Brainstorms: Philosophical Essays on Mind and Psychology*, Bradford Books, 1978.]

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# Martin Luther King, Jr., *What Is Your Life's Blueprint?*

*Six months before he was assassinated, King spoke to a group of students at Barratt Junior High School in Philadelphia on October 26, 1967.*

I want to ask you a question, and that is: What is your life's blueprint?

Whenever a building is constructed, you usually have an architect who draws a blueprint, and that blueprint serves as the pattern, as the guide, and a building is not well erected without a good, solid blueprint.

Now each of you is in the process of building the structure of your lives, and the question is whether you have a proper, a solid and a sound blueprint.

I want to suggest some of the things that should begin your life's blueprint. Number one in your life's blueprint, should be a deep belief in your own dignity, your worth and your own somebodiness. Don't allow anybody to make you feel that you're nobody. Always feel that you count. Always feel that you have worth, and always feel that your life has ultimate significance.

Secondly, in your life's blueprint you must have as the basic principle the determination to achieve excellence in your various fields of endeavor. You're going to be deciding as the days, as the years unfold what you will do in life—what your life's work will be. Set out to do it well.

And I say to you, my young friends, doors are opening to you—doors of opportunities that were not open to your mothers and your fathers—and the great challenge facing you is to be ready to face these doors as they open.

Ralph Waldo Emerson, the great essayist, said in a lecture in 1871, "If a man can write a better book or preach a better sermon or make a better mousetrap than his neighbor, even if he builds his house in the woods, the world will make a beaten path to his door."

This hasn't always been true—but it will become increasingly true, and so I would urge you to study hard, to burn the midnight oil; I would say to you, don't drop out of school. I

understand all the sociological reasons, but I urge you that in spite of your economic plight, in spite of the situation that you're forced to live in—stay in school.

And when you discover what you will be in your life, set out to do it as if God Almighty called you at this particular moment in history to do it. Don't just set out to do a good job. Set out to do such a good job that the living, the dead or the unborn couldn't do it any better.

If it falls your lot to be a street sweeper, sweep streets like Michelangelo painted pictures, sweep streets like Beethoven composed music, sweep streets like Leontyne Price sings before the Metropolitan Opera. Sweep streets like Shakespeare wrote poetry. Sweep streets so well that all the hosts of heaven and earth will have to pause and say: Here lived a great street sweeper who swept his job well. If you can't be a pine at the top of the hill, be a shrub in the valley. Be the best little shrub on the side of the hill.

Be a bush if you can't be a tree. If you can't be a highway, just be a trail. If you can't be a sun, be a star. For it isn't by size that you win or fail. Be the best of whatever you are.

[Source: the Estate of Dr. Martin Luther King, Jr.]

* * *

## Henry David Thoreau, *What I Lived For*

[Excerpt from *Walden*]

I went to the woods because I wished to live deliberately, to front only the essential facts of life and see if I could not learn what it had to teach, and not, when I came to die, discover that I had not lived. I did not wish to live what was not life, living is so dear; nor did I wish to practise resignation, unless it was quite necessary. I wanted to live deep and suck out all the marrow of life.

* * *

## *Advice*

[Falsely ascribed as Kurt Vonnegut's 1997 commencement address at MIT.]

Ladies and gentlemen of the class of '97:

Wear sunscreen. If I could offer you only one tip for the future, sunscreen would be it. The long-term benefits of sunscreen have been proved by scientists, whereas the rest of my advice has no basis more reliable than my own meandering experience. I will dispense this advice now.

Enjoy the power and beauty of your youth. Oh, never mind. You will not understand the power and beauty of your youth until they've faded. But trust me, in 20 years, you'll look

back at photos of yourself and recall in a way you can't grasp now how much possibility lay before you and how fabulous you really looked.

You are not as fat as you imagine.

Don't worry about the future. Or worry, but know that worrying is as effective as trying to solve an algebra equation by chewing bubble gum. The real troubles in your life are apt to be things that never crossed your worried mind, the kind that blindside you at 4 pm on some idle Tuesday.

Do one thing every day that scares you.

Sing.

Don't be reckless with other people's hearts. Don't put up with people who are reckless with yours.

Floss.

Don't waste your time on jealousy.

Sometimes you're ahead, sometimes you're behind. The race is long and, in the end, it's only with yourself.

Remember compliments you receive. Forget the insults. If you succeed in doing this, tell me how.

Keep your old love letters. Throw away your old bank statements.

Stretch.

Don't feel guilty if you don't know what you want to do with your life. The most interesting people I know didn't know at 22 what they wanted to do with their lives. Some of the most interesting 40-year-olds I know still don't.

Get plenty of calcium.

Be kind to your knees. You'll miss them when they're gone.

Maybe you'll marry, maybe you won't. Maybe you'll have children, maybe you won't. Maybe you'll divorce at 40; maybe you'll dance the funky chicken on your 75th wedding anniversary. Whatever you do, don't congratulate yourself too much, or berate yourself either.

Your choices are half chance. So are everybody else's.

Enjoy your body. Use it every way you can. Don't be afraid of it or of what other people think of it. It's the greatest instrument you'll ever own.

Dance, even if you have nowhere to do it but your living room.

Read the directions, even if you don't follow them.

Do not read beauty magazines. They will only make you feel ugly.

Get to know your parents. You never know when they'll be gone for good.

Be nice to your siblings. They're your best link to your past and the people most likely to stick with you in the future.

Understand that friends come and go, but with a precious few you should hold on. Work hard to bridge the gaps in geography and lifestyle, because the older you get, the more you need the people who knew you when you were young.

Live in New York City once, but leave before it makes you hard.

Live in Northern California once, but leave before it makes you soft.

Travel.

Accept certain inalienable truths: Prices will rise. Politicians will philander. You, too, will get old. And when you do, you'll fantasize that when you were young, prices were reasonable, politicians were noble, and children respected their elders.

Respect your elders.

Don't expect anyone else to support you. Maybe you have a trust fund. Maybe you'll have a wealthy spouse. But you never know when either one might run out.

Don't mess too much with your hair or by the time you're 40 it will look 85.

Be careful whose advice you buy, but be patient with those who supply it. Advice is a form of nostalgia. Dispensing it is a way of fishing the past from the disposal, wiping it off, painting over the ugly parts and recycling it for more than it's worth.

But trust me on the sunscreen.

* * *

## John Steinbeck, *Undelivered address to Emory University, 1956*

Well, you are perfectly right. You are going out into the world and it is a frightened, neurotic, gibbering mess. Yes, my young friends, you are going to take your bright and shining faces into a jungle, but a jungle where all the animals are insane.

You haven't the strength for vice. That takes energy and all the energy of this time is needed for fear. That takes energy, too. And what energy is left over is needed for running down the rabbit holes of hatred to avoid thought. The rich hate the poor and taxes. The young hate the draft. The Democrats hate the Republicans, and everybody hates the Russians. Children are shooting their parents and parents are drowning their children when they think they can get away with it. No one can plan one day ahead because all certainties are gone.

If you work very hard and are lucky and have a good tax man, then when you are 50, if your heart permits, you and your sagging wife can make a tired and bored but first-class trip to Europe to stare at the works of dead people who were not afraid. But you won't see it. You'll be too anxious to get home to your worrying.

* * *

## Shakespeare, *Macbeth* (excerpt)

Tomorrow and tomorrow and tomorrow
Creeps this petty pace from day to day,
To the last syllable of recorded time,
And all our yesterdays have lighted fools
The way to dusty death. Out, out, brief candle;
Life's but a walking shadow; a poor player
That struts and frets his hour upon the stage
And then is heard no more: it is a tale
Told by an idiot; full of sound and fury,
Signifying nothing.

* * *

# Psalm 103:15-16

As for man, his days are as grass: as a flower of the field, so he flourisheth.

For the wind passeth over its, and it is gone; and the place thereof shall know it no more.

* * *

## Andrew Marvell, *To His Coy Mistress*

Had we but world enough, and time,
This coyness, lady, were no crime,
We would sit down and think which way
To walk, and pass our long love's day.
Thou by the Indian Ganges' side
Shouldst rubies find: I by the tide
Of Humber would complain. I would
Love you ten years before the Flood,
And you should, if you please, refuse
Till the conversion of the Jews;
My vegetable love should grow
Vaster than empires and more slow;
An hundred years should go to praise

Thine eyes, and on thy forehead gaze;
Two hundred to adore each breast,
But thirty thousand to the rest;
An age at least to every part,
And the last age should show your heart.
For, lady, you deserve this state,
Nor would I love at lower rate.

But at my back I always hear
Time's winged chariot hurrying near,
And yonder all before us lie
Deserts of vast eternity.
Thy beauty shall no more be found
Nor, in thy marble vault, shall sound
My echoing song; then worms shall try
That long-preserved virginity,
And your quaint honor turn to dust,
And into ashes all my lust:
The grave's a fine and private place,
But none, I think, do there embrace.

Now, therefore, while the youthful hue
Sits on thy skin like morning dew,
And while thy willing soul transpires
At every pore with instant fires,
Now let us sport us while we may,
And now, like amorous birds of prey,
Rather at once our time devour,
Than languish in his slow-chapped power.
Let us roll all our strength and all
Our sweetness up into one ball,
And tear our pleasure with rough strife
Thorough the iron gates of life;
Thus, though we cannot make our sun
Stand still, yet we will make him run.

* * *

## Rupert Brooke, *The Great Lover*

I have been so great a lover: filled my days
So proudly with the splendour of Love's praise,
The pain, the calm, and the astonishment,

Desire illimitable, and still content,
And all dear names men use, to cheat despair,
For the perplexed and viewless streams that bear
Our hearts at random down the dark of life.
Now, ere the unthinking silence on that strife
Steals down, I would cheat drowsy Death so far,
My night shall be remembered for a star
That outshone all the suns of all men's days.
Shall I not crown them with immortal praise
Whom I have loved, who have given me, dared with me
High secrets, and in darkness knelt to see
The inenarrable godhead of delight?
Love is a flame; –we have beaconed the world's night.
A city: –and we have built it, these and I.
An emperor. –we have taught the world to die.
*So,* for their sakes I loved, ere I go hence,
And the high cause of Love's magnificence,
And to keep loyalties young, I'll write those names
Golden for ever, eagles, crying flames,
And set them as a banner, that men may know,
To dare the generations, burn, and blow
Out on the wind of Time, shining and streaming....

These I have loved:
White plates and cups, clean-gleaming,
Ringed with blue lines; and feathery, faery dust;
Wet roofs, beneath the lamp-light; the strong crust
Of friendly bread; and many-tasting food;
Rainbows; and the blue bitter smoke of wood;
And radiant raindrops couching in cool flowers;
And flowers themselves, that sway through sunny hours,
Dreaming of moths that drink them under the moon;
Then, the cool kindliness of sheets, that soon
Smooth away trouble; and the rough male kiss
Of blankets; grainy wood; live hair that is
Shining and free; blue-massing clouds; the keen
Unpassioned beauty of a great machine;
The benison of hot water; furs to touch;
The good smell of old clothes; and other such
The comfortable smell of friendly fingers,
Hair's fragrance, and the musty reek that lingers
About dead leaves and last year's ferns. . . . Dear names

And thousand others throng to me!  Royal flames;
Sweet water's dimpling laugh from tap or spring;
Holes in the ground; and voices that do sing:
Voices in laughter, too; and body's pain,
Soon turned to peace; and the deep-panting train;
Firm sands; the little dulling edge of foam
That browns and dwindles as the wave goes home;
And washen stones, gay for an hour; the cold
Graveness of iron; moist black earthen mould;
Sleep; and high places; footprints in the dew;
And oaks; and brown horse-chestnuts, glossy-new;
And new-peeled sticks; and shining pools on grass;-
All these have been my loves.  And these shall pass.
Whatever passes not, in the great hour,
Nor all my passion, all my prayers, have power
To hold them with me through the gate of Death.
They'll play deserter, turn with traitor breath,
Break the high bond we made, and sell Love's trust
And sacramented covenant to the dust.

–Oh, never a doubt but, somewhere, I shall wake,
And give what's left of love again, and make
New friends, now strangers.... But the best I've known,
Stays here, and changes, breaks, grows old, is blown
About the winds of the world, and fades from brains
Of living men, and dies.  Nothing remains.

O dear my loves, O faithless, once again
This one last gift I give: that after men
Shall know, and later lovers, far-removed
Praise you, 'All these were lovely'; say, 'He loved.'

* * *

# Stephen R. C. Hicks, *Would Immortality Be Worth It?*

Gather ye rosebuds while ye may,
Old Time is still a-flying,
And this same flower that smiles to-day
To-morrow will be dying.

Upon realizing the fact of their mortality, people typically respond in one of two completely opposite ways. One common response, exhibited by Robert Herrick, the 17th-century poet of "Gather ye rosebuds" fame, is, *I'm going to die sometime, so I'd better get a move on!* But equally often the response is, *If I'm going to die, what's the use of doing anything?*

These are two very different attitudes toward the very same fact: mortality. And when the very same fact can give rise to such widely divergent reactions, philosophers become interested.

On the former view, the *Gather ye rosebuds* view, life has value despite the fact of death; the realization of impending death is simply a spur to get going on the things that make life worthwhile. We each have a deadline, a limited amount of time to squeeze in as much of the good life as we can—so gather ye rosebuds *now*. Don't wait around, for neither you nor the rosebuds will be here forever. This is also the view paraphrased in the words of a bumper sticker on the car of a woman I know: "So many men, so little time." Or in the academic's version: "So many books, so little time!" The point can be taken universally: we can each change the words to suit our preferences.

The idea here is that mortality means you have to get things done. Your awareness of death is seen, in part, as a negative motivation not to waste time, to get going on the good stuff. You don't want to reach 70 years of age and say "What if I had ..."—and realize that you hadn't because you were too worried or lazy or had just gotten into a groove and let things drift. This is not to say that you suddenly embrace life because you suddenly find death something to fear; it is not a horror at the nothingness of death that, contrary to what some like Unamuno have argued, gives life meaning. The claim is that what the awareness of death does is heighten your appreciation of the value of the limited time you have available. Life is too valuable to sit around and just watch it slip by.

But for the other view, the *What's the use?* view, the same fact of impending death is taken to wipe out any sense that a meaningful life is possible. On this view, the implicit premise is that only immortality could make life worthwhile. Mortality simply makes life meaninglessness. We are all going to die, so what's the value of anything? Consider the seven-year cicadas. They start their lives as eggs laid underground, where they stay buried and unhatched for seven years. During the spring of the seventh year they come out of the ground and go up into the trees for a brief but frenzied bout of reproduction, lay the next generation of eggs, and then die. The next generation of laid eggs stays unhatched and buried

underground for seven years, and the cycle is repeated. Is this what we call meaningful life? If you were a philosopher for cicadas, you'd say, "What's the use?" And we humans are no different, on this view, except that our mortal lives are extended for a few more decades. Even those of us who do accomplish a lot die, and all our creations, however magnificent, eventually crumble. So, the argument runs, everything is meaningless.

> Tomorrow and tomorrow and tomorrow
> Creeps this petty pace from day to day,
> To the last syllable of recorded time,
> And all our yesterdays have lighted fools
> The way to dusty death. Out, out, brief candle;
> Life's but a walking shadow; a poor player
> That struts and frets his hour upon the stage
> And then is heard no more: it is a tale
> Told by an idiot; full of sound and fury,
> Signifying nothing.

Those are Shakespeare's words, if not necessarily his sentiments. Others echo those sentiments: "All we are is dust in the wind," the musical group Kansas pointed out in the late 1970s. Life is transient, so life has no meaning. But then, if life has no meaning, we're just a step away from affirming with Camus that the question of suicide is the only important philosophical question. What difference should it make if you die now or twenty or forty years from now? Either way you end up dead forever. If only the transience of life were eliminated! If only the possibility of death were eliminated!

The *Gather ye rosebuds* advocates hear all this, and ask in a puzzled tone of voice, What on earth are you folks talking about? The world is a beautiful place, life is intrinsically wonderful—so don't just throw it away. Make as much of it as you can, you only go around once, life is too precious to miss a single minute of. The fact that we're mortal is not as important as the fact that we're alive now. Of course, immortality could be great—not because it would make life worth living, but rather because it would give us more time to do more or get more or enjoy more of those things that do make life worth living.

So we have here a fundamental opposition expressed in completely opposite reactions to a single fact. And this raises our question: *Would* immortality change anything, as say those who say mortality makes life meaningless? And would it be worth it? Is the amount of time one has to live one's life the fundamental question to ask when asking what makes (or would make) life worth living?

* * *

My plan is to set up a thought experiment. The scenario is quite simple. Suppose you were immortal, but limited to continued existence as a human being, on earth. Would it be worth it?

How do we answer this question? In preparing this essay I started, as is normal in philosophy, by doing some field research. I posed this scenario to people and asked them

what they thought. As it happened, most of those I asked were young men and women of college age, and invariably instead of an answer I got a worried question in return: At what age would I have to live this immortal life? Would I have to have the body of a 110-year-old, or could I have that of a 25-year-old athlete? Could I keep my present body and age? Or—horror of horrors—would I start off young and then slowly, ever so slowly, wither away as the centuries ticked by without ever quite withering away into nothingness?

If this is a concern, I responded, for the purposes of this thought experiment suppose that you would retain your faculties and potencies, that you wouldn't deteriorate appreciably either physically or mentally, that you could live forever in your prime, at whatever age you considered your prime to be.

That sounded pretty good to them, but then another question came up: Would you have to eat? I answered this question, Yes. It would be a *conditional* immortality, conditional upon you continuing to fulfill all the normal requirements for human life, including eating, sleeping, keeping warm, and so on.

Another question followed that one: Would the cows and the chickens and the other animal and plant species be immortal too, and thus not be able to die? Because if so, you wouldn't be able to eat anything and our supposed immortality would end rather quickly. To nip this one in the bud, I replied: For the purposes of this thought experiment, suppose that only humans would be immortal.

But—the questions continued—what if we immortal human beings continued to reproduce and produced still more immortal beings and the world became overpopulated? Response: Suppose we found some way to solve this potential problem, by settling other planets, by birth control, or whatever. Our focus, I explained, is on what makes life worth living and whether immortality has anything to do with it, so let us set aside these sorts of considerations.

However, there is one consideration I wish to raise regarding some sort of unconditional immortality. I have this worry: If humans were unconditionally immortal, i.e., if humans were beings who could not die no matter what, would they even be the same sort of being? I ask this with the following in mind. If the alternative of life or death does not face a being in any way whatsoever, can that creature have *values*—can it judge things as good or bad, positive or negative? Think of it this way: Would such an unconditionally immortal being be any different than an indestructible robot? If it literally cannot die, then nothing can harm it, so nothing could be bad to it; and conversely, if it exists unconditionally there is nothing that it has to do, nothing it has to achieve, so nothing could be good to it. So for such an unconditionally immortal creature, there would be no limits, no framework for a value system to get started.[1] And with no value system the question of whether life is good or bad, worth it or not worth it, valuable or not, becomes meaningless. The creature just exists, period. I think values are possible only if one faces, in some form, a life and death alternative; so if one is unconditionally immortal, then no values would be possible.

So all I wish to do in this thought-experiment is lift the limits of our biological clocks. Suppose that we can be immortal, provided we choose to continue to live and to do the things that continued human existence requires, like getting enough food and rest. But if we choose at any point not to live any longer, we can put an end to ourselves. Everything about human life is exactly the same, except that there is no set amount of time one has available to live. Let's call this "conditional immortality."

* * *

Imagine one is now immortal. Isn't it great?

This has not always been thought to be obvious.

Let us consider Potential Problem Number One. I will indicate it to you by means of a quotation from John Steinbeck, a man who has thought a lot about things and come to some definite conclusions. What follows is an excerpt from a commencement address, written to be delivered to young people just graduating from college and about to go out into the real world. Steinbeck is accordingly trying to impart to those young people the most valuable advice he can muster. Here is what he wrote:

You are going out into the world and it is a frightened, neurotic, gibbering mess. Yes, my young friends, you are going to take your bright and shining faces into a jungle, but a jungle where all the animals are insane.

You haven't the strength for vice. That takes energy and all the energy of this time is needed for fear. That takes energy, too. And what energy is left over is needed for running down the rabbit holes of hatred to avoid thought. The rich hate the poor and taxes. The young hate the draft. The Democrats hate the Republicans, and everybody hates the Russians. Children are shooting their parents and parents are drowning their children when they think they can get away with it. No one can plan one day ahead because all certainties are gone.

If you work very hard and are lucky and have a good tax man, then when you are 50, if your heart permits, you and your sagging wife can make a tired and bored but first-class trip to Europe to stare at the works of dead people who were not afraid. But you won't see it. You'll be too anxious to get home to your worrying.

This, I think, is a good example of what philosophy can do to you if you don't get it right.

Berthold Brecht wrote, "The man who laughs is the one who has not heard the terrible news." What is the terrible news? The same news Steinbeck wanted to tell the college students. Fundamentally, the world is hell. We live in a nasty universe. Human beings are incompetents, misfits, neurotics. And we are all, quite rightly, damned scared. So you might as well face up to it, accept your lot, insulate yourself as best you can from life's messes, and hope you die a relatively painless death.

Now suppose we asked Steinbeck and Brecht whether immortality would be worth it. Their response would no doubt be: Are you kidding us? We don't see why *any* amount of life is worth living, let alone an infinite amount of it. Life is pain, depression, and horror.

This certainly poses a problem for the immortal life. How could one tolerate a neurotic mess forever? Wouldn't 70 years or so be quite enough?

What are we to think of this? If we do not agree, then how should we respond to such extreme pessimism? This is a question I raise now only as a teaser, for I would like to set it aside temporarily in order to pursue our main objective, which is to find out exactly what value immortality would add to life, *supposing that it is possible to value life*. So let us suppose we are not in this pessimistic tradition, for such pessimism negates the very question that is the focus of this essay. Suppose (if you don't already believe it) that such Steinbeckian pessimism is some sort of philosophical illness and that you do find or can at least conceive of some positive value to life on earth. The question is, Could this positive value in life, whatever it is, be extended over eternity?

Potential Problem Number Two: What would you do with all that time? Mark Twain's "Extracts from Captain Stormfield's Visit to Heaven" satirically characterizes Heaven as a place of eternal boredom: folks just hang around and play harps. Is this what immortality means? Is it all standing on clouds, wearing a halo and playing a harp? Captain Stormfield gave it his best shot for a while—after all, that's what you're supposed to do in Heaven. After about sixteen increasingly boring hours he questioned a neighbor who had been doing the same thing: "Now tell me—is this to go on forever? Ain't there anything else for a change?" Immortality is here conceived of as a static state: you don't do anything, or if you do, it's within a very limited range of activities. So after a while there are no new experiences and you start to get bored. An eternity of boredom, I think it is safe to say, would not be worth it.

Now, whether one is immortal in Heaven or on earth, the same potential problem of boredom arises and thus the same question: How does one prevent boredom from making immortality worthless?

But this is an important clue. Two facts—the fact that boredom lessens or negates the value of life and the fact that boredom can result from doing nothing or from doing some limited number of things over and over again—together imply that life is worth living only if there are new things to do. Only if there is a possibility for growth, a potential for discovering new experiences or for enriching current experiences, does life remain valuable. The moment one stops growing, a wise man once said, is the moment one starts dying. Stagnation for an organism means, at best, boredom; at worst, death. *Life is essentially growth*. Another way of putting this point is to say that life is essentially value achievement: setting goals, planning a course of action, executing the plan, overcoming obstacles—hopefully enjoying the process all the while—and then achieving the goal and savoring the beauty or usefulness or pleasurableness of the result. The values to be achieved certainly needn't be limited to any one range of items: they can include increasing your knowledge, enriching your friendships, experiencing art, developing your career, and so on.

Supposing this is so, the question then for our immortal life is: Is there in principle a finite limit to this, a cap on how much you can grow, a limit to the number of new experiences it is possible to have? Yes. The universe is huge, but, say physics and philosophy, it is finite. There's only so much of it, and this is the problem. If there's only so much of it, then there's

only so much you can do, and then what do you do when you've done it all—after you've taught physiology for 16,000 years, and after you've won Wimbledon for the 750th time, and after you've gained and lost 1200 fortunes on Wall Street, and after you've composed every possible piece of music for a piano with 88 keys, and then done the same for the harpsichord? We're talking about billions of years here—a big leap from the usual 75-year life-span we think in terms of—but after you've done absolutely everything, and had a great time doing it, there are no more goals. And if there are no more goals, what motivates you to do anything? Nothing. And if you do nothing, what's left except to be bored?

This problem of the limits to growth and the ensuing boredom can be tailored a bit. If there is a limit to growth and new experiences, then there is certainly a limit to *positive* growth and experiences. For after you have done everything fine and good (you've been a deep-sea diver, a poet, a professor of 19th century Romantic literature, an Austrian pastry chef, a space explorer), then to avoid boredom you would be driven to start working on the bad and evil. Perhaps you would set out to be a peeping-Tom; and then when that began to become boring, maybe you could try your hand as a confidence trickster in Rio de Janeiro; and when that began to pale, you could give the police and citizens a hard time as a serial killer in Montreal; and then when that lost its edge, just for kicks you might move on to a stint as a bullwhip specialist in a New Orleans brothel. We are left with the specter of the immortal life leading us to exhaust the positive possibilities that make life worth living and then forcing us to seek out the evil, the nasty, and the unpleasant in order to avoid boredom. This is an unsavory outcome: life remains worth living only at the cost of embracing evil and destruction.

But even then, once all the possibilities for new experiences of evil have been exhausted, after you've become the consummate criminal and immoralist in every possible way, the identical problem of boredom once again looms large.

Setting aside the problem of resorting to new experiences—any new experiences, including evil ones— what happens when you reach the limit, however many billions of years it takes? There are no new experiences, there are no new challenges, and no growth is possible. There is nothing to do that you haven't done a hundred or a thousand times before, and so boredom sets in. This, I think, would be a state worse than death: death at least is a neutral, a nothing, a zero—while boredom is a negative: boredom is *painful*. This is also a boredom you can't do anything about, as compared with the garden-variety boredoms we encounter nowadays, most of which are our own fault or under our control to change. This is Boredom with a capital **B**. So at this point, the point of supreme, irreversible boredom, death would become preferable to life. Your immortality becomes a burden and one aspect of the Myth of Sisyphus becomes true: you would have absolutely no motivation to roll the boulder up the hill one more time.

Supposing you reached this point, I think you would want the capacity to opt out. At the moment of realization of impending, eternal boredom, at the moment you realize that you have done everything, literally everything, you would want the power to end your life.

Unless there is some way to avoid the boredom.

One possibility is this. On any theory of the nature of the mind, there is at the very least held to be an intimate connection between mind and brain. In some form or other, our memories, our knowledge, our characteristic emotions and thought patterns—in short, everything that makes each of us a unique individual personality—are dependent upon the physical brain. The brain, however, is a finite physical organ. However much it can retain, it can only retain so much. I have no idea how much that is, but I would venture a guess that it is much less than what it would take to know and retain absolutely everything that can be known and experienced. And that means that before you could reach the end of the new experiences and challenges you could try, you would reach the point at which, in order to store and retain the new experiences you would have to forget some of the old ones. Think for a moment of the brain as a huge hard disk drive. Once it is filled up, the only way to store new information on it is to write over the old information, which means that the old information is lost.

This could be our saving grace with regard to boredom, for it opens up the following possibility: after you've done everything and are looking for something interesting to do, there will be things that you have already done but forgotten having done them. And since you've forgotten having done them, you can therefore approach and do them again with all the zest and freshness of the first time. So even if you already spent, as a young pup back in your early millions, twenty-two thousand years learning everything there is to know about volcanoes, you've forgotten all about it; so now volcanoes can be incredibly interesting again.

Could the built-in limits to our brain capacity prevent an immortal life from becoming boring?

But another potential problem arises. What if at some point along the line you discovered that this forgetting was happening? Perhaps during your three million year stint as a neurophysiologist you found out exactly what the limits of the human brain are, and you found out that you have lived longer and experienced more than your brain could possibly have retained. This would mean that you must have forgotten things, that some major portions of your life are no longer accessible to you. *This* opens up a potential worry: whatever it is you are doing right now and perhaps enjoying seemingly for the first time, maybe you've already done it a thousand times before but forgotten all about it. This, I think, would start to take the edge off the pleasure of whatever it is you are doing right now. There's a parallel here to how one reacts to the thought of Nietzsche's concept of the Eternal Recurrence:[2] If the cycle of world history repeats itself over and over again in the exact same pattern, forever—if, for example, you have read this essay a jillion times before, only you don't remember the other times, and you will read it a jillion times again in the future, and then a jillion times again, and so on without end—coming to know that this is going on would, I think, detract from whatever enjoyment you are getting out of this particular portion of the cycle. The new experience isn't genuinely new, you come to realize; it only seems new because you've forgotten all the other times.

If you discovered that this necessary forgetting was happening, how much would it detract? I don't know. But it is a counter-problem for the solution to the boredom problem. And probably once you discovered that you were forgetting major portions of your past life, for fear of repeating yourself you would start devising other ways to store the information about your past life—other than in your brain, that is; in a computer or a diary, or whatever—and before embarking upon a new career in quasar physics at age 13 trillion you would check your computer or diary to see whether you had done it before. If you found that you had and that you had spent 211 thousand years at it, would you want to do it again? What if you couldn't find a single thing to do other than the things that you had forgotten having done but had done nevertheless? Eventually you would reach this point, the same abyss of eternal boredom would confront you again, and you would have a choice: to do again things you know you've done already but forgotten, or to decide that the only new experience worth having is a genuinely new experience and not just one that you happen to have forgotten about—and that therefore you would rather stop right there.

That choice is a long way away in the future, and it is not obvious which choice is preferable, or even whether the same choice would be preferable to every conditionally immortal person. However, for our purposes the situation that gives rise to this choice serves to sharpen up our initial question about the value of the immortal life. What if, in the context of the boredom problem, we now asked those who feel that only immortality would make life worth living: What exactly would make the immortal life worth living? What exactly does the mortal life lack that you think makes it meaningless? The answer would have to be along the lines of pointing out that if you were immortal you could continue to grow and learn and enjoy the manifold activities life has to offer; that such growth is what makes life valuable is the lesson boredom teaches us. But this is not a satisfactory answer, for it is the same one given by those who think life has value even with without immortality. Why then is the fact that humans are mortal a problem, if in any case it is growth that makes life worth living and growth is possible whether one is mortal or not? Because, the answer comes back, mortality means that at some point the growth has to stop. One eventually dies, so one cannot grow forever, and so why even start? Only, in other words, a capacity for infinite growth would make any growth worthwhile.

But this sort of response is also problematic. The trouble is that one cannot grow forever, even if one is immortal. That is also what considering the problem of boredom teaches us. We are finite, reality is finite, and that's a fact. So immortal or mortal, there is always going to be a finite limit to growth. Thus, what makes life valuable cannot be cashed out in terms of an infinite capacity for growth. And if this is the case, then it cannot be that having an infinite amount of time available, i.e., an immortal life, is what makes life worth living. An infinite amount of time would only give you more time to do more of those things that make life worth living in the first place. But that is to say that life *is* worth living in the first place, that life has value independently of the amount of time available to live.

For actually mortal creatures, then, the point has to be to recognize that the amount of time available to each of us is necessarily limited, to accept the fact that that's the way the life is,

and not to let that fact interfere with our enjoyment of the positive values life has to offer. The moral has to be, in other words, not to be trapped and paralyzed in the attitude of the young boy in Thomas Hardy's *Jude the Obscure* who explains to his bewildered parents the reasons for his crippled sense of life with these words, "I am very, very sorry, father and mother. But please don't mind!—I can't help it. I should like the flowers very very much, if I didn't keep on thinking they'd all be withered in a few days." Whether your life is to be 75 years long, or 200 years, or several millennia, the principle is still the same: time considerations are at the very least of secondary import if not irrelevant to the value of life.

This is where we must pick up once again the challenge of Steinbeckian pessimism. Why should we think life worth it at all, the pessimist retorts, if life is essentially futile suffering and defeat? Immortality and boredom are not the real problems of life; futility and pain are. This has been a dominating theme for the past century in the works of the great pessimists—Hardy, Camus, Dostoevsky in some moods, Chekhov.

Is life useless suffering and defeat? This is, perhaps, the point at which, as with all fundamental philosophical starting points, one either agrees or not—and nothing more can be said. If you think life is better than death but your interlocutor can't see the point, what can you say to convince him? You can always point to *x*, *y*, and *z* (nature, friends, lovers, family, advances in technology, puzzle-solving, art, exploration), but if this leaves him fundamentally indifferent and unconvinced, what more can be said? There is no value outside of life that makes it good, and if the values you see within life are not also seen as worthwhile by your pessimist, then no argumentative recourse is left. The only thing possible is to affirm the fundamental values you find that living involves and go your separate ways when he claims, as all pessimists ultimately do, that he finds "value" to be an empty concept. You can then only forge your own values and seek them out.

I do think, with Herrick, that each of us mortals should get out there and gather as many rosebuds as we may, that any amount of life is preferable to none at all, that human life is the most precious thing in the world. But it is because what makes life precious is that it allows for growth, for development and change, for constantly having new worlds to seek—it is for this reason that I do not think immortality would be worth it. Barring some satisfactory solution to the problem of boredom, immortality would have to become a burden. And then, after having had enough time to do everything worthwhile and knowing that you've done it, having the capacity to bow out would be essential. But until you do bow out, under whatever circumstances that happens, gather ye rosebuds!

The next question is, of course, Which rosebuds? It is here that ethical philosophy gets down to business.

Let me close with the final lines from Andrew Marvell's "To His Coy Mistress," which I think speak directly to our theme.

Now let us sport us while we may,
And now, like amorous birds of prey,
Rather at once our time devour,

Than languish in his slow-chapped power.
Let us roll all our strength and all
Our sweetness up into one ball,
And tear our pleasure with rough strife
Through the iron gates of life;
Thus, though we cannot make our sun
Stand still, yet we will make him run.

That, I think, is the ideal. So to give my answer to the question of the essay, Would Immortality Be Worth It?—I would say No, but a billion years would be great.

*References*

1. Rand, Ayn. 1964. *The Virtue of Selfishness* (New York: Signet), p. 16.

2. Nietzsche, Friedrich. 1974 [1882]. *The Gay Science*. Translated by Walter Kaufmann (New York: Vintage), section 341.

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# Bertrand Russell, *The Value of Philosophy*

[Chapter 15 of *The Problems of Philosophy*]

Having now come to the end of our brief and very incomplete review of the problems of philosophy, it will be well to consider, in conclusion, what is the value of philosophy and why it ought to be studied. It is the more necessary to consider this question, in view of the fact that many men, under the influence of science or of practical affairs, are inclined to doubt whether philosophy is anything better than innocent but useless trifling, hair-splitting distinctions, and controversies on matters concerning which knowledge is impossible.

This view of philosophy appears to result, partly from a wrong conception of the ends of life, partly from a wrong conception of the kind of goods which philosophy strives to achieve. Physical science, through the medium of inventions, is useful to innumerable people who are wholly ignorant of it; thus the study of physical science is to be recommended, not only, or primarily, because of the effect on the student, but rather because of the effect on mankind in general. This utility does not belong to philosophy. If the study of philosophy has any value at all for others than students of philosophy, it must be only indirectly, through its effects upon the lives of those who study it. It is in these effects, therefore, if anywhere, that the value of philosophy must be primarily sought.

But further, if we are not to fail in our endeavour to determine the value of philosophy, we must first free our minds from the prejudices of what are wrongly called 'practical' men. The 'practical' man, as this word is often used, is one who recognizes only material needs, who

realizes that men must have food for the body, but is oblivious of the necessity of providing food for the mind. If all men were well off, if poverty and disease had been reduced to their lowest possible point, there would still remain much to be done to produce a valuable society; and even in the existing world the goods of the mind are at least as important as the goods of the body. It is exclusively among the goods of the mind that the value of philosophy is to be found; and only those who are not indifferent to these goods can be persuaded that the study of philosophy is not a waste of time.

Philosophy, like all other studies, aims primarily at knowledge. The knowledge it aims at is the kind of knowledge which gives unity and system to the body of the sciences, and the kind which results from a critical examination of the grounds of our convictions, prejudices, and beliefs. But it cannot be maintained that philosophy has had any very great measure of success in its attempts to provide definite answers to its questions. If you ask a mathematician, a mineralogist, a historian, or any other man of learning, what definite body of truths has been ascertained by his science, his answer will last as long as you are willing to listen. But if you put the same question to a philosopher, he will, if he is candid, have to confess that his study has not achieved positive results such as have been achieved by other sciences. It is true that this is partly accounted for by the fact that, as soon as definite knowledge concerning any subject becomes possible, this subject ceases to be called philosophy, and becomes a separate science. The whole study of the heavens, which now belongs to astronomy, was once included in philosophy; Newton's great work was called 'the mathematical principles of natural philosophy'. Similarly, the study of the human mind, which was a part of philosophy, has now been separated from philosophy and has become the science of psychology. Thus, to a great extent, the uncertainty of philosophy is more apparent than real: those questions which are already capable of definite answers are placed in the sciences, while those only to which, at present, no definite answer can be given, remain to form the residue which is called philosophy.

This is, however, only a part of the truth concerning the uncertainty of philosophy. There are many questions—and among them those that are of the profoundest interest to our spiritual life—which, so far as we can see, must remain insoluble to the human intellect unless its powers become of quite a different order from what they are now. Has the universe any unity of plan or purpose, or is it a fortuitous concourse of atoms? Is consciousness a permanent part of the universe, giving hope of indefinite growth in wisdom, or is it a transitory accident on a small planet on which life must ultimately become impossible? Are good and evil of importance to the universe or only to man? Such questions are asked by philosophy, and variously answered by various philosophers. But it would seem that, whether answers be otherwise discoverable or not, the answers suggested by philosophy are none of them demonstrably true. Yet, however slight may be the hope of discovering an answer, it is part of the business of philosophy to continue the consideration of such questions, to make us aware of their importance, to examine all the approaches to them, and to keep alive that speculative interest in the universe which is apt to be killed by confining ourselves to definitely ascertainable knowledge.

Many philosophers, it is true, have held that philosophy could establish the truth of certain answers to such fundamental questions. They have supposed that what is of most importance in religious beliefs could be proved by strict demonstration to be true. In order to judge of such attempts, it is necessary to take a survey of human knowledge, and to form an opinion as to its methods and its limitations. On such a subject it would be unwise to pronounce dogmatically; but if the investigations of our previous chapters have not led us astray, we shall be compelled to renounce the hope of finding philosophical proofs of religious beliefs. We cannot, therefore, include as part of the value of philosophy any definite set of answers to such questions. Hence, once more, the value of philosophy must not depend upon any supposed body of definitely ascertainable knowledge to be acquired by those who study it.

The value of philosophy is, in fact, to be sought largely in its very uncertainty. The man who has no tincture of philosophy goes through life imprisoned in the prejudices derived from common sense, from the habitual beliefs of his age or his nation, and from convictions which have grown up in his mind without the co-operation or consent of his deliberate reason. To such a man the world tends to become definite, finite, obvious; common objects rouse no questions, and unfamiliar possibilities are contemptuously rejected. As soon as we begin to philosophize, on the contrary, we find, as we saw in our opening chapters, that even the most everyday things lead to problems to which only very incomplete answers can be given. Philosophy, though unable to tell us with certainty what is the true answer to the doubts which it raises, is able to suggest many possibilities which enlarge our thoughts and free them from the tyranny of custom. Thus, while diminishing our feeling of certainty as to what things are, it greatly increases our knowledge as to what they may be; it removes the somewhat arrogant dogmatism of those who have never travelled into the region of liberating doubt, and it keeps alive our sense of wonder by showing familiar things in an unfamiliar aspect.

Apart from its utility in showing unsuspected possibilities, philosophy has a value—perhaps its chief value—through the greatness of the objects which it contemplates, and the freedom from narrow and personal aims resulting from this contemplation. The life of the instinctive man is shut up within the circle of his private interests: family and friends may be included, but the outer world is not regarded except as it may help or hinder what comes within the circle of instinctive wishes. In such a life there is something feverish and confined, in comparison with which the philosophic life is calm and free. The private world of instinctive interests is a small one, set in the midst of a great and powerful world which must, sooner or later, lay our private world in ruins. Unless we can so enlarge our interests as to include the whole outer world, we remain like a garrison in a beleagured fortress, knowing that the enemy prevents escape and that ultimate surrender is inevitable. In such a life there is no peace, but a constant strife between the insistence of desire and the powerlessness of will. In one way or another, if our life is to be great and free, we must escape this prison and this strife.

One way of escape is by philosophic contemplation. Philosophic contemplation does not, in its widest survey, divide the universe into two hostile camps—friends and foes, helpful and hostile, good and bad—it views the whole impartially. Philosophic contemplation, when it is unalloyed, does not aim at proving that the rest of the universe is akin to man. All acquisition of knowledge is an enlargement of the Self, but this enlargement is best attained when it is not directly sought. It is obtained when the desire for knowledge is alone operative, by a study which does not wish in advance that its objects should have this or that character, but adapts the Self to the characters which it finds in its objects. This enlargement of Self is not obtained when, taking the Self as it is, we try to show that the world is so similar to this Self that knowledge of it is possible without any admission of what seems alien. The desire to prove this is a form of self-assertion and, like all self-assertion, it is an obstacle to the growth of Self which it desires, and of which the Self knows that it is capable. Self-assertion, in philosophic speculation as elsewhere, views the world as a means to its own ends; thus it makes the world of less account than Self, and the Self sets bounds to the greatness of its goods. In contemplation, on the contrary, we start from the not-Self, and through its greatness the boundaries of Self are enlarged; through the infinity of the universe the mind which contemplates it achieves some share in infinity.

For this reason greatness of soul is not fostered by those philosophies which assimilate the universe to Man. Knowledge is a form of union of Self and not-Self; like all union, it is impaired by dominion, and therefore by any attempt to force the universe into conformity with what we find in ourselves. There is a widespread philosophical tendency towards the view which tells us that Man is the measure of all things, that truth is man-made, that space and time and the world of universals are properties of the mind, and that, if there be anything not created by the mind, it is unknowable and of no account for us. This view, if our previous discussions were correct, is untrue; but in addition to being untrue, it has the effect of robbing philosophic contemplation of all that gives it value, since it fetters contemplation to Self. What it calls knowledge is not a union with the not-Self, but a set of prejudices, habits, and desires, making an impenetrable veil between us and the world beyond. The man who finds pleasure in such a theory of knowledge is like the man who never leaves the domestic circle for fear his word might not be law.

The true philosophic contemplation, on the contrary, finds its satisfaction in every enlargement of the not-Self, in everything that magnifies the objects contemplated, and thereby the subject contemplating. Everything, in contemplation, that is personal or private, everything that depends upon habit, self-interest, or desire, distorts the object, and hence impairs the union which the intellect seeks. By thus making a barrier between subject and object, such personal and private things become a prison to the intellect. The free intellect will see as God might see, without a here and now, without hopes and fears, without the trammels of customary beliefs and traditional prejudices, calmly, dispassionately, in the sole and exclusive desire of knowledge—knowledge as impersonal, as purely contemplative, as it is possible for man to attain. Hence also the free intellect will value more the abstract and universal knowledge into which the accidents of private history do not enter, than the knowledge brought by the senses, and dependent, as such knowledge must be, upon an

exclusive and personal point of view and a body whose sense-organs distort as much as they reveal.

The mind which has become accustomed to the freedom and impartiality of philosophic contemplation will preserve something of the same freedom and impartiality in the world of action and emotion. It will view its purposes and desires as parts of the whole, with the absence of insistence that results from seeing them as infinitesimal fragments in a world of which all the rest is unaffected by any one man's deeds. The impartiality which, in contemplation, is the unalloyed desire for truth, is the very same quality of mind which, in action, is justice, and in emotion is that universal love which can be given to all, and not only to those who are judged useful or admirable. Thus contemplation enlarges not only the objects of our thoughts, but also the objects of our actions and our affections: it makes us citizens of the universe, not only of one walled city at war with all the rest. In this citizenship of the universe consists man's true freedom, and his liberation from the thraldom of narrow hopes and fears.

Thus, to sum up our discussion of the value of philosophy; Philosophy is to be studied, not for the sake of any definite answers to its questions since no definite answers can, as a rule, be known to be true, but rather for the sake of the questions themselves; because these questions enlarge our conception of what is possible, enrich our intellectual imagination and diminish the dogmatic assurance which closes the mind against speculation; but above all because, through the greatness of the universe which philosophy contemplates, the mind also is rendered great, and becomes capable of that union with the universe which constitutes its highest good.

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# Ayn Rand, *Philosophy: Who Needs It?*

*Address to the Graduating Class of the United States Military Academy at West Point, New York–March 6, 1974*

Since I am a fiction writer, let us start with a short story. Suppose that you are an astronaut whose spaceship gets out of control and crashes on an unknown planet. When you regain consciousness and find that you are not hurt badly, the first three questions in or mind would be: Where am I? How can I discover it? What should I do?

You see unfamiliar vegetation outside, and there is air to breathe; the sunlight seems paler than you remember it and colder. You turn to look at the sky, but stop. You are struck by a sudden feeling: it you don't look, you won't have to know that you are, perhaps, too far from the earth and no return is possible; so long as you don't know it, you are free to believe what you wish—and you experience a foggy, pleasant, but somehow guilty, kind of hope.

You turn to your instruments: they may be damaged, you don't know how seriously. But you stop, struck by a sudden fear: how can you trust these instruments? How can you be sure

that they won't mislead you? How can you know whether they will work in a different world? You turn away from the instruments.

Now you begin to wonder why you have no desire to do anything. It seems so much safer just to wait for something to turn up somehow; it is better, you tell yourself, not to rock the spaceship. Far in the distance, you see some sort of living creatures approaching; you don't know whether they are human, but they walk on two feet. They, you decide, will tell you what to do.

You are never heard from again.

This is fantasy, you say? You would not act like that and no astronaut ever would? Perhaps not. But this is the way most men live their lives, here, on earth.

Most men spend their days struggling to evade three questions, the answers to which underlie man's every thought, feeling and action, whether he is consciously aware of it or not: Where am I? How do I know it? What should I do?

By the time they are old enough to understand these questions, men believe that they know the answers. Where am I? Say, in New York City. How do I know it? It's self-evident. What should I do? Here, they are not too sure—but the usual answer is: whatever everybody does. The only trouble seems to be that they are not very active, not very confident, not very happy—and they experience, at times, a causeless fear and an undefined guilt, which they cannot explain or get rid of.

They have never discovered the fact that the trouble comes from the three unanswered questions—and that there is only one science that can answer them: philosophy.

Philosophy studies the fundamental nature of existence, of man, and of man's relationship to existence. As against the special sciences, which deal only with particular aspects, philosophy deals with those aspects of the universe which pertain to everything that exists. In the realm of cognition, the special sciences are the trees, but philosophy is the soil which makes the forest possible.

Philosophy would not tell you, for instance, whether you are in New York City or in Zanzibar (though it would give you the means to find out). But here is what it would tell you: Are you in a universe which is ruled by natural laws and, therefore, is stable, firm, absolute—and knowable? Or are you in an incomprehensible chaos, a realm of inexplicable miracles, an unpredictable, unknowable flux, which your mind is impotent to grasp? Are the things you see around you real—or are they only an illusion? Do they exist independent of any observer—or are they created by the observer? Are they the object or the subject of man's consciousness? Are they what they are—or can they be changed by a mere act of your consciousness, such as a wish?

The nature of your actions-and of your ambition—will be different, according to which set of answers you come to accept. These answers are the province of metaphysics—the study of existence as such or, in Aristotle's words, of "being qua being"—the basic branch of philosophy.

No matter what conclusions you reach, you will be confronted by the necessity to answer another, corollary question: How do I know it? Since man is not omniscient or infallible, you have to discover what you can claim as knowledge and how to prove the validity of your conclusions. Does man acquire knowledge by a process of reason—or by sudden revelation from a supernatural power? Is reason a faculty that identifies and integrates the material provided by man's senses—or is it fed by innate ideas, implanted in man's mind before he was born? Is reason competent to perceive reality—or does man possess some other cognitive faculty which is superior to reason? Can man achieve certainty—or is he doomed to perpetual doubt?

The extent of your self-confidence—and of your success—will be different, according to which set of answers you accept. These answers are the province of epistemology, the theory of knowledge, which studies man's means of cognition.

These two branches are the theoretical foundation of philosophy. The third branch—ethics—may be regarded as its technology. Ethics does not apply to everything that exists, only to man, but it applies to every aspect of man's life: his character, his actions, his values, his relationship to all of existence. Ethics, or morality, defines a code of values to guide man's choices and actions—the choices and actions that determine the course of his life.

Just as the astronaut in my story did not know what he should do, because he refused to know where he was and how to discover it, so you cannot know what you should do until you know the nature of the universe you deal with, the nature of your means of cognition—and your own nature. Before you come to ethics, you must answer the questions posed by metaphysics and epistemology: Is man a rational being, able to deal with reality—or is he a helplessly blind misfit, a chip buffeted by the universal flux? Are achievement and enjoyment possible to man on earth—or is he doomed to failure and distaste? Depending on the answers, you can proceed to consider the questions posed by ethics: What is good or evil for man—and why? Should man's primary concern be a quest for joy—or an escape from suffering? Should man hold self-fulfillment—or self-destruction—as the goal of his life? Should man pursue his values—or should he place the interests of others above his own? Should man seek happiness—or self-sacrifice?

I do not have to point out the different consequences of these two sets of answers. You can see them everywhere—within you and around you.

The answers given by ethics determine how man should treat other men, and this determines the fourth branch of philosophy: politics, which defines the principles of a proper social system. As an example of philosophy's function, political philosophy will not tell you how mush rationed gas you should be given and on which day of the week—it will tell you whether the government has the right to impose any rationing on anything.

The fifth and last branch of philosophy is esthetics, the study of art, which is based on metaphysics, epistemology and ethics. Art deals with the needs—the refueling—of man's consciousness.

Now some of you might say, as many people do: "Aw, I never think in such abstract terms—I want to deal with concrete, particular, real-life problems—what do I need philosophy for?" My answer is: In order to be able to deal with concrete, particular, real-life problems—i.e., in order to be able to live on earth.

You might claim-as most people do—that you have never been influenced by philosophy. I will ask you to check that claim. Have you ever thought or said the following? "Don't be so sure—nobody can be certain of anything." You got that notion from David Hume (and many, many others), even though you might never have heard of him. Or: "This may be good in theory, but it doesn't work in practice." You got that from Plato. Or: "That was a rotten thing to do, but it's only human, nobody is perfect in this world." You got that from Augustine. Or: "It may be true for you, but it's not true for me." You got it from William James. Or: "I couldn't help it! Nobody can help anything he does." You got it from Hegel. Or: "I can't prove it, but I feel that it's true." You got it from Kant. Or: "It's logical, but logic has nothing to do with reality." You got it from Kant. Or: "It's evil, because it's selfish." You got it from Kant. Have you heard the modern activists say: "Act first, think afterward"? They got it from John Dewey.

Some people might answer: "Sure, I've said those things at different times, but I don't have to believe that stuff all of the time. It may have been true yesterday, but it's not true today." They got it from Hegel. They might say: "Consistency is the hobgoblin of little minds." They got it from a very little mind, Emerson. They might say: "But can't one compromise and borrow different ideas from different philosophies according to the expediency of the moment?" They got it from Richard Nixon—who got it from William James.

Now ask yourself: if you are not interested in abstract ideas, why do you (and all men) feel compelled to use them? The fact is that abstract ideas are conceptual integrations which subsume an incalculable number of concretes—and that without abstract ideas you would not be able to deal with concrete, particular, real-life problems. You would be in the position of a newborn infant, to whom every object is a unique, unprecedented phenomenon. The difference between his mental state and yours lies in the number of conceptual integrations your mind has performed.

You have no choice about the necessity to integrate your observations, your experiences, your knowledge into abstract ideas, i.e., into principles. Your only choice is whether these principles are true or false, whether they represent your conscious, rational conviction—or a grab-bag of notions snatched at random, whose sources, validity, context and consequences you do not know, notions which, more often than not, you would drop like a hot potato if you knew.

But the principles you accept (consciously or subconsciously) may clash with or contradict one another; they, too, have to be integrated. What integrates them? Philosophy. A philosophic system is an integrated view of existence. As a human being, you have no choice about the fact that you need a philosophy. Your only choice is whether you define your philosophy by a conscious, rational, disciplined process of thought and scrupulously logical deliberation—or let your subconscious accumulate a junk heap of unwarranted conclusions,

false generalizations, undefined contradictions, undigested slogans, unidentified whishes, doubts and fears, thrown together by chance, but integrated by your subconscious into a kind of mongrel philosophy and fused into a single, solid weight: self-doubt, like a ball and chain in the place where your mind's wings should have grown.

You might say, as many people do, that it is not easy always to act on abstract principles. No, it is not easy. But how much harder is it, to have to act on them without knowing what they are?

Your subconscious is like a computer—more complex a computer than men can build—and its main function is the integration of your ideas. Who programs it? Your conscious mind. If you default, if you don't reach any firm convictions, your subconscious is programmed by chance—and you deliver yourself into the power of ideas you do not know you have accepted. But one way or the other, your computer gives you print-outs, daily and hourly, in the form of emotions—which are lightning-like estimates of the things around you, calculated according to your values. If you programmed your computer by conscious thinking, you know the nature of your values and emotions. If you didn't, you don't.

Many people, particularly today, claim that man cannot live by logic alone, that there's the emotional element of his nature to consider, and that they rely on the guidance of their emotions. Well, so did the astronaut in my story. The joke is on him—and on them: man's values and emotions are determined by his fundamental view of life. The ultimate programmer of his subconscious is philosophy—the science which, according to the emotionalists, is impotent to affect or penetrate the murky mysteries of their feelings.

The quality of a computer's output is determined by the quality of its input. If your subconscious is programmed by chance, its output will have a corresponding character. You have probably heard the computer operators' eloquent term "gigo"—which means: "Garbage in, garbage out." The same formula applies to the relationship between a man's thinking and his emotions.

A man who is run by emotions is like a man who is run by a computer whose print-outs he cannot read. He does not know whether its programming is true or false, right or wrong, whether it's set to lead him to success or destruction, whether it serves his goals or those of some evil, unknowable power. He is blind on two fronts: blind to the world around him and to his own inner world, unable to grasp reality or his own motives, and he is in chronic terror of both. Emotions are not tools of cognition. The men who are not interested in philosophy need it most urgently: they are most helplessly in its power.

The men who are not interested in philosophy absorb its principles from the cultural atmosphere around them—from schools, colleges, books, magazines, newspapers, movies, television, etc. Who sets the tone of a culture? A small handful of men: the philosophers. Others follow their lead, either by conviction or by default. For some two hundred years, under the influence of Immanuel Kant, the dominant trend of philosophy has been directed to a single goal: the destruction of man's mind, of his confidence in the power of reason. Today, we are seeing the climax of that trend.

When men abandon reason, they find not only that their emotions cannot guide them, but that they can experience no emotions save one: terror. The spread of drug addiction among young people brought up on today's intellectual fashions, demonstrates the unbearable inner state of men who are deprived of their means of cognition and who seek escape from reality—from the terror of their impotence to deal with existence. Observe these young people's dread of independence and their frantic desire to "belong," to attach themselves to some group, clique or gang. Most of them have never heard of philosophy, but they sense that they need some fundamental answers to questions they dare not ask—and they hope that the tribe will tell them how to live. They are ready to be taken over by any witch doctor, guru, or dictator. One of the most dangerous things a man can do is to surrender his moral autonomy to others: like the astronaut in my story, he does not know whether they are human, even though they walk on two feet.

Now you may ask: If philosophy can be that evil, why should one study it? Particularly, why should one study the philosophical theories which are blatantly false, make no sense, and bear no relation to real life?

My answer is: In self-protection—and in defense of truth, justice, freedom, and any value you ever held or may ever hold.

Not all philosophies are evil, though too many of them are, particularly in modern history. On the other hand, at the root of every civilized achievement, such as science, technology, progress, freedom—at the root of every value we enjoy today, including the birth of this country—you will find the achievement of one man, who lived over two thousand years ago: Aristotle.

If you feel nothing but boredom when reading the virtually unintelligible theories of some philosophers, you have my deepest sympathy. But if you brush them aside, saying: "Why should I study that stuff when I know it's nonsense?"—you are mistaken. It is nonsense, but you don't know it—not so long as you go on accepting all their conclusions, all the vicious catch phrases generated by those philosophers. And not so long as you are unable to refute them.

That nonsense deals with the most crucial, the life-or-death issues of man's existence. At the root of every significant philosophic theory, there is a legitimate issue—in the sense that there is an authentic need of man's consciousness, which some theories struggle to clarify and others struggle to obfuscate, to corrupt, to prevent man from ever discovering. The battle of philosophers is a battle for man's mind. If you do not understand their theories, you are vulnerable to the worst among them.

The best way to study philosophy is to approach it as one approaches a detective story: follow every trail, clue and implication, in order to discover who is a murderer and who is a hero. The criterion of detection is two questions: Why? and How? If a given tenet seems to be true—why? If another tenet seems to be false—why? and how is it being put over? You will not find all the answers immediately, but you will acquire an invaluable characteristic: the ability to think in terms of essentials.

Nothing is given to man automatically, neither knowledge, nor self-confidence, nor inner serenity, nor the right way to use his mind. Every value he needs or wants has to be discovered, learned and acquired—even the proper posture of his body. In this context, I want to say that I have always admired the posture of West Point graduates, a posture that projects man in proud, disciplined control of his body. Well, philosophical training gives man the proper intellectual posture—a proud, disciplined control of his mind.

In your own profession, in military science, you know the importance of keeping track of the enemy's weapons, strategy and tactics—and of being prepared to counter them. The same is true in philosophy: you have to understand the enemy's ideas and be prepared to refute them, you have to know his basic arguments and be able to blast them.

In physical warfare, you would not send your men into a booby trap: you would make every effort to discover its location. Well, Kant's system is the biggest and most intricate booby trap in the history of philosophy—but it's so full of holes that once you grasp its gimmick, you can defuse it without any trouble and walk forward over it in perfect safety. And, once it is defused, the lesser Kantians—the lower ranks of his army, the philosophical sergeants, buck privates, and mercenaries of today—will fall of their own weightlessness, by chain reaction.

There is a special reason why you, the future leaders of the United States Army, need to be philosophically armed today. You are the target of a special attack by the Kantian-Hegelian-collectivist establishment that dominates our cultural institutions at present. You are the army of the last semi-free country left on earth, yet you are accused of being a tool of imperialism—and "imperialism" is the name given to the foreign policy of this country, which has never engaged in military conquest and has never profited from the two world wars, which she did not initiate, but entered and won. (It was, incidentally, a foolishly overgenerous policy, which made this country waste her wealth on helping both her allies and her former enemies.) Something called "the military-industrial complex"—which is a myth or worse—is being blamed for all of this country's troubles. Bloody college hoodlums scream demands that R.O.T.C. units be banned from college campuses. Our defense budget is being attacked, denounced and undercut by people who claim that financial priority should be given to ecological rose gardens and to classes in esthetic self-expression for the residents of the slums.

Some of you may be bewildered by this campaign and may be wondering, in good faith, what errors you committed to bring it about. If so, it is urgently important for you to understand the nature of the enemy. You are attacked, not for any errors or flaws, but for your virtues. You are denounced, not for any weaknesses, but for your strength and your competence. You are penalized for being the protectors of the United States. On a lower level of the same issue, a similar kind of campaign is conducted against the police force. Those who seek to destroy this country, seek to disarm it—intellectually and physically. But it is not a mere political issue; politics is not the cause, but the last consequence of philosophical ideas. It is not a communist conspiracy, though some communists may be involved—as maggots cashing in on a disaster they had no power to originate. The motive of the

destroyers is not love for communism, but hatred for America. Why hatred? Because America is the living refutation of a Kantian universe.

Today's mawkish concern with and compassion for the feeble, the flawed, the suffering, the guilty, is a cover for the profoundly Kantian hatred of the innocent, the strong, the able, the successful, the virtuous, the confident, the happy. A philosophy out to destroy man's mind is necessarily a philosophy of hatred for man, for man's life, and for every human value. Hatred of the good for being the good, is the hallmark of the twentieth century. This is the enemy you are facing.

A battle of this kind requires special weapons. It has to be fought with a full understanding of your cause, a full confidence in yourself, and the fullest certainty of the moral rightness of both. Only philosophy can provide you with these weapons.

The assignment I gave myself for tonight is not to sell you on my philosophy, but on philosophy as such. I have, however, been speaking implicitly of my philosophy in every sentence—since none of us and no statement can escape from philosophical premises. What is my selfish interest in the matter? I am confident enough to think that if you accept the importance of philosophy and the task of examining it critically, it is my philosophy that you will come to accept. Formally, I call it Objectivism, but informally I call it a philosophy for living on earth. You will find an explicit presentation of it in my books, particularly in *Atlas Shrugged*.

In conclusion, allow me to speak in personal terms. This evening means a great deal to me. I feel deeply honored by the opportunity to address you. I can say—not as a patriotic bromide, but with full knowledge of the necessary metaphysical, epistemological, ethical, political and esthetic roots—that the United States of America is the greatest, the noblest and, in its original founding principles, the only moral country in the history of the world. There is a kind of quiet radiance associated in my mind with the name West Point—because you have preserved the spirit of those original founding principles and you are their symbol. There were contradictions and omissions in those principles, and there may be in yours—but I am speaking of the essentials. There may be individuals in your history who did not live up to your highest standards—as there are in every institution—since no institutions and no social system can guarantee the automatic perfection of all its members; this depends on an individual's free will. I am speaking of your standards. You have preserved three qualities of character which were typical at the time of America's birth, but are virtually nonexistent today: earnestness—dedication—a sense of honor. Honor is self-esteem made visible in action.

You have chosen to risk your lives for the defense of this country. I will not insult you by saying that you are dedicated to selfless service—it is not a virtue in my morality. In my morality, the defense of one's country means that a man is personally unwilling to live as the conquered slave of any enemy, foreign or domestic. This is an enormous virtue. Some of you may not be consciously aware of it. I want to help you to realize it.

The army of a free country has a great responsibility: the right to use force, but not as an instrument of compulsion and brute conquest—as the armies of other countries have done in their histories—only as an instrument of a free nation's self-defense, which means: the defense of a man's individual rights. The principle of using force only in retaliation against those who initiate its use, is the principle of subordinating might to right. The highest integrity and sense of honor are required for such a task. No other army in the world has achieved it. You have.

West Point has given America a long line of heroes, known and unknown. You, this year's graduates, have a glorious tradition to carry on—which I admire profoundly, not because it is a tradition, but because it is glorious.

Since I came from a country guilty of the worst tyranny on earth, I am particularly able to appreciate the meaning, the greatness and the supreme value of that which you are defending. So, in my own name and in the name of many people who think as I do, I want to say, to all the men of West Point, past, present and future: Thank you.

[Source: http://gos.sbc.edu/r/rand.html]

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# John Locke, *A Letter Concerning Toleration* (1689)

Honoured Sir,

Since you are pleased to inquire what are my thoughts about the mutual toleration of Christians in their different professions of religion, I must needs answer you freely that I esteem that toleration to be the chief characteristic mark of the true Church. For whatsoever some people boast of the antiquity of places and names, or of the pomp of their outward worship; others, of the reformation of their discipline; all, of the orthodoxy of their faith–for everyone is orthodox to himself –these things, and all others of this nature, are much rather marks of men striving for power and empire over one another than of the Church of Christ. Let anyone have never so true a claim to all these things, yet if he be destitute of charity, meekness, and good-will in general towards all mankind, even to those that are not Christians, he is certainly yet short of being a true Christian himself. "The kings of the Gentiles exercise leadership over them," said our Saviour to his disciples, "but ye shall not be so."[1] The business of true religion is quite another thing. It is not instituted in order to the erecting of an external pomp, nor to the obtaining of ecclesiastical dominion, nor to the exercising of compulsive force, but to the regulating of men's lives, according to the rules of virtue and piety. Whosoever will list himself under the banner of Christ, must, in the first place and above all things, make war upon his own lusts and vices. It is in vain for any man to unsurp the name of Christian, without holiness of life, purity of manners, benignity and meekness of spirit. "Let everyone that nameth the name of Christ, depart from iniquity."[2] "Thou, when thou art converted, strengthen thy brethren," said our Lord to Peter.[3] It would, indeed, be very hard for one that appears careless about his own salvation to

persuade me that he were extremely concerned for mine. For it is impossible that those should sincerely and heartily apply themselves to make other people Christians, who have not really embraced the Christian religion in their own hearts. If the Gospel and the apostles may be credited, no man can be a Christian without charity and without that faith which works, not by force, but by love. Now, I appeal to the consciences of those that persecute, torment, destroy, and kill other men upon pretence of religion, whether they do it out of friendship and kindness towards them or no? And I shall then indeed, and not until then, believe they do so, when I shall see those fiery zealots correcting, in the same manner, their friends and familiar acquaintance for the manifest sins they commit against the precepts of the Gospel; when I shall see them persecute with fire and sword the members of their own communion that are tainted with enormous vices and without amendment are in danger of eternal perdition; and when I shall see them thus express their love and desire of the salvation of their souls by the infliction of torments and exercise of all manner of cruelties. For if it be out of a principle of charity, as they pretend, and love to men's souls that they deprive them of their estates, maim them with corporal punishments, starve and torment them in noisome prisons, and in the end even take away their lives–I say, if all this be done merely to make men Christians and procure their salvation, why then do they suffer whoredom, fraud, malice, and such-like enormities, which (according to the apostle)[4] manifestly relish of heathenish corruption, to predominate so much and abound amongst their flocks and people? These, and such-like things, are certainly more contrary to the glory of God, to the purity of the Church, and to the salvation of souls, than any conscientious dissent from ecclesiastical decisions, or separation from public worship, whilst accompanied with innocence of life. Why, then, does this burning zeal for God, for the Church, and for the salvation of souls—burning I say, literally, with fire and faggot—pass by those moral vices and wickednesses, without any chastisement, which are acknowledged by all men to be diametrically opposite to the profession of Christianity, and bend all its nerves either to the introducing of ceremonies, or to the establishment of opinions, which for the most part are about nice and intricate matters, that exceed the capacity of ordinary understandings? … .

Now, though the divisions that are amongst sects should be allowed to be never so obstructive of the salvation of souls; yet, nevertheless, adultery, fornication, uncleanliness, lasciviousness, idolatry, and such-like things, cannot be denied to be works of the flesh, concerning which the apostle has expressly declared that "they who do them shall not inherit the kingdom of God."[5] Whosoever, therefore, is sincerely solicitous about the kingdom of God and thinks it his duty to endeavour the enlargement of it amongst men, ought to apply himself with no less care and industry to the rooting out of these immoralities than to the extirpation of sects. But if anyone do otherwise, and whilst he is cruel and implacable towards those that differ from him in opinion, he be indulgent to such iniquities and immoralities as are unbecoming the name of a Christian, let such a one talk never so much of the Church, he plainly demonstrates by his actions that it is another kingdom he aims at and not the advancement of the kingdom of God.

That any man should think fit to cause another man—whose salvation he heartily desires—to expire in torments, and that even in an unconverted state, would, I confess, seem very strange to me, and I think, to any other also. But nobody, surely, will ever believe that such a carriage can proceed from charity, love, or goodwill. … .

I esteem it above all things necessary to distinguish exactly the business of civil government from that of religion and to settle the just bounds that lie between the one and the other. If this be not done, there can be no end put to the controversies that will be always arising between those that have, or at least pretend to have, on the one side, a concernment for the interest of men's souls, and, on the other side, a care of the commonwealth.

The commonwealth seems to me to be a society of men constituted only for the procuring, preserving, and advancing their own civil interests.

Civil interests I call life, liberty, health, and indolency of body; and the possession of outward things, such as money, lands, houses, furniture, and the like.

It is the duty of the civil magistrate, by the impartial execution of equal laws, to secure unto all the people in general and to every one of his subjects in particular the just possession of these things belonging to this life. If anyone presume to violate the laws of public justice and equity, established for the preservation of those things, his presumption is to be checked by the fear of punishment, consisting of the deprivation or diminution of those civil interests, or goods, which otherwise he might and ought to enjoy. But seeing no man does willingly suffer himself to be punished by the deprivation of any part of his goods, and much less of his liberty or life, therefore, is the magistrate armed with the force and strength of all his subjects, in order to the punishment of those that violate any other man's rights.

Now that the whole jurisdiction of the magistrate reaches only to these civil concernments, and that all civil power, right and dominion, is bounded and confined to the only care of promoting these things; and that it neither can nor ought in any manner to be extended to the salvation of souls, these following considerations seem unto me abundantly to demonstrate.

First, because the care of souls is not committed to the civil magistrate, any more than to other men. It is not committed unto him, I say, by God; because it appears not that God has ever given any such authority to one man over another as to compel anyone to his religion. Nor can any such power be vested in the magistrate by the consent of the people, because no man can so far abandon the care of his own salvation as blindly to leave to the choice of any other, whether prince or subject, to prescribe to him what faith or worship he shall embrace. For no man can, if he would, conform his faith to the dictates of another. All the life and power of true religion consist in the inward and full persuasion of the mind; and faith is not faith without believing. Whatever profession we make, to whatever outward worship we conform, if we are not fully satisfied in our own mind that the one is true and the other well pleasing unto God, such profession and such practice, far from being any furtherance, are indeed great obstacles to our salvation. For in this manner, instead of expiating other sins by the exercise of religion, I say, in offering thus unto God Almighty such a worship as we

esteem to be displeasing unto Him, we add unto the number of our other sins those also of hypocrisy and contempt of His Divine Majesty.

In the second place, the care of souls cannot belong to the civil magistrate, because his power consists only in outward force; but true and saving religion consists in the inward persuasion of the mind, without which nothing can be acceptable to God. And such is the nature of the understanding, that it cannot be compelled to the belief of anything by outward force. Confiscation of estate, imprisonment, torments, nothing of that nature can have any such efficacy as to make men change the inward judgement that they have framed of things.

It may indeed be alleged that the magistrate may make use of arguments, and, thereby; draw the heterodox into the way of truth, and procure their salvation. I grant it; but this is common to him with other men. In teaching, instructing, and redressing the erroneous by reason, he may certainly do what becomes any good man to do. Magistracy does not oblige him to put off either humanity or Christianity; but it is one thing to persuade, another to command; one thing to press with arguments, another with penalties. This civil power alone has a right to do; to the other, goodwill is authority enough. Every man has commission to admonish, exhort, convince another of error, and, by reasoning, to draw him into truth; but to give laws, receive obedience, and compel with the sword, belongs to none but the magistrate. And, upon this ground, I affirm that the magistrate's power extends not to the establishing of any articles of faith, or forms of worship, by the force of his laws. For laws are of no force at all without penalties, and penalties in this case are absolutely impertinent, because they are not proper to convince the mind. Neither the profession of any articles of faith, nor the conformity to any outward form of worship (as has been already said), can be available to the salvation of souls, unless the truth of the one and the acceptableness of the other unto God be thoroughly believed by those that so profess and practise. But penalties are no way capable to produce such belief. It is only light and evidence that can work a change in men's opinions; which light can in no manner proceed from corporal sufferings, or any other outward penalties.

In the third place, the care of the salvation of men's souls cannot belong to the magistrate; because, though the rigour of laws and the force of penalties were capable to convince and change men's minds, yet would not that help at all to the salvation of their souls. For there being but one truth, one way to heaven, what hope is there that more men would be led into it if they had no rule but the religion of the court and were put under the necessity to quit the light of their own reason, and oppose the dictates of their own consciences, and blindly to resign themselves up to the will of their governors and to the religion which either ignorance, ambition, or superstition had chanced to establish in the countries where they were born? In the variety and contradiction of opinions in religion, wherein the princes of the world are as much divided as in their secular interests, the narrow way would be much straitened; one country alone would be in the right, and all the rest of the world put under an obligation of following their princes in the ways that lead to destruction; and that which heightens the absurdity, and very ill suits the notion of a Deity, men would owe their eternal happiness or misery to the places of their nativity.

These considerations, to omit many others that might have been urged to the same purpose, seem unto me sufficient to conclude that all the power of civil government relates only to men's civil interests, is confined to the care of the things of this world, and hath nothing to do with the world to come.

Let us now consider what a church is. A church, then, I take to be a voluntary society of men, joining themselves together of their own accord in order to the public worshipping of God in such manner as they judge acceptable to Him, and effectual to the salvation of their souls.

I say it is a free and voluntary society. Nobody is born a member of any church; otherwise the religion of parents would descend unto children by the same right of inheritance as their temporal estates, and everyone would hold his faith by the same tenure he does his lands, than which nothing can be imagined more absurd. Thus, therefore, that matter stands. No man by nature is bound unto any particular church or sect, but everyone joins himself voluntarily to that society in which he believes he has found that profession and worship which is truly acceptable to God. The hope of salvation, as it was the only cause of his entrance into that communion, so it can be the only reason of his stay there. For if afterwards he discover anything either erroneous in the doctrine or incongruous in the worship of that society to which he has joined himself, why should it not be as free for him to go out as it was to enter? No member of a religious society can be tied with any other bonds but what proceed from the certain expectation of eternal life. A church, then, is a society of members voluntarily uniting to that end.

It follows now that we consider what is the power of this church and unto what laws it is subject.

Forasmuch as no society, how free soever, or upon whatsoever slight occasion instituted, whether of philosophers for learning, of merchants for commerce, or of men of leisure for mutual conversation and discourse, no church or company, I say, can in the least subsist and hold together, but will presently dissolve and break in pieces, unless it be regulated by some laws, and the members all consent to observe some order. Place and time of meeting must be agreed on; rules for admitting and excluding members must be established; distinction of officers, and putting things into a regular course, and suchlike, cannot be omitted. But since the joining together of several members into this church-society, as has already been demonstrated, is absolutely free and spontaneous, it necessarily follows that the right of making its laws can belong to none but the society itself; or, at least (which is the same thing), to those whom the society by common consent has authorised thereunto.

Some, perhaps, may object that no such society can be said to be a true church unless it have in it a bishop or presbyter, with ruling authority derived from the very apostles, and continued down to the present times by an uninterrupted succession.

To these I answer: In the first place, let them show me the edict by which Christ has imposed that law upon His Church. And let not any man think me impertinent, if in a thing of this consequence I require that the terms of that edict be very express and positive; for the promise He has made us,[6] that "wheresoever two or three are gathered together" in His

name, He will be in the midst of them, seems to imply the contrary. Whether such an assembly want anything necessary to a true church, pray do you consider. Certain I am that nothing can be there wanting unto the salvation of souls, which is sufficient to our purpose.

Next, pray observe how great have always been the divisions amongst even those who lay so much stress upon the Divine institution and continued succession of a certain order of rulers in the Church. Now, their very dissension unavoidably puts us upon a necessity of deliberating and, consequently, allows a liberty of choosing that which upon consideration we prefer.

… the Gospel frequently declares that the true disciples of Christ must suffer persecution; but that the Church of Christ should persecute others, and force others by fire and sword to embrace her faith and doctrine, I could never yet find in any of the books of the New Testament.

The end of a religious society (as has already been said) is the public worship of God and, by means thereof, the acquisition of eternal life. All discipline ought, therefore, to tend to that end, and all ecclesiastical laws to be thereunto confined. Nothing ought nor can be transacted in this society relating to the possession of civil and worldly goods. No force is here to be made use of upon any occasion whatsoever. For force belongs wholly to the civil magistrate, and the possession of all outward goods is subject to his jurisdiction.

But, it may be asked, by what means then shall ecclesiastical laws be established, if they must be thus destitute of all compulsive power? I answer: They must be established by means suitable to the nature of such things, whereof the external profession and observation–if not proceeding from a thorough conviction and approbation of the mind–is altogether useless and unprofitable. The arms by which the members of this society are to be kept within their duty are exhortations, admonitions, and advices. If by these means the offenders will not be reclaimed, and the erroneous convinced, there remains nothing further to be done but that such stubborn and obstinate persons, who give no ground to hope for their reformation, should be cast out and separated from the society. This is the last and utmost force of ecclesiastical authority. No other punishment can thereby be inflicted than that, the relation ceasing between the body and the member which is cut off. The person so condemned ceases to be a part of that church.

These things being thus determined, let us inquire, in the next place: How far the duty of toleration extends, and what is required from everyone by it?

And, first, I hold that no church is bound, by the duty of toleration, to retain any such person in her bosom as, after admonition, continues obstinately to offend against the laws of the society. For, these being the condition of communion and the bond of the society, if the breach of them were permitted without any animadversion the society would immediately be thereby dissolved. But, nevertheless, in all such cases care is to be taken that the sentence of excommunication, and the execution thereof, carry with it no rough usage of word or action whereby the ejected person may any wise be damnified in body or estate. For all force (as has often been said) belongs only to the magistrate, nor ought any private persons at any

time to use force, unless it be in self-defence against unjust violence. Excommunication neither does, nor can, deprive the excommunicated person of any of those civil goods that he formerly possessed. All those things belong to the civil government and are under the magistrate's protection. The whole force of excommunication consists only in this: that, the resolution of the society in that respect being declared, the union that was between the body and some member comes thereby to be dissolved; and, that relation ceasing, the participation of some certain things which the society communicated to its members, and unto which no man has any civil right, comes also to cease. For there is no civil injury done unto the excommunicated person by the church minister's refusing him that bread and wine, in the celebration of the Lord's Supper, which was not bought with his but other men's money.

Secondly, no private person has any right in any manner to prejudice another person in his civil enjoyments because he is of another church or religion. All the rights and franchises that belong to him as a man, or as a denizen, are inviolably to be preserved to him. These are not the business of religion. No violence nor injury is to be offered him, whether he be Christian or Pagan. Nay, we must not content ourselves with the narrow measures of bare justice; charity, bounty, and liberality must be added to it. This the Gospel enjoins, this reason directs, and this that natural fellowship we are born into requires of us. If any man err from the right way, it is his own misfortune, no injury to thee; nor therefore art thou to punish him in the things of this life because thou supposest he will be miserable in that which is to come. …

In the third place, let us see what the duty of toleration requires from those who are distinguished from the rest of mankind (from the laity, as they please to call us) by some ecclesiastical character and office; whether they be bishops, priests, presbyters, ministers, or however else dignified or distinguished. It is not my business to inquire here into the original of the power or dignity of the clergy. This only I say, that, whencesoever their authority be sprung, since it is ecclesiastical, it ought to be confined within the bounds of the Church, nor can it in any manner be extended to civil affairs, because the Church itself is a thing absolutely separate and distinct from the commonwealth. The boundaries on both sides are fixed and immovable. He jumbles heaven and earth together, the things most remote and opposite, who mixes these two societies, which are in their original, end, business, and in everything perfectly distinct and infinitely different from each other. No man, therefore, with whatsoever ecclesiastical office he be dignified, can deprive another man that is not of his church and faith either of liberty or of any part of his worldly goods upon the account of that difference between them in religion. For whatsoever is not lawful to the whole Church cannot by any ecclesiastical right become lawful to any of its members.

But this is not all. It is not enough that ecclesiastical men abstain from violence and rapine and all manner of persecution. He that pretends to be a successor of the apostles, and takes upon him the office of teaching, is obliged also to admonish his hearers of the duties of peace and goodwill towards all men … . I will not undertake to represent how happy and how great would be the fruit, both in Church and State, if the pulpits everywhere sounded with this doctrine of peace and toleration, lest I should seem to reflect too severely upon those

men whose dignity I desire not to detract from, nor would have it diminished either by others or themselves. But this I say, that thus it ought to be. And if anyone that professes himself to be a minister of the Word of God, a preacher of the gospel of peace, teach otherwise, he either understands not or neglects the business of his calling and shall one day give account thereof unto the Prince of Peace. If Christians are to be admonished that they abstain from all manner of revenge, even after repeated provocations and multiplied injuries, how much more ought they who suffer nothing, who have had no harm done them, forbear violence and abstain from all manner of ill-usage towards those from whom they have received none! This caution and temper they ought certainly to use towards those. who mind only their own business and are solicitous for nothing but that (whatever men think of them) they may worship God in that manner which they are persuaded is acceptable to Him and in which they have the strongest hopes of eternal salvation. In private domestic affairs, in the management of estates, in the conservation of bodily health, every man may consider what suits his own convenience and follow what course he likes best. No man complains of the ill-management of his neighbour's affairs. No man is angry with another for an error committed in sowing his land or in marrying his daughter. Nobody corrects a spendthrift for consuming his substance in taverns. Let any man pull down, or build, or make whatsoever expenses he pleases, nobody murmurs, nobody controls him; he has his liberty. But if any man do not frequent the church, if he do not there conform his behaviour exactly to the accustomed ceremonies, or if he brings not his children to be initiated in the sacred mysteries of this or the other congregation, this immediately causes an uproar. The neighbourhood is filled with noise and clamour. Everyone is ready to be the avenger of so great a crime, and the zealots hardly have the patience to refrain from violence and rapine so long till the cause be heard and the poor man be, according to form, condemned to the loss of liberty, goods, or life. Oh, that our ecclesiastical orators of every sect would apply themselves with all the strength of arguments that they are able to the confounding of men's errors! But let them spare their persons. Let them not supply their want of reasons with the instruments of force, which belong to another jurisdiction and do ill become a Churchman's hands. Let them not call in the magistrate's authority to the aid of their eloquence or learning, lest perhaps, whilst they pretend only love for the truth, this their intemperate zeal, breathing nothing but fire and sword, betray their ambition and show that what they desire is temporal dominion. For it will be very difficult to persuade men of sense that he who with dry eyes and satisfaction of mind can deliver his brother to the executioner to be burnt alive, does sincerely and heartily concern himself to save that brother from the flames of hell in the world to come.

In the last place, let us now consider what is the magistrate's duty in the business of toleration, which certainly is very considerable.

We have already proved that the care of souls does not belong to the magistrate. Not a magisterial care, I mean (if I may so call it), which consists in prescribing by laws and compelling by punishments. But a charitable care, which consists in teaching, admonishing, and persuading, cannot be denied unto any man. The care, therefore, of every man's soul belongs unto himself and is to be left unto himself. But what if he neglect the care of his soul? I answer: What if he neglect the care of his health or of his estate, which things are nearlier

related to the government of the magistrate than the other? Will the magistrate provide by an express law that such a one shall not become poor or sick? Laws provide, as much as is possible, that the goods and health of subjects be not injured by the fraud and violence of others; they do not guard them from the negligence or ill-husbandry of the possessors themselves. No man can be forced to be rich or healthful whether he will or no. Nay, God Himself will not save men against their wills. Let us suppose, however, that some prince were desirous to force his subjects to accumulate riches, or to preserve the health and strength of their bodies. Shall it be provided by law that they must consult none but Roman physicians, and shall everyone be bound to live according to their prescriptions? What, shall no potion, no broth, be taken, but what is prepared either in the Vatican, suppose, or in a Geneva shop? Or, to make these subjects rich, shall they all be obliged by law to become merchants or musicians? Or, shall everyone turn victualler, or smith, because there are some that maintain their families plentifully and grow rich in those professions? But, it may be said, there are a thousand ways to wealth, but one only way to heaven. It is well said, indeed, especially by those that plead for compelling men into this or the other way. For if there were several ways that led thither, there would not be so much as a pretence left for compulsion. But now, if I be marching on with my utmost vigour in that way which, according to the sacred geography, leads straight to Jerusalem, why am I beaten and ill-used by others because, perhaps, I wear not buskins; because my hair is not of the right cut; because, perhaps, I have not been dipped in the right fashion; because I eat flesh upon the road, or some other food which agrees with my stomach; because I avoid certain by-ways, which seem unto me to lead into briars or precipices; because, amongst the several paths that are in the same road, I choose that to walk in which seems to be the straightest and cleanest; because I avoid to keep company with some travellers that are less grave and others that are more sour than they ought to be; or, in fine, because I follow a guide that either is, or is not, clothed in white, or crowned with a mitre? Certainly, if we consider right, we shall find that, for the most part, they are such frivolous things as these that (without any prejudice to religion or the salvation of souls, if not accompanied with superstition or hypocrisy) might either be observed or omitted. I say they are such-like things as these which breed implacable enmities amongst Christian brethren, who are all agreed in the substantial and truly fundamental part of religion.

But let us grant unto these zealots, who condemn all things that are not of their mode, that from these circumstances are different ends. What shall we conclude from thence? There is only one of these which is the true way to eternal happiness: but in this great variety of ways that men follow, it is still doubted which is the right one. Now, neither the care of the commonwealth, nor the right enacting of laws, does discover this way that leads to heaven more certainly to the magistrate than every private man's search and study discovers it unto himself. I have a weak body, sunk under a languishing disease, for which (I suppose) there is one only remedy, but that unknown. Does it therefore belong unto the magistrate to prescribe me a remedy, because there is but one, and because it is unknown? Because there is but one way for me to escape death, will it therefore be safe for me to do whatsoever the magistrate ordains? Those things that every man ought sincerely to inquire into himself, and

by meditation, study, search, and his own endeavours, attain the knowledge of, cannot be looked upon as the peculiar possession of any sort of men. Princes, indeed, are born superior unto other men in power, but in nature equal. Neither the right nor the art of ruling does necessarily carry along with it the certain knowledge of other things, and least of all of true religion. For if it were so, how could it come to pass that the lords of the earth should differ so vastly as they do in religious matters? But let us grant that it is probable the way to eternal life may be better known by a prince than by his subjects, or at least that in this incertitude of things the safest and most commodious way for private persons is to follow his dictates. You will say: "What then?" If he should bid you follow merchandise for your livelihood, would you decline that course for fear it should not succeed? I answer: I would turn merchant upon the prince's command, because, in case I should have ill-success in trade, he is abundantly able to make up my loss some other way. If it be true, as he pretends, that he desires I should thrive and grow rich, he can set me up again when unsuccessful voyages have broken me. But this is not the case in the things that regard the life to come; if there I take a wrong course, if in that respect I am once undone, it is not in the magistrate's power to repair my loss, to ease my suffering, nor to restore me in any measure, much less entirely, to a good estate. What security can be given for the Kingdom of Heaven?

Perhaps some will say that they do not suppose this infallible judgement, that all men are bound to follow in the affairs of religion, to be in the civil magistrate, but in the Church. What the Church has determined, that the civil magistrate orders to be observed; and he provides by his authority that nobody shall either act or believe in the business of religion otherwise than the Church teaches. So that the judgement of those things is in the Church; the magistrate himself yields obedience thereunto and requires the like obedience from others. I answer: Who sees not how frequently the name of the Church, which was venerable in time of the apostles, has been made use of to throw dust in the people's eyes in the following ages? But, however, in the present case it helps us not. The one only narrow way which leads to heaven is not better known to the magistrate than to private persons, and therefore I cannot safely take him for my guide, who may probably be as ignorant of the way as myself, and who certainly is less concerned for my salvation than I myself am. Amongst so many kings of the Jews, how many of them were there whom any Israelite, thus blindly following, had not fallen into idolatry and thereby into destruction? Yet, nevertheless, you bid me be of good courage and tell me that all is now safe and secure, because the magistrate does not now enjoin the observance of his own decrees in matters of religion, but only the decrees of the Church. Of what Church, I beseech you? of that, certainly, which likes him best. As if he that compels me by laws and penalties to enter into this or the other Church, did not interpose his own judgement in the matter. What difference is there whether he lead me himself, or deliver me over to be led by others? I depend both ways upon his will, and it is he that determines both ways of my eternal state. Would an Israelite that had worshipped Baal upon the command of his king have been in any better condition because somebody had told him that the king ordered nothing in religion upon his own head, nor commanded anything to be done by his subjects in divine worship but what was approved by the counsel of priests, and declared to be of divine right by the doctors of their Church? If the religion of any

Church become, therefore, true and saving, because the head of that sect, the prelates and priests, and those of that tribe, do all of them, with all their might, extol and praise it, what religion can ever be accounted erroneous, false, and destructive? I am doubtful concerning the doctrine of the Socinians, I am suspicious of the way of worship practised by the Papists, or Lutherans; will it be ever a jot safer for me to join either unto the one or the other of those Churches, upon the magistrate's command, because he commands nothing in religion but by the authority and counsel of the doctors of that Church?

But, to speak the truth, we must acknowledge that the Church (if a convention of clergymen, making canons, must be called by that name) is for the most part more apt to be influenced by the Court than the Court by the Church. How the Church was under the vicissitude of orthodox and Arian emperors is very well known. Or if those things be too remote, our modern English history affords us fresh examples in the reigns of Henry VIII, Edward VI, Mary, and Elizabeth, how easily and smoothly the clergy changed their decrees, their articles of faith, their form of worship, everything according to the inclination of those kings and queens. Yet were those kings and queens of such different minds in point of religion, and enjoined thereupon such different things, that no man in his wits (I had almost said none but an atheist) will presume to say that any sincere and upright worshipper of God could, with a safe conscience, obey their several decrees. To conclude, it is the same thing whether a king that prescribes laws to another man's religion pretend to do it by his own judgement, or by the ecclesiastical authority and advice of others. The decisions of churchmen, whose differences and disputes are sufficiently known, cannot be any sounder or safer than his; nor can all their suffrages joined together add a new strength to the civil power. Though this also must be taken notice of—that princes seldom have any regard to the suffrages of ecclesiastics that are not favourers of their own faith and way of worship.

But, after all, the principal consideration, and which absolutely determines this controversy, is this: Although the magistrate's opinion in religion be sound, and the way that he appoints be truly Evangelical, yet, if I be not thoroughly persuaded thereof in my own mind, there will be no safety for me in following it. No way whatsoever that I shall walk in against the dictates of my conscience will ever bring me to the mansions of the blessed. I may grow rich by an art that I take not delight in; I may be cured of some disease by remedies that I have not faith in; but I cannot be saved by a religion that I distrust and by a worship that I abhor. It is in vain for an unbeliever to take up the outward show of another man's profession. Faith only and inward sincerity are the things that procure acceptance with God. The most likely and most approved remedy can have no effect upon the patient, if his stomach reject it as soon as taken; and you will in vain cram a medicine down a sick man's throat, which his particular constitution will be sure to turn into poison. In a word, whatsoever may be doubtful in religion, yet this at least is certain, that no religion which I believe not to be true can be either true or profitable unto me. In vain, therefore, do princes compel their subjects to come into their Church communion, under pretence of saving their souls. If they believe, they will come of their own accord, if they believe not, their coming will nothing avail them. How great soever, in fine, may be the pretence of good-will and charity, and concern for the

salvation of men's souls, men cannot be forced to be saved whether they will or no. And therefore, when all is done, they must be left to their own consciences. …

But as in every Church there are two things especially to be considered—the outward form and rites of worship, and the doctrines and articles of things must be handled each distinctly that so the whole matter of toleration may the more clearly be understood.

Concerning outward worship, I say, in the first place, that the magistrate has no power to enforce by law, either in his own Church, or much less in another, the use of any rites or ceremonies whatsoever in the worship of God. And this, not only because these Churches are free societies, but because whatsoever is practised in the worship of God is only so far justifiable as it is believed by those that practise it to be acceptable unto Him. Whatsoever is not done with that assurance of faith is neither well in itself, nor can it be acceptable to God. To impose such things, therefore, upon any people, contrary to their own judgment, is in effect to command them to offend God, which, considering that the end of all religion is to please Him, and that liberty is essentially necessary to that end, appears to be absurd beyond expression. …

In the next place: As the magistrate has no power to impose by his laws the use of any rites and ceremonies in any Church, so neither has he any power to forbid the use of such rites and ceremonies as are already received, approved, and practised by any Church; because, if he did so, he would destroy the Church itself: the end of whose institution is only to worship God with freedom after its own manner.

You will say, by this rule, if some congregations should have a mind to sacrifice infants, or (as the primitive Christians were falsely accused) lustfully pollute themselves in promiscuous uncleanness, or practise any other such heinous enormities, is the magistrate obliged to tolerate them, because they are committed in a religious assembly? I answer: No. These things are not lawful in the ordinary course of life, nor in any private house; and therefore neither are they so in the worship of God, or in any religious meeting. But, indeed, if any people congregated upon account of religion should be desirous to sacrifice a calf, I deny that that ought to be prohibited by a law. Meliboeus, whose calf it is, may lawfully kill his calf at home, and burn any part of it that he thinks fit. For no injury is thereby done to any one, no prejudice to another man's goods. And for the same reason he may kill his calf also in a religious meeting. Whether the doing so be well-pleasing to God or no, it is their part to consider that do it. The part of the magistrate is only to take care that the commonwealth receive no prejudice, and that there be no injury done to any man, either in life or estate. And thus what may be spent on a feast may be spent on a sacrifice. … .

It may be said: "What if a Church be idolatrous, is that also to be tolerated by the magistrate?" I answer: What power can be given to the magistrate for the suppression of an idolatrous Church, which may not in time and place be made use of to the ruin of an orthodox one? For it must be remembered that the civil power is the same everywhere, and the religion of every prince is orthodox to himself. If, therefore, such a power be granted unto the civil magistrate in spirituals as that at Geneva, for example, he may extirpate, by violence and blood, the religion which is there reputed idolatrous, by the same rule another

magistrate, in some neighbouring country, may oppress the reformed religion and, in India, the Christian. …

But idolatry, say some, is a sin and therefore not to be tolerated. If they said it were therefore to be avoided, the inference were good. But it does not follow that because it is a sin it ought therefore to be punished by the magistrate. For it does not belong unto the magistrate to make use of his sword in punishing everything, indifferently, that he takes to be a sin against God. Covetousness, uncharitableness, idleness, and many other things are sins by the consent of men, which yet no man ever said were to be punished by the magistrate. The reason is because they are not prejudicial to other men's rights, nor do they break the public peace of societies. …

Thus far concerning outward worship. Let us now consider articles of faith.

The articles of religion are some of them practical and some speculative. Now, though both sorts consist in the knowledge of truth, yet these terminate simply in the understanding, those influence the will and manners. Speculative opinions, therefore, and articles of faith (as they are called) which are required only to be believed, cannot be imposed on any Church by the law of the land. For it is absurd that things should be enjoined by laws which are not in men's power to perform. And to believe this or that to be true does not depend upon our will. But of this enough has been said already. "But." will some say; "let men at least profess that they believe." A sweet religion, indeed, that obliges men to dissemble and tell lies, both to God and man, for the salvation of their souls! If the magistrate thinks to save men thus, he seems to understand little of the way of salvation. And if he does it not in order to save them, why is he so solicitous about the articles of faith as to enact them by a law?

Further, the magistrate ought not to forbid the preaching or professing of any speculative opinions in any Church because they have no manner of relation to the civil rights of the subjects. If a Roman Catholic believe that to be really the body of Christ which another man calls bread, he does no injury thereby to his neighbour. If a Jew do not believe the New Testament to be the Word of God, he does not thereby alter anything in men's civil rights. If a heathen doubt of both Testaments, he is not therefore to be punished as a pernicious citizen. The power of the magistrate and the estates of the people may be equally secure whether any man believe these things or no. I readily grant that these opinions are false and absurd. But the business of laws is not to provide for the truth of opinions, but for the safety and security of the commonwealth and of every particular man's goods and person. …

But to come to particulars. I say, first, no opinions contrary to human society, or to those moral rules which are necessary to the preservation of civil society, are to be tolerated by the magistrate. But of these, indeed, examples in any Church are rare. For no sect can easily arrive to such a degree of madness as that it should think fit to teach, for doctrines of religion, such things as manifestly undermine the foundations of society and are, therefore, condemned by the judgement of all mankind; because their own interest, peace, reputation, everything would be thereby endangered.

Another more secret evil, but more dangerous to the commonwealth, is when men arrogate to themselves, and to those of their own sect, some peculiar prerogative covered over with a specious show of deceitful words, but in effect opposite to the civil right of the community. For example: we cannot find any sect that teaches, expressly and openly, that men are not obliged to keep their promise; that princes may be dethroned by those that differ from them in religion; or that the dominion of all things belongs only to themselves. For these things, proposed thus nakedly and plainly, would soon draw on them the eye and hand of the magistrate and awaken all the care of the commonwealth to a watchfulness against the spreading of so dangerous an evil. But, nevertheless, we find those that say the same things in other words. What else do they mean who teach that faith is not to be kept with heretics? Their meaning, forsooth, is that the privilege of breaking faith belongs unto themselves; for they declare all that are not of their communion to be heretics, or at least may declare them so whensoever they think fit. What can be the meaning of their asserting that kings excommunicated forfeit their crowns and kingdoms? It is evident that they thereby arrogate unto themselves the power of deposing kings, because they challenge the power of excommunication, as the peculiar right of their hierarchy. That dominion is founded in grace is also an assertion by which those that maintain it do plainly lay claim to the possession of all things. For they are not so wanting to themselves as not to believe, or at least as not to profess themselves to be the truly pious and faithful. These, therefore, and the like, who attribute unto the faithful, religious, and orthodox, that is, in plain terms, unto themselves, any peculiar privilege or power above other mortals, in civil concernments; or who upon pretence of religion do challenge any manner of authority over such as are not associated with them in their ecclesiastical communion, I say these have no right to be tolerated by the magistrate; as neither those that will not own and teach the duty of tolerating all men in matters of mere religion. For what do all these and the like doctrines signify, but that they may and are ready upon any occasion to seize the Government and possess themselves of the estates and fortunes of their fellow subjects; and that they only ask leave to be tolerated by the magistrate so long until they find themselves strong enough to effect it?

Again: That Church can have no right to be tolerated by the magistrate which is constituted upon such a bottom that all those who enter into it do thereby ipso facto deliver themselves up to the protection and service of another prince. For by this means the magistrate would give way to the settling of a foreign jurisdiction in his own country and suffer his own people to be listed, as it were, for soldiers against his own Government. Nor does the frivolous and fallacious distinction between the Court and the Church afford any remedy to this inconvenience; especially when both the one and the other are equally subject to the absolute authority of the same person, who has not only power to persuade the members of his Church to whatsoever he lists, either as purely religious, or in order thereunto, but can also enjoin it them on pain of eternal fire. It is ridiculous for any one to profess himself to be a Mahometan only in his religion, but in everything else a faithful subject to a Christian magistrate, whilst at the same time he acknowledges himself bound to yield blind obedience to the Mufti of Constantinople, who himself is entirely obedient to the Ottoman Emperor and frames the feigned oracles of that religion according to his pleasure. But this Mahometan

living amongst Christians would yet more apparently renounce their government if he acknowledged the same person to be head of his Church who is the supreme magistrate in the state.

Lastly, those are not at all to be tolerated who deny the being of a God. Promises, covenants, and oaths, which are the bonds of human society, can have no hold upon an atheist. The taking away of God, though but even in thought, dissolves all; besides also, those that by their atheism undermine and destroy all religion, can have no pretence of religion whereupon to challenge the privilege of a toleration. As for other practical opinions, though not absolutely free from all error, if they do not tend to establish domination over others, or civil impunity to the Church in which they are taught, there can be no reason why they should not be tolerated. … .

Let us therefore deal plainly. The magistrate is afraid of other Churches, but not of his own, because he is kind and favourable to the one, but severe and cruel to the other. These he treats like children, and indulges them even to wantonness. Those he uses as slaves and, how blamelessly soever they demean themselves, recompenses them no otherwise than by galleys, prisons, confiscations, and death. These he cherishes and defends; those he continually scourges and oppresses. Let him turn the tables. Or let those dissenters enjoy but the same privileges in civils as his other subjects, and he will quickly find that these religious meetings will be no longer dangerous. For if men enter into seditious conspiracies, it is not religion inspires them to it in their meetings, but their sufferings and oppressions that make them willing to ease themselves. Just and moderate governments are everywhere quiet, everywhere safe; but oppression raises ferments and makes men struggle to cast off an uneasy and tyrannical yoke. I know that seditions are very frequently raised upon pretence of religion, but it is as true that for religion subjects are frequently ill treated and live miserably. Believe me, the stirs that are made proceed not from any peculiar temper of this or that Church or religious society, but from the common disposition of all mankind, who when they groan under any heavy burthen endeavour naturally to shake off the yoke that galls their necks. Suppose this business of religion were let alone, and that there were some other distinction made between men and men upon account of their different complexions, shapes, and features, so that those who have black hair (for example) or grey eyes should not enjoy the same privileges as other citizens; that they should not be permitted either to buy or sell, or live by their callings; that parents should not have the government and education of their own children; that all should either be excluded from the benefit of the laws, or meet with partial judges; can it be doubted but these persons, thus distinguished from others by the colour of their hair and eyes, and united together by one common persecution, would be as dangerous to the magistrate as any others that had associated themselves merely upon the account of religion? Some enter into company for trade and profit, others for want of business have their clubs for claret. Neighbourhood joins some and religion others. But there is only one thing which gathers people into seditious commotions, and that is oppression.

… .

That we may draw towards a conclusion. The sum of all we drive at is that every man may enjoy the same rights that are granted to others. Is it permitted to worship God in the Roman manner? Let it be permitted to do it in the Geneva form also. Is it permitted to speak Latin in the market-place? Let those that have a mind to it be permitted to do it also in the Church. Is it lawful for any man in his own house to kneel, stand, sit, or use any other posture; and to clothe himself in white or black, in short or in long garments? Let it not be made unlawful to eat bread, drink wine, or wash with water in the church. In a word, whatsoever things are left free by law in the common occasions of life, let them remain free unto every Church in divine worship. Let no man's life, or body, or house, or estate, suffer any manner of prejudice upon these accounts. Can you allow of the Presbyterian discipline? Why should not the Episcopal also have what they like? Ecclesiastical authority, whether it be administered by the hands of a single person or many, is everywhere the same; and neither has any jurisdiction in things civil, nor any manner of power of compulsion, nor anything at all to do with riches and revenues.

Ecclesiastical assemblies and sermons are justified by daily experience and public allowance. These are allowed to people of some one persuasion; why not to all? If anything pass in a religious meeting seditiously and contrary to the public peace, it is to be punished in the same manner and no otherwise than as if it had happened in a fair or market. These meetings ought not to be sanctuaries for factious and flagitious fellows. Nor ought it to be less lawful for men to meet in churches than in halls; nor are one part of the subjects to be esteemed more blamable for their meeting together than others. Every one is to be accountable for his own actions, and no man is to be laid under a suspicion or odium for the fault of another. Those that are seditious, murderers, thieves, robbers, adulterers, slanderers, etc., of whatsoever Church, whether national or not, ought to be punished and suppressed. But those whose doctrine is peaceable and whose manners are pure and blameless ought to be upon equal terms with their fellow-subjects. Thus if solemn assemblies, observations of festivals, public worship be permitted to any one sort of professors, all these things ought to be permitted to the Presbyterians, Independents, Anabaptists, Arminians, Quakers, and others, with the same liberty. Nay, if we may openly speak the truth, and as becomes one man to another, neither Pagan nor Mahometan, nor Jew, ought to be excluded from the civil rights of the commonwealth because of his religion. The Gospel commands no such thing. The Church which "judgeth not those that are without"[9] wants it not. And the common-wealth, which embraces indifferently all men that are honest, peaceable, and industrious, requires it not. Shall we suffer a Pagan to deal and trade with us, and shall we not suffer him to pray unto and worship God? If we allow the Jews to have private houses and dwellings amongst us, why should we not allow them to have synagogues? Is their doctrine more false, their worship more abominable, or is the civil peace more endangered by their meeting in public than in their private houses? But if these things may be granted to Jews and Pagans, surely the condition of any Christians ought not to be worse than theirs in a Christian commonwealth. … .

FAREWELL.

**Notes:** 1. Luke 22. 25. 2. II Tim. 2. 19. 3. Luke 22. 32. 4. Rom. I. 5. Gal. 5. 6. Matt. 18. 20. 7. Exod. 22, 20, 21. 8. Deut. 2. 9. I Cor. 5. 12, 13.

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## Raymond Smullyan, *Is Man a Machine?*

"Recently I was with a group of mathematicians and philosophers. One philosopher asked me whether I believed man was a machine. I replied, 'Do you really think it makes any difference?' He most earnestly replied, 'Of course! To me it is the most important question in philosophy.'

"I had the following afterthoughts: I imagine that if my friend had finally come to the conclusion that he *were* a machine, he would be infinitely crestfallen. I think he would think: 'My God! How horrible! I am *only* a machine!' But if *I* should find out I were a machine, my attitude would be totally different. I would say: 'How amazing! I never before realized that machines could be so marvelous!'"

(From *This Book Needs No Title* [Prentice-Hall], p. 120)

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## Roy F. Baumeister, *Is There Anything Good About Men?*

*This invited address was given at a meeting the American Psychological Association in San Francisco on August 24, 2007. The thinking it represents is part of a long-range project to understand human action and the relation of culture to behavior. Further information about Prof. Baumeister and his research can be found at the end of the essay.*

You're probably thinking that a talk called "Is there anything good about men" will be a short talk! Recent writings have not had much good to say about men. Titles like *Men Are Not Cost Effective* speak for themselves. Maureen Dowd's book was called *Are Men Necessary?* and although she never gave an explicit answer, anyone reading the book knows her answer was no. Louann Brizendine's book, *The Female Brain*, introduces itself by saying, "Men, get ready to experience brain envy." Imagine a book advertising itself by saying that women will soon be envying the superior male brain!

Nor are these isolated examples. Alice Eagly's research has compiled mountains of data on the stereotypes people have about men and women, which the researchers summarized as "The WAW effect." WAW stands for "Women Are Wonderful." Both men and women hold much more favorable views of women than of men. Almost everybody likes women better than men. I certainly do.

My purpose in this talk is not to try to balance this out by praising men, though along the way I will have various positive things to say about both genders. The question of whether there's anything good about men is only my point of departure. The tentative title of the book I'm writing is "How culture exploits men," but even that for me is the lead-in to grand questions about how culture shapes action. In that context, what's good about men means what men are good for, from the perspective of the system.

Hence this is not about the "battle of the sexes," and in fact I think one unfortunate legacy of feminism has been the idea that men and women are basically enemies. I shall suggest, instead, that most often men and women have been partners, supporting each other rather than exploiting or manipulating each other.

Nor is this about trying to argue that men should be regarded as victims. I detest the whole idea of competing to be victims. And I'm certainly not denying that culture has exploited women. But rather than seeing culture as patriarchy, which is to say a conspiracy by men to exploit women, I think it's more accurate to understand culture (e.g., a country, a religion) as an abstract system that competes against rival systems—and that uses both men and women, often in different ways, to advance its cause.

Also I think it's best to avoid value judgments as much as possible. They have made discussion of gender politics very difficult and sensitive, thereby warping the play of ideas. I have no conclusions to present about what's good or bad or how the world should change. In fact my own theory is built around tradeoffs, so that whenever there is something good it is tied to something else that is bad, and they balance out.

I don't want to be on anybody's side. Gender warriors please go home.

## Men on Top

When I say I am researching how culture exploits men, the first reaction is usually "How can you say culture exploits men, when men are in charge of everything?" This is a fair objection and needs to be taken seriously. It invokes the feminist critique of society. This critique started when some women systematically looked up at the top of society and saw men everywhere: most world rulers, presidents, prime ministers, most members of Congress and parliaments, most CEOs of major corporations, and so forth–these are mostly men.

Seeing all this, the feminists thought, wow, men dominate everything, so society is set up to favor men. It must be great to be a man.

The mistake in that way of thinking is to look only at the top. If one were to look downward to the bottom of society instead, one finds mostly men there too. Who's in prison, all over the world, as criminals or political prisoners? The population on Death Row has never approached 51% female. Who's homeless? Again, mostly men. Whom does society use for bad or dangerous jobs? US Department of Labor statistics report that 93% of the people killed on the job are men. Likewise, who gets killed in battle? Even in today's American army, which has made much of integrating the sexes and putting women into combat, the risks

aren't equal. This year we passed the milestone of 3,000 deaths in Iraq, and of those, 2,938 were men, 62 were women.

One can imagine an ancient battle in which the enemy was driven off and the city saved, and the returning soldiers are showered with gold coins. An early feminist might protest that hey, all those men are getting gold coins, half of those coins should go to women. In principle, I agree. But remember, while the men you see are getting gold coins, there are other men you don't see, who are still bleeding to death on the battlefield from spear wounds.

That's an important first clue to how culture uses men. Culture has plenty of tradeoffs, in which it needs people to do dangerous or risky things, and so it offers big rewards to motivate people to take those risks. Most cultures have tended to use men for these high-risk, high-payoff slots much more than women. I shall propose there are important pragmatic reasons for this. The result is that some men reap big rewards while others have their lives ruined or even cut short. Most cultures shield their women from the risk and therefore also don't give them the big rewards. I'm not saying this is what cultures ought to do, morally, but cultures aren't moral beings. They do what they do for pragmatic reasons driven by competition against other systems and other groups.

## Stereotypes at Harvard

I said that today most people hold more favorable stereotypes of women than men. It was not always thus. Up until about the 1960s, psychology (like society) tended to see men as the norm and women as the slightly inferior version. During the 1970s, there was a brief period of saying there were no real differences, just stereotypes. Only since about 1980 has the dominant view been that women are better and men are the inferior version.

The surprising thing to me is that it took little more than a decade to go from one view to its opposite, that is, from thinking men are better than women to thinking women are better than men. How is this possible?

I'm sure you're expecting me to talk about Larry Summers at some point, so let's get it over with! You recall, he was the president of Harvard. As summarized in *The Economist*, "Mr Summers infuriated the feminist establishment by wondering out loud whether the prejudice alone could explain the shortage of women at the top of science." After initially saying, it's possible that maybe there aren't as many women physics professors at Harvard because there aren't as many women as men with that high innate ability, just one possible explanation among others, he had to apologize, retract, promise huge sums of money, and not long afterward he resigned.

What was his crime? Nobody accused him of actually discriminating against women. His misdeed was to think thoughts that are not allowed to be thought, namely that there might be more men with high ability. The only permissible explanation for the lack of top women scientists is patriarchy—that men are conspiring to keep women down. It can't be ability. Actually, there is some evidence that men on average are a little better at math, but let's assume Summers was talking about general intelligence. People can point to plenty of data

that the average IQ of adult men is about the same as the average for women. So to suggest that men are smarter than women is wrong. No wonder some women were offended.

But that's not what he said. He said there were more men at the top levels of ability. That could still be true despite the average being the same–if there are also more men at the bottom of the distribution, more really stupid men than women. During the controversy about his remarks, I didn't see anybody raise this question, but the data are there, indeed abundant, and they are indisputable. There are more males than females with really low IQs. Indeed, the pattern with mental retardation is the same as with genius, namely that as you go from mild to medium to extreme, the preponderance of males gets bigger.

All those retarded boys are not the handiwork of patriarchy. Men are not conspiring together to make each other's sons mentally retarded.

Almost certainly, it is something biological and genetic. And my guess is that the greater proportion of men at both extremes of the IQ distribution is part of the same pattern. Nature rolls the dice with men more than women. Men go to extremes more than women. It's true not just with IQ but also with other things, even height: The male distribution of height is flatter, with more really tall and really short men.

Again, there is a reason for this, to which I shall return.

For now, the point is that it explains how we can have opposite stereotypes. Men go to extremes more than women. Stereotypes are sustained by confirmation bias. Want to think men are better than women? Then look at the top, the heroes, the inventors, the philanthropists, and so on. Want to think women are better than men? Then look at the bottom, the criminals, the junkies, the losers.

In an important sense, men really are better AND worse than women.

A pattern of more men at both extremes can create all sorts of misleading conclusions and other statistical mischief. To illustrate, let's assume that men and women are on average exactly equal in every relevant respect, but more men at both extremes. If you then measure things that are bounded at one end, it screws up the data to make men and women seem significantly different.

Consider grade point average in college. Thanks to grade inflation, most students now get A's and B's, but a few range all the way down to F. With that kind of low ceiling, the high-achieving males cannot pull up the male average, but the loser males will pull it down. The result will be that women will get higher average grades than men—again despite no difference in average quality of work.

The opposite result comes with salaries. There is a minimum wage but no maximum. Hence the high-achieving men can pull the male average up while the low-achieving ones can't pull it down. The result? Men will get higher average salaries than women, even if there is no average difference on any relevant input.

Today, sure enough, women get higher college grades but lower salaries than men. There is much discussion about what all this means and what should be done about it. But as you see, both facts could be just a statistical quirk stemming from male extremity.

## Trading Off

When you think about it, the idea that one gender is all-around better than the other is not very plausible. Why would nature make one gender better than the other? Evolution selects for good, favorable traits, and if there's one good way to be, after a few generations everyone will be that way.

But evolution will preserve differences when there is a tradeoff: when one trait is good for one thing, while the opposite is good for something else.

Let's return to the three main theories we've had about gender: Men are better, no difference, and women are better. What's missing from that list? Different but equal. Let me propose that as a rival theory that deserves to be considered. I think it's actually the most plausible one. Natural selection will preserve innate differences between men and women as long as the different traits are beneficial in different circumstances or for different tasks.

Tradeoff example: African-Americans suffer from sickle cell anemia more than white people. This appears to be due to a genetic vulnerability. That gene, however, promotes resistance to malaria. Black people evolved in regions where malaria was a major killer, so it was worth having this gene despite the increased risk of sickle cell anemia. White people evolved in colder regions, where there was less malaria, and so the tradeoff was resolved differently, more avoiding the gene that prevented malaria while risking sickle cell anemia.

The tradeoff approach yields a radical theory of gender equality. Men and women may be different, but each advantage may be linked to a disadvantage.

Hence whenever you hear a report that one gender is better at something, stop and consider why this is likely true—and what the opposite trait might be good for.

## Can't Vs. Won't

Before we go too far down that path, though, let me raise another radical idea. Maybe the differences between the genders are more about motivation than ability. This is the difference between can't and won't.

Return for a moment to the Larry Summers issue about why there aren't more female physics professors at Harvard. Maybe women can do math and science perfectly well but they just don't like to. After all, most men don't like math either! Of the small minority of people who do like math, there are probably more men than women. Research by Jacquelynne Eccles has repeatedly concluded that the shortage of females in math and science reflects motivation more than ability. And by the same logic, I suspect most men could learn to change diapers and vacuum under the sofa perfectly well too, and if men don't do those things, it's because they don't want to or don't like to, not because they are constitutionally unable (much as they may occasionally pretend otherwise!).

Several recent works have questioned the whole idea of gender differences in abilities: Even when average differences are found, they tend to be extremely small. In contrast, when you look at what men and women want, what they like, there are genuine differences. Look at research on the sex drive: Men and women may have about equal "ability" in sex, whatever that means, but there are big differences as to motivation: which gender thinks about sex all the time, wants it more often, wants more different partners, risks more for sex, masturbates more, leaps at every opportunity, and so on. Our survey of published research found that pretty much every measure and every study showed higher sex drive in men. It's official: men are hornier than women. This is a difference in motivation.

Likewise, I mentioned the salary difference, but it may have less to do with ability than motivation. High salaries come from working super-long hours. Workaholics are mostly men. (There are some women, just not as many as men.) One study counted that over 80% of the people who work 50-hour weeks are men.

That means that if we want to achieve our ideal of equal salaries for men and women, we may need to legislate the principle of equal pay for less work. Personally, I support that principle. But I recognize it's a hard sell.

Creativity may be another example of gender difference in motivation rather than ability. The evidence presents a seeming paradox, because the tests of creativity generally show men and women scoring about the same, yet through history some men have been much more creative than women. An explanation that fits this pattern is that men and women have the same creative ability but different motivations.

I am a musician, and I've long wondered about this difference. We know from the classical music scene that women can play instruments beautifully, superbly, proficiently–essentially just as well as men. They can and many do. Yet in jazz, where the performer has to be creative while playing, there is a stunning imbalance: hardly any women improvise. Why? The ability is there but perhaps the motivation is less. They don't feel driven to do it.

I suppose the stock explanation for any such difference is that women were not encouraged, or were not appreciated, or were discouraged from being creative. But I don't think this stock explanation fits the facts very well. In the 19th century in America, middle-class girls and women played piano far more than men. Yet all that piano playing failed to result in any creative output. There were no great women composers, no new directions in style of music or how to play, or anything like that. All those female pianists entertained their families and their dinner guests but did not seem motivated to create anything new.

Meanwhile, at about the same time, black men in America created blues and then jazz, both of which changed the way the world experiences music. By any measure, those black men, mostly just emerging from slavery, were far more disadvantaged than the middle-class white women. Even getting their hands on a musical instrument must have been considerably harder. And remember, I'm saying that the creative abilities are probably about equal. But somehow the men were driven to create something new, more than the women.

One test of what's meaningfully real is the marketplace. It's hard to find anybody making money out of gender differences in abilities. But in motivation, there are plenty. Look at the magazine industry: men's magazines cover different stuff from women's magazines, because men and women like and enjoy and are interested in different things. Look at the difference in films between the men's and women's cable channels. Look at the difference in commercials for men or for women.

This brings us to an important part of the argument. I'm suggesting the important differences between men and women are to be found in motivation rather than ability. What, then, are these differences? I want to emphasize two.

## The Most Underappreciated Fact

The first big, basic difference has to do with what I consider to be the most underappreciated fact about gender. Consider this question: What percent of our ancestors were women?

It's not a trick question, and it's not 50%. True, about half the people who ever lived were women, but that's not the question. We're asking about all the people who ever lived who have a descendant living today. Or, put another way, yes, every baby has both a mother and a father, but some of those parents had multiple children.

Recent research using DNA analysis answered this question about two years ago. Today's human population is descended from twice as many women as men.

I think this difference is the single most underappreciated fact about gender. To get that kind of difference, you had to have something like, throughout the entire history of the human race, maybe 80% of women but only 40% of men reproduced.

Right now our field is having a lively debate about how much behavior can be explained by evolutionary theory. But if evolution explains anything at all, it explains things related to reproduction, because reproduction is at the heart of natural selection. Basically, the traits that were most effective for reproduction would be at the center of evolutionary psychology. It would be shocking if these vastly different reproductive odds for men and women failed to produce some personality differences.

For women throughout history (and prehistory), the odds of reproducing have been pretty good. Later in this talk we will ponder things like, why was it so rare for a hundred women to get together and build a ship and sail off to explore unknown regions, whereas men have fairly regularly done such things? But taking chances like that would be stupid, from the perspective of a biological organism seeking to reproduce. They might drown or be killed by savages or catch a disease. For women, the optimal thing to do is go along with the crowd, be nice, play it safe. The odds are good that men will come along and offer sex and you'll be able to have babies. All that matters is choosing the best offer. We're descended from women who played it safe.

For men, the outlook was radically different. If you go along with the crowd and play it safe, the odds are you won't have children. Most men who ever lived did not have descendants who are alive today. Their lines were dead ends. Hence it was necessary to take chances, try

new things, be creative, explore other possibilities. Sailing off into the unknown may be risky, and you might drown or be killed or whatever, but then again if you stay home you won't reproduce anyway. We're most descended from the type of men who made the risky voyage and managed to come back rich. In that case he would finally get a good chance to pass on his genes. We're descended from men who took chances (and were lucky).

The huge difference in reproductive success very likely contributed to some personality differences, because different traits pointed the way to success. Women did best by minimizing risks, whereas the successful men were the ones who took chances. Ambition and competitive striving probably mattered more to male success (measured in offspring) than female. Creativity was probably more necessary, to help the individual man stand out in some way. Even the sex drive difference was relevant: For many men, there would be few chances to reproduce and so they had to be ready for every sexual opportunity. If a man said "not today, I have a headache," he might miss his only chance.

Another crucial point. The danger of having no children is only one side of the male coin. Every child has a biological mother and father, and so if there were only half as many fathers as mothers among our ancestors, then some of those fathers had lots of children.

Look at it this way. Most women have only a few children, and hardly any have more than a dozen–but many fathers have had more than a few, and some men have actually had several dozen, even hundreds of kids.

In terms of the biological competition to produce offspring, then, men outnumbered women both among the losers and among the biggest winners.

To put this in more subjective terms: When I walk around and try to look at men and women as if seeing them for the first time, it's hard to escape the impression (sorry, guys!) that women are simply more likeable and lovable than men. (This I think explains the "WAW effect" mentioned earlier.) Men might wish to be lovable, and men can and do manage to get women to love them (so the ability is there), but men have other priorities, other motivations. For women, being lovable was the key to attracting the best mate. For men, however, it was more a matter of beating out lots of other men even to have a chance for a mate.

Tradeoffs again: perhaps nature designed women to seek to be lovable, whereas men were designed to strive, mostly unsuccessfully, for greatness.

And it was worth it, even despite the "mostly unsuccessfully" part. Experts estimate Genghis Khan had several hundred and perhaps more than a thousand children. He took big risks and eventually conquered most of the known world. For him, the big risks led to huge payoffs in offspring. My point is that no woman, even if she conquered twice as much territory as Genghis Khan, could have had a thousand children. Striving for greatness in that sense offered the human female no such biological payoff. For the man, the possibility was there, and so the blood of Genghis Khan runs through a large segment of today's human population. By definition, only a few men can achieve greatness, but for the few men who do, the gains have been real. And we are descended from those great men much more than from other men. Remember, most of the mediocre men left no descendants at all.

## Are Women More Social?

Let me turn now to the second big motivational difference. This has its roots in an exchange in the Psychological Bulletin about ten years ago, but the issue is still fresh and relevant today. It concerns the question of whether women are more social than men.

The idea that women are more social was raised by S.E. Cross and L. Madsen in a manuscript submitted to that journal. I was sent it to review, and although I disagreed with their conclusion, I felt they had made their case well, so I advocated publishing their paper. They provided plenty of evidence. They said things like, look, men are more aggressive than women. Aggression could damage a relationship because if you hurt someone then that person might not want to be with you. Women refrain from aggression because they want relationships, but men don't care about relationships and so are willing to be aggressive. Thus, the difference in aggression shows that women are more social than men.

But I had just published my early work on "the need to belong," which concluded that both men and women had that need, and so I was worried to hear that men don't care about social connection. I wrote a reply that said there was another way to look at all the evidence Cross and Madsen covered.

The gist of our view was that there are two different ways of being social. In social psychology we tend to emphasize close, intimate relationships, and yes, perhaps women specialize in those and are better at them than men. But one can also look at being social in terms of having larger networks of shallower relationships, and on these, perhaps, men are more social than women.

It's like the common question, what's more important to you, having a few close friendships or having lots of people who know you? Most people say the former is more important. But the large network of shallow relationships might be important too. We shouldn't automatically see men as second-class human beings simply because they specialize in the less important, less satisfying kind of relationship. Men are social too–just in a different way.

So we reexamined the evidence Cross and Madsen had provided. Consider aggression. True, women are less aggressive than men, no argument there. But is it really because women don't want to jeopardize a close relationship? It turns out that in close relationships, women are plenty aggressive. Women are if anything more likely than men to perpetrate domestic violence against romantic partners, everything from a slap in the face to assault with a deadly weapon. Women also do more child abuse than men, though that's hard to untangle from the higher amount of time they spend with children. Still, you can't say that women avoid violence toward intimate partners.

Instead, the difference is found in the broader social sphere. Women don't hit strangers. The chances that a woman will, say, go to the mall and end up in a knife fight with another woman are vanishingly small, but there is more such risk for men. The gender difference in aggression is mainly found there, in the broader network of relationships. Because men care more about that network.

Now consider helping. Most research finds that men help more than women. Cross and Madsen struggled with that and eventually just fell back on the tired cliché that maybe women don't help because they aren't brought up to help or aren't socialized to help. But I think the pattern is the same as with aggression. Most research looks at helping between strangers, in the larger social sphere, and so it finds men helping more. Inside the family, though, women are plenty helpful, if anything more than men.

Aggression and helping are in some ways opposites, so the converging pattern is quite meaningful. Women both help and aggress in the intimate sphere of close relationships, because that's what they care about. In contrast, men care (also) about the broader network of shallower relationships, and so they are plenty helpful and aggressive there.

The same two-spheres conclusion is supported in plenty of other places. Playground observation studies find that girls pair off and play one-on-one with the same playmate for the full hour. Boys will either play one-on-one with a series of different playmates or with a larger group. Girls want the one-to-one relationship, whereas boys are drawn to bigger groups or networks.

When two girls are playing together and the researchers bring in a third one, the two girls resist letting her join. But two boys will let a third boy join their game. My point is that girls want the one-on-one connection, so adding a third person spoils the time for them, but it doesn't spoil it for the boys.

The conclusion is that men and women are both social but in different ways. Women specialize in the narrow sphere of intimate relationships. Men specialize in the larger group. If you make a list of activities that are done in large groups, you are likely to have a list of things that men do and enjoy more than women: team sports, politics, large corporations, economic networks, and so forth.

## Traded-Off Traits

Again, important personality differences probably follow from the basic motivational difference in the kind of social relationship that interests men and women.

Consider the common finding that women are more emotionally expressive than men. For an intimate relationship, good communication is helpful. It enables the two people to understand each other, appreciate each other's feelings, and so forth. The more the two intimate partners know about each other, the better they can care for and support each other. But in a large group, where you have rivals and maybe enemies, it's risky to let all your feelings show. The same goes for economic transactions. When you are negotiating the price of something, it's best to keep your feelings a bit to yourself. And so men hold back more.

Fairness is another example. Research by Brenda Major and others back in the 1970s used procedures like this. A group of subjects would perform a task, and the experimenter would then say that the group had earned a certain amount of money, and it was up to one member to divide it up however he or she wanted. The person could keep all the money, but that wasn't usually what happened. Women would divide the money equally, with an equal

share for everybody. Men, in contrast, would divide it unequally, giving the biggest share of reward to whoever had done the most work.

Which is better? Neither. Both equality and equity are valid versions of fairness. But they show the different social sphere orientation. Equality is better for close relationships, when people take care of each other and reciprocate things and divide resources and opportunities equally. In contrast, equity—giving bigger rewards for bigger contributions—is more effective in large groups. I haven't actually checked, but I'm willing to bet that if you surveyed the Fortune 500 large and successful corporations in America, you wouldn't find a single one out of 500 that pays every employee the same salary. The more valuable workers who contribute more generally get paid more. It simply is a more effective system in large groups. The male pattern is suited for the large groups, the female pattern is best suited to intimate pairs.

Ditto for the communal-exchange difference Women have more communal orientation, men more exchange. In psychology we tend to think of communal as a more advanced form of relationship than exchange. For example, we'd be suspicious of a couple who after ten years of marriage are still saying, "I paid the electric bill last month, now it's your turn." But the supposed superiority of communal relationships applies mainly to intimate relationships. At the level of large social systems, it's the other way around. Communal (including communist) countries remain primitive and poor, whereas the rich, advanced nations have gotten where they are by means of economic exchange.

There's also the point about men being more competitive, women more cooperative. Again, though, cooperation is much more useful than competition for close relationships. What use is there in competing against your spouse? But in large groups, getting to the top can be crucial. The male preference for dominance hierarchies, and the ambitious striving to get to the top, likewise reflect an orientation toward the large group, not a dislike of intimacy. And remember, most men didn't reproduce, and we're mainly descended from the men who did fight their way to the top. Not so for women.

One more thing. Cross and Madsen covered plenty of research showing that men think of themselves based on their unusual traits that set them apart from others, while women's self-concepts feature things that connect them to others. Cross and Madsen thought that this was because men wanted to be apart from others. But in fact being different is vital strategy for belonging to a large group. If you're the only group member who can kill an antelope or find water or talk to the gods or kick a field goal, the group can't afford to get rid of you.

It's different in a one-to-one relationship. A woman's husband, and her baby, will love her even if she doesn't play the trombone. So cultivating a unique skill isn't essential for her. But playing the trombone is a way to get into some groups, especially brass bands. This is another reason that men go to extremes more than women. Large groups foster the need to establish something different and special about yourself.

## Benefits of Cultural Systems

Let's turn now to culture. Culture is relatively new in evolution. It continues the line of evolution that made animals social. I understand culture as a kind of system that enables the human group to work together effectively, using information. Culture is a new, improved way of being social.

Feminism has taught us to see culture as men against women. Instead, I think the evidence indicates that culture emerged mainly with men and women working together, but working against other groups of men and women. Often the most intense and productive competitions were groups of men against other groups of men, though both groups depended on support from women.

Culture enables the group to be more than the sum of its parts (its members). Culture can be seen as a biological strategy. Twenty people who work together, in a cultural system, sharing information and dividing up tasks and so forth, will all live better–survive and reproduce better–than if those same twenty people lived in the same forest but did everything individually.

Culture thus provides some benefit from having a system. Let's call this "system gain," which means how much better the group does because of the system. Think of two soccer teams. Both sets of players know the rules and have the same individual skills. One group has only that, and they go out to play as individuals trying to do their best. The other works as a team, complementing each other, playing with a system. The system will likely enable them to do better than the group playing as separate individuals. That's system gain.

And one vital fact is that the scope of system gain increases with the size of the system. This is essentially what's happening in the world right now, globalization in the world economy. Bigger systems provide more benefits, so as we expand and merge more units into bigger systems, overall there is more gain.

There is one crucial implication from all this. Culture depends on system gain, and bigger systems provide more of this. Therefore, you'll get more of the benefit of culture from large groups than from small ones. A one-on-one close relationship can do a little in terms of division of labor and sharing information, but a 20-person group can do much more.

As a result, culture mainly arose in the types of social relationships favored by men. Women favor close, intimate relationships. These are if anything more important for the survival of the species. That's why human women evolved first. We need those close relationships to survive. The large networks of shallower relationships aren't as vital for survival–but they are good for something else, namely the development of larger social systems and ultimately for culture.

## Men and Culture

This provides a new basis for understanding gender politics and inequality.

The generally accepted view is that back in early human society, men and women were close to equal. Men and women had separate spheres and did different things, but both were respected. Often, women were gatherers and men were hunters. The total contribution to the

group's food was about the same, even though there were some complementary differences. For example, the gatherers' food was reliably there most days, while the hunters brought home great food once in a while but nothing on other days.

Gender inequality seems to have increased with early civilization, including agriculture. Why? The feminist explanation has been that the men banded together to create patriarchy. This is essentially a conspiracy theory, and there is little or no evidence that it is true. Some argue that the men erased it from the history books in order to safeguard their newly won power. Still, the lack of evidence should be worrisome, especially since this same kind of conspiracy would have had to happen over and over, in group after group, all over the world.

Let me offer a different explanation. It's not that the men pushed the women down. Rather, it's just that the women's sphere remained about where it was, while the men's sphere, with its big and shallow social networks, slowly benefited from the progress of culture. By accumulating knowledge and improving the gains from division of labor, the men's sphere gradually made progress.

Hence religion, literature, art, science, technology, military action, trade and economic marketplaces, political organization, medicine–these all mainly emerged from the men's sphere. The women's sphere did not produce such things, though it did other valuable things, like take care of the next generation so the species would continue to exist.

Why? It has nothing to do with men having better abilities or talents or anything like that. It comes mainly from the different kinds of social relationships. The women's sphere consisted of women and therefore was organized on the basis of the kind of close, intimate, supportive one-on-one relationships that women favor. These are vital, satisfying relationships that contribute vitally to health and survival. Meanwhile the men favored the larger networks of shallower relationships. These are less satisfying and nurturing and so forth, but they do form a more fertile basis for the emergence of culture.

Note that all those things I listed—literature, art, science, etc.—are optional. Women were doing what was vital for the survival of the species. Without intimate care and nurturance, children won't survive, and the group will die out. Women contributed the necessities of life. Men's contributions were more optional, luxuries perhaps. But culture is a powerful engine of making life better. Across many generations, culture can create large amounts of wealth, knowledge, and power. Culture did this—but mainly in the men's sphere.

Thus, the reason for the emergence of gender inequality may have little to do with men pushing women down in some dubious patriarchal conspiracy. Rather, it came from the fact that wealth, knowledge, and power were created in the men's sphere. This is what pushed the men's sphere ahead. Not oppression.

Giving birth is a revealing example. What could be more feminine than giving birth? Throughout most of history and prehistory, giving birth was at the center of the women's sphere, and men were totally excluded. Men were rarely or never present at childbirth, nor was the knowledge about birthing even shared with them. But not very long ago, men were

finally allowed to get involved, and the men were able to figure out ways to make childbirth safer for both mother and baby. Think of it: the most quintessentially female activity, and yet the men were able to improve on it in ways the women had not discovered for thousands and thousands of years.

Let's not overstate. The women had after all managed childbirth pretty well for all those centuries. The species had survived, which is the bottom line. The women had managed to get the essential job done. What the men added was, from the perspective of the group or species at least, optional, a bonus: some mothers and babies survived who would otherwise have died. Still, the improvements show some value coming from the male way of being social. Large networks can collect and accumulate information better than small ones, and so in a relatively short time the men were able to discover improvements that the women hadn't been able to find. Again, it's not that the men were smarter or more capable. It's just that the women shared their knowledge individually, from mother to daughter, or from one midwife to another, and in the long run this could not accumulate and progress as effectively as in the larger groups of shallower relationships favored by men.

## What Men Are Good For

With that, we can now return to the question of what men are good for, from the perspective of a cultural system. The context is these systems competing against other systems, group against group. The group systems that used their men and women most effectively would enable their groups to outperform their rivals and enemies.

I want to emphasize three main answers for how culture uses men.

First, culture relies on men to create the large social structures that comprise it. Our society is made up of institutions such as universities, governments, corporations. Most of these were founded and built up by men. Again, this probably had less to do with women being oppressed or whatever and more to do with men being motivated to form large networks of shallow relationships. Men are much more interested than women in forming large groups and working in them and rising to the top in them.

This still seems to be true today. Several recent news articles have called attention to the fact that women now start more small businesses then men. This is usually covered in the media as a positive sign about women, which it is. But women predominate only if you count all businesses. If you restrict the criteria to businesses that employ more than one person, or ones that make enough money to live off of, then men create more. I suspect that the bigger the group you look at, the more they are male-created.

Certainly today anybody of any gender can start a business, and if anything there are some set-asides and advantages to help women do so. There are no hidden obstacles or blocks, and that's shown by the fact that women start more businesses than men. But the women are content to stay small, such as operating a part-time business out of the spare bedroom, making a little extra money for the family. They don't seem driven to build these up into giant corporations. There are some exceptions, of course, but there is a big difference on average.

Hence both men and women rely on men to create the giant social structures that offer opportunities to both. And it is clear men and women can both perform quite well in these organizations. But culture still relies mainly on men to make them in the first place.

## The Disposable Male

A second thing that makes men useful to culture is what I call male expendability. This goes back to what I said at the outset, that cultures tend to use men for the high-risk, high-payoff undertakings, where a significant portion of those will suffer bad outcomes ranging from having their time wasted, all the way to being killed.

Any man who reads the newspapers will encounter the phrase "even women and children" a couple times a month, usually about being killed. The literal meaning of this phrase is that men's lives have less value than other people's lives. The idea is usually "It's bad if people are killed, but it's especially bad if women and children are killed." And I think most men know that in an emergency, if there are women and children present, he will be expected to lay down his life without argument or complaint so that the others can survive. On the Titanic, the richest men had a lower survival rate (34%) than the poorest women (46%) (though that's not how it looked in the movie). That in itself is remarkable. The rich, powerful, and successful men, the movers and shakers, supposedly the ones that the culture is all set up to favor—in a pinch, their lives were valued less than those of women with hardly any money or power or status. The too-few seats in the lifeboats went to the women who weren't even ladies, instead of to those patriarchs.

Most cultures have had the same attitude. Why? There are pragmatic reasons. When a cultural group competes against other groups, in general, the larger group tends to win out in the long run. Hence most cultures have promoted population growth. And that depends on women. To maximize reproduction, a culture needs all the wombs it can get, but a few penises can do the job. There is usually a penile surplus. If a group loses half its men, the next generation can still be full-sized. But if it loses half its women, the size of the next generation will be severely curtailed. Hence most cultures keep their women out of harm's way while using men for risky jobs.

These risky jobs extend beyond the battlefield. Many lines of endeavor require some lives to be wasted. Exploration, for example: a culture may send out dozens of parties, and some will get lost or be killed, while others bring back riches and opportunities. Research is somewhat the same way: There may be a dozen possible theories about some problem, only one of which is correct, so the people testing the eleven wrong theories will end up wasting their time and ruining their careers, in contrast to the lucky one who gets the Nobel prize. And of course the dangerous jobs. When the scandals broke about the dangers of the mining industry in Britain, Parliament passed the mining laws that prohibited children under the age of 10 and women of all ages from being sent into the mines. Women and children were too precious to be exposed to death in the mines: so only men. As I said earlier, the gender gap in dangerous work persists today, with men accounting for the vast majority of deaths on the job.

Another basis of male expendability is built into the different ways of being social. Expendability comes with the large groups that male sociality creates. In an intimate, one-to-one relationship, neither person can really be replaced. You can remarry if your spouse dies, but it isn't really the same marriage or relationship. And of course nobody can ever really replace a child's mother or father.

In contrast, large groups can and do replace just about everybody. Take any large organization–the Ford Motor Company, the U.S. Army, the Green Bay Packers—and you'll find that the organization goes on despite having replaced every single person in it. Moreover, every member off those groups knows he or she can be replaced and probably will be replaced some day.

Thus, men create the kind of social networks where individuals are replaceable and expendable. Women favor the kind of relationships in which each person is precious and cannot truly be replaced.

## Earning Manhood

The phrase "Be a man" is not as common as it once was, but there is still some sense that manhood must be earned. Every adult female is a woman and is entitled to respect as such, but many cultures withhold respect from the males until and unless the lads prove themselves. This is of course tremendously useful for the culture, because it can set the terms by which males earn respect as men, and in that way it can motivate the men to do things that the culture finds productive.

Some sociological writings about the male role have emphasized that to be a man, you have to produce more than you consume. That is, men are expected, first, to provide for themselves: If somebody else provides for you, you're less than a man. Second, the man should create some additional wealth or surplus value so that it can provide for others in addition to himself. These can be his wife and children, or others who depend on him, or his subordinates, or even perhaps just paying taxes that the government can use. Regardless, you're not a man unless you produce at that level.

Again, I'm not saying men have it worse than women. There are plenty of problems and disadvantages that cultures put on women. My point is just that cultures find men useful in these very specific ways. Requiring the man to earn respect by producing wealth and value that can support himself and others is one of these. Women do not face this particular challenge or requirement.

These demands also contribute to various male behavior patterns. The ambition, competition, and striving for greatness may well be linked to this requirement to fight for respect. All-male groups tend to be marked by putdowns and other practices that remind everybody that there is not enough respect to go around, because this awareness motivates each man to try harder to earn respect. This, incidentally, has probably been a major source of friction as women have moved into the workplace, and organizations have had to shift toward policies that everyone is entitled to respect. The men hadn't originally built them to respect everybody.

One of the basic, most widely accepted gender differences is agency versus communion. Male agency may be partly an adaptation to this kind of social life based on larger groups, where people aren't necessarily valued and one has to strive for respect. To succeed in the male social sphere of large groups, you need an active, agentic self to fight for your place, because it isn't given to you and only a few will be successful. Even the male ego, with its concern with proving oneself and competing against others, seems likely to be designed to cope with systems where there is a shortage of respect and you have to work hard to get some–or else you'll be exposed to humiliation.

## Is That All?

I have not exhausted all the ways that culture exploits men. Certainly there are others. The male sex drive can be harnessed to motivate all sorts of behaviors and put to work in a kind of economic marketplace in which men give women other resources (love, money, commitment) in exchange for sex.

Cultures also use individual men for symbolic purposes more than women. This can be in a positive way, such as the fact that cultures give elaborate funerals and other memorials to men who seem to embody its favorite values. It can also be negative, such as when cultures ruin a man's career, shame him publicly, or even execute him for a single act that violates one of its values. From Martin Luther King to Don Imus, our culture uses men as symbols for expressing its values. (Note neither of those two came out the better for it.)

## Conclusion

To summarize my main points: A few lucky men are at the top of society and enjoy the culture's best rewards. Others, less fortunate, have their lives chewed up by it. Culture uses both men and women, but most cultures use them in somewhat different ways. Most cultures see individual men as more expendable than individual women, and this difference is probably based on nature, in whose reproductive competition some men are the big losers and other men are the biggest winners. Hence it uses men for the many risky jobs it has.

Men go to extremes more than women, and this fits in well with culture using them to try out lots of different things, rewarding the winners and crushing the losers.

Culture is not about men against women. By and large, cultural progress emerged from groups of men working with and against other men. While women concentrated on the close relationships that enabled the species to survive, men created the bigger networks of shallow relationships, less necessary for survival but eventually enabling culture to flourish. The gradual creation of wealth, knowledge, and power in the men's sphere was the source of gender inequality. Men created the big social structures that comprise society, and men still are mainly responsible for this, even though we now see that women can perform perfectly well in these large systems.

What seems to have worked best for cultures is to play off the men against each other, competing for respect and other rewards that end up distributed very unequally. Men have to prove themselves by producing things the society values. They have to prevail over rivals

and enemies in cultural competitions, which is probably why they aren't as lovable as women.

The essence of how culture uses men depends on a basic social insecurity. This insecurity is in fact social, existential, and biological. Built into the male role is the danger of not being good enough to be accepted and respected and even the danger of not being able to do well enough to create offspring.

The basic social insecurity of manhood is stressful for the men, and it is hardly surprising that so many men crack up or do evil or heroic things or die younger than women. But that insecurity is useful and productive for the culture, the system.

Again, I'm not saying it's right, or fair, or proper. But it has worked. The cultures that have succeeded have used this formula, and that is one reason that they have succeeded instead of their rivals.

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