

Document 4.4

Voltaire, “Chancellor Bacon”

From Voltaire’s *Letters on England*

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It is not long since the ridiculous and threadbare question was agitated in a celebrated assembly; who was the greatest man, Cæsar or Alexander, Tamerlane or Cromwell? Somebody said that it must undoubtedly be Sir Isaac Newton. This man was certainly in the right; for if true greatness consists in having received from heaven the advantage of a superior genius, with the talent of applying it for the interest of the possessor and of mankind, a man like Newton—and such a one is hardly to be met with in ten centuries—is surely by much the greatest; and those statesmen and conquerors which no age has ever been without, are commonly but so many illustrious villains. It is the man who sways our minds by the prevalence of reason and the native force of truth, not they who reduce mankind to a state of slavery by brutish force and downright violence; the man who by the vigor of his mind, is able to penetrate into the hidden secrets of nature, and whose capacious soul can contain the vast frame of the universe, not those who lay nature waste, and desolate the face of the earth, that claims our reverence and admiration.

Therefore, as you are desirous to be informed of the great men that England has produced, I shall begin with the Bacons, the Lockes, and the Newtons. The generals and ministers will come after them in their turn.

I must begin with the celebrated baron Verulam, known to the rest of Europe by the name of Bacon, who was the son of a certain keeper of the seals, and was for a considerable time chancellor under James I. Notwithstanding the intrigues and bustle of a court, and the occupations incident to his office, which would have required his whole attention, he found means to become a great philosopher, a good historian, and an elegant writer; and what is yet more wonderful is that he lived in an age where the art of writing was totally unknown, and where sound philosophy was still less so. This personage, as is the way among mankind, was more valued after his death than while he lived. His enemies were courtiers residing at London, while his admirers consisted wholly of foreigners....

The most singular, as well as the most excellent, of all his works, is that which is now the least read, and which is at the same time the most useful; I mean his “*Novum Scientiarum Organum*.” This is the scaffold by means of which the edifice of the new philosophy has been reared; so that when the building was completed, the scaffold was no longer of any use. Chancellor Bacon was still unacquainted with nature, but he perfectly knew, and pointed out extraordinarily well, all the paths which lead to her recesses. He had very early despised what those square-capped fools teach in those dungeons called *Colleges*, under the name of philosophy, and did everything in his power that those bodies, instituted for the cultivation and perfection of the human understanding, might cease any longer to mar it, by their “quiddities,” their “horrors of a vacuum,” their “substantial forms,” with the rest of that jargon which ignorance and a nonsensical jumble of religion had consecrated.

This great man is the father of experimental philosophy. It is true, wonderful discoveries had been made even before his time; the mariner’s compass, the art of printing, that of engraving, the art of painting in oil, that of making glass, with the remarkably advantageous invention of restoring in some measure sight to the blind; that is, to old men, by means of spectacles; the secret of making gunpowder had, also, been discovered. They had gone in search of, discovered, and conquered a new world in another hemisphere. Who would not have thought that these sublime discoveries had been made by the greatest philosophers, and in times much more enlightened than ours? By no means; for all these astonishing revolutions happened in the ages of scholastic barbarity. Chance alone has brought forth almost all these inventions; it is even pretended that chance has had a great share in the discovery of America; at least, it has been believed that Christopher Columbus undertook this voyage on the faith of a captain of a ship who had been cast by a storm on one of the

Caribbee islands. **Be this as it will, men had learned to penetrate to the utmost limits of the habitable globe, and to destroy the most impregnable cities with an artificial thunder, much more terrible than the real; but they were still ignorant of the circulation of the blood, the weight and pressure of the air, the laws of motion, the doctrine of light and color, the number of the planets in our system, etc...**

The most wonderful and useful inventions are by no means those which do most honor to the human mind. And it is to a certain mechanical instinct, which exists in almost every man, that we owe far the greater part of the arts, and in no manner whatever to philosophy. The discovery of fire, the arts of making bread, of melting and working metals, of building houses, the invention of the shuttle, are infinitely more useful than printing and the compass; notwithstanding, all these were invented by men who were still in a state of barbarity. What astonishing things have the Greeks and Romans... done in mechanics? Yet men believed, in their time, that the heavens were of crystal, and the stars were so many small lamps, that sometimes fell into the sea; and one of their greatest philosophers, after many researches, had at length discovered that the stars were so many pebbles, that had flown off like sparks from the earth.

In a word, there was not a man who had any idea of experimental philosophy before Chancellor Bacon; and of an infinity of experiments which have been made since his time, there is hardly a single one which has not been pointed out in his book. He had even made a good number of them himself. He constructed several pneumatic machines, by which he discovered the elasticity of the air; he had long brooded over the discovery of its weight, and was even at times very near to catching it, when it was laid hold of by Torricelli. A short time after, experimental physics began to be cultivated in almost all parts of Europe. This was a hidden treasure, of which Bacon had some glimmerings, and which all the philosophers whom his promises had encouraged made their utmost efforts to lay open. We see in his book mention made in express terms of that new attraction of which Newton passes for the inventor. "We must inquire," said Bacon, "whether there be not a certain magnetic force, which operates reciprocally between the earth and other heavy bodies, between the moon and the ocean, between the planets, etc." In another place he says: "Either heavy bodies are impelled toward the centre of the earth, or they are mutually attracted by it; in this latter case it is evident that the nearer falling bodies approach the earth, the more forcibly are they attracted by it. We must try," continues he, "whether the same pendulum clock goes faster on the top of a mountain, or at the bottom of a mine. If the force of the weight diminishes on the mountain, and increases in the mine, it is probable the earth has a real attracting quality."

This precursor in philosophy was also an elegant writer, a historian, and a wit. His moral essays are in high estimation, though they seem rather calculated to instruct than to please; and as they are neither a satire on human nature... nor a school of skepticism... His life of Henry VII passed for a masterpiece....

Document 4.5

Immanuel Kant, "What is Enlightenment?"

Source: <http://www.columbia.edu/acis/ets/CCREAD/etscc/kant.html>

Enlightenment is man's emergence from his self-imposed nonage. Nonage is the inability to use one's own understanding without another's guidance. This nonage is self-imposed if its cause lies not in lack of understanding but in indecision and lack of courage to use one's own mind without another's guidance. *Dare to know! (Sapere aude.)* "Have the courage to use your own understanding," is therefore the motto of the enlightenment.

Laziness and cowardice are the reasons why such a large part of mankind gladly remain minors all their lives, long after nature has freed them from external guidance. They are the reasons why it is so easy for others to set themselves up as guardians. It is so comfortable to be a minor. If I have a book that thinks for me, a pastor who acts as my conscience, a physician who prescribes my diet, and so on--then I have no need to exert myself. I have no need to think, if only I can pay; others will take care of that disagreeable business for me. Those guardians who have kindly taken supervision upon themselves see to it that the overwhelming majority of mankind--among them the entire fair sex--should consider the step to maturity, not only as hard, but as extremely dangerous. First, these guardians make their domestic cattle stupid and carefully prevent the docile creatures from taking a single step without the leading-strings to which they have fastened them. Then they show them the danger that would threaten them if they should try to walk by themselves. Now this danger is really not very great; after stumbling a few times they would, at last, learn to walk. However, examples of such failures intimidate and generally discourage all further attempts.

Thus it is very difficult for the individual to work himself out of the nonage which has become almost second nature to him. He has even grown to like it, and is at first really incapable of using his own understanding because he has never been permitted to try it. Dogmas and formulas, these mechanical tools designed for reasonable use--or rather abuse--of his natural gifts, are the fetters of an everlasting nonage. The man who casts them off would make an uncertain leap over the narrowest ditch, because he is not used to such free movement. That is why there are only a few men who walk firmly, and who have emerged from nonage by cultivating their own minds.

It is more nearly possible, however, for the public to enlighten itself; indeed, if it is only given freedom, enlightenment is almost inevitable. There will always be a few independent thinkers, even among the self-appointed guardians of the multitude. Once such men have thrown off the yoke of nonage, they will spread about them the spirit of a reasonable appreciation of man's value and of his duty to think for himself. It is especially to be noted that the public which was earlier brought under the yoke by these men afterwards forces these very guardians to remain in submission, if it is so incited by some of its guardians who are themselves incapable of any enlightenment. That shows how pernicious it is to implant prejudices: they will eventually revenge themselves upon their authors or their authors' descendants. Therefore, a public can achieve enlightenment only slowly. A revolution may bring about the end of a personal despotism or of avaricious tyrannical oppression, but never a true reform of modes of thought. New prejudices will serve, in place of the old, as guide lines for the unthinking multitude.

This enlightenment requires nothing but *freedom*--and the most innocent of all that may be called "freedom": freedom to make public use of one's reason in all matters. Now I hear the cry from all sides: "Do not argue!" The officer says: "Do not argue--drill!" The tax collector: "Do not argue--pay!" The pastor: "Do not argue--believe!" Only one ruler in the world says: "Argue as much as you please, but obey!" We find restrictions on freedom everywhere. But which restriction is harmful to enlightenment? Which restriction is innocent, and which advances enlightenment? I reply: the public use of one's reason must be free at all times, and this alone can bring enlightenment to mankind....

A man may postpone his own enlightenment, but only for a limited period of time. And to give up enlightenment altogether, either for oneself or one's descendants, is to violate and to trample upon the sacred rights of man....

When we ask, "Are we now living in an enlightened age?" The answer is, "No, but we live in an age of enlightenment." As matters now stand it is still far from true that men are already capable of using their own reason in religious matters confidently and correctly without external guidance. Still, we have some obvious indications that the field of working toward the goal [of religious truth] is now opened. What is more, the hindrances against general enlightenment or the emergence from self-imposed nonage are gradually diminishing. In this respect this is the age of the enlightenment and the century of Frederick [the Great].

A prince ought not to deem it beneath his dignity to state that he considers it his duty not to dictate anything to his subjects in religious matters, but to leave them complete freedom... [Frederick's Prussia] is a shining example that freedom need not cause the least worry concerning public order or the unity of the community. When one does not deliberately attempt to keep men in barbarism, they will gradually work out of that condition by themselves.

I have emphasized the main point of the enlightenment--man's emergence from his self-imposed nonage--primarily in religious matters, because our rulers have no interest in playing the guardian to their subjects in the arts and sciences. Above all, nonage in religion is not only the most harmful but the most dishonorable. But the disposition of a sovereign ruler who favors freedom in the arts and sciences goes even further: he knows that there is no danger in permitting his subjects to make public use of their reason and to publish their ideas concerning a better constitution, as well as candid criticism of existing basic laws. We already have a striking example [of such freedom], and no monarch can match the one whom we venerate.

But only the man who is himself enlightened, who is not afraid of shadows, and who commands at the same time a well disciplined and numerous army as guarantor of public peace--only he can say what [the sovereign of] a free state cannot dare to say: "Argue as much as you like, and about what you like, but obey!" Thus we observe here as elsewhere in human affairs, in which almost everything is paradoxical, a surprising and unexpected course of events: a large degree of civic freedom appears to be of advantage to the intellectual freedom of the people, yet at the same time it establishes insurmountable barriers. A lesser degree of civic freedom, however, creates room to let that free spirit expand to the limits of its capacity. Nature, then, has carefully cultivated the seed within the hard core--namely the urge for and the vocation of free thought. And this free thought gradually reacts back on the modes of thought of the people, and men become more and more capable of acting in freedom. At last free thought acts even on the fundamentals of government and the state finds it agreeable to treat man, who is now more than a machine, in accord with his dignity.

Document 4.7

From Montesquieu, *The Spirit of the Laws*

Modern History Sourcebook: <http://www.fordham.edu/halsall/mod/montesquieu-spirit.asp>

BACKGROUND: *Charles de Secondat, Baron de Montesquieu (1689-1755), was a nobleman, a judge in a French court, and one of the most influential political thinkers. Based on his research he developed a number of political theories presented in The Spirit of the Laws (1748).*

This treatise presented numerous theories - among the most important was respect for the role of history and climate in shaping a nation's political structure.

In every government there are three sorts of power; the **legislative**; the **executive**, in respect to things dependent on the law of nations; and the **judicial**, in regard to things that depend on the civil law.

By virtue of the first, the prince or magistrate enacts temporary or perpetual laws, and amends or abrogates those that have been already enacted. By the second, he makes peace or war, sends or receives embassies; establishes the public security, and provides against invasions. By the third, he punishes criminals, or determines the disputes that arise between individuals. The latter we shall call the judiciary power, and the other simply the executive power of the state.

The political liberty of the subject is a tranquility of mind, arising from the opinion each person has of his safety. In order to have this liberty, it is requisite the government be so constituted as one man need not be afraid of another.

When the legislative and executive powers are united in the same person, or in the same body of magistrates, there can be no liberty; because apprehensions may arise, lest the same monarch or senate should enact tyrannical laws, to execute them in a tyrannical manner.

Again, there is no liberty, if the power of judging be not separated from the legislative and executive powers. Were it joined with the legislative, the life and liberty of the subject would be exposed to arbitrary control, for the judge would then be the legislator. Were it joined to the executive power, the judge might behave with all the violence of an oppressor.

There would be an end of everything were the same man, or the same body, whether of the nobles or of the people to exercise those three powers that of enacting laws, that of executing the public resolutions, and that of judging the crimes or differences of individuals.

Most kingdoms in Europe enjoy a **moderate government**, because the prince, who is invested with the two first powers, leaves the third to his subjects. In Turkey [Ottoman Empire], where these three powers are united in the sultan's person the subjects groan under the weight of a most frightful oppression.

In the republics of Italy, where these three powers are united, there is less liberty than in our monarchies. Hence their government is obliged to have recourse to as violent methods for its support, as even that of the Turks witness the state inquisitors, and the lion's mouth into which every informer may at all hours throw his written accusations.

What a situation must the poor subject be in, under those republics! The same body of magistrates are possessed, as executors of the laws, of the whole power they have given themselves in quality of legislators. They may plunder the state by their general determinations; and as they have likewise the judiciary power in their hands, every private citizen may be ruined by their particular decisions.

The whole power is here united in one body; and though there is no external pomp that indicates a despotic sway, yet the people feel the effects of it every moment.

Hence it is that many of the princes of Europe, whose aim has been leveled at arbitrary power, have constantly set out with uniting in their own persons, all the branches of magistracy, and all the great offices of state.

The executive power ought to be in the hands of a monarch; because this branch of government, which has always need of expedition, is better administered by one than by many: Whereas, whatever depends on the legislative power, is oftentimes better regulated by many than by a single person.

But if there was no monarch, and the executive power was committed to a certain number of persons selected from the legislative body, there would be an end then of liberty; by reason the two powers would be united, as the same persons would actually sometimes have, and would moreover be always able to have, a share in both.

Were the legislative body to be a considerable time without meeting, this would likewise put an end to liberty. For one of these two things would naturally follow; either that there would be no longer any legislative resolutions, and then the state would fall into anarchy; or that these resolutions would be taken by the executive power, which would render it absolute.

It would be needless for the legislative body to continue always assembled. This would be troublesome to the representatives, and moreover would cut out too much work for the executive power, so as to take off its attention from executing, and oblige it to think only of defending its own prerogatives, and the right it has to execute....

Were the executive power not to have a right of putting a stop to the encroachments of the legislative body, the latter would become despotic; for as it might arrogate to itself what authority it pleased, it would soon destroy all the other powers.

But it is not proper, on the other hand, that the legislative power should have a right to stop the executive. For as the execution has its natural limits, it is useless to confine it; besides, the executive power is generally employed in momentary operations. The power therefore of the Roman tribunes was faulty, as it put a stop not only to the legislation, but likewise to the execution itself; which was attended with infinite mischiefs.

But if the legislative power in a free government ought to have no right to stop the executive, it has a right, and ought to have the means of examining in what manner its laws have been executed; an advantage which this government has over that of... Sparta, where the... Ephors gave no account of their administration.

But whatever may be the issue of that examination, the legislative body ought not to have a power of judging the person, nor of course the conduct of him who is entrusted with the executive power. His person should be sacred, because as it is necessary for the good of the state to prevent the legislative body from rendering themselves arbitrary, the moment he is accused or tried, there is an end of liberty....

Whoever shall read the admirable treatise of [Tacitus](#) on the manners of the Germans, will find that it is from them the English have borrowed the idea of their political government. This beautiful system was invented first in the woods.

As all human things have an end, the state we are speaking of will lose its liberty, it will perish. Have not Rome, Sparta, and Carthage perished? It will perish when the legislative power shall be more corrupted than the executive...

From Montesquieu, *The Spirit of the Laws*, vol. 1, trans. Thomas Nugent (London: J. Nourse, 1777), pp. 221-237, passim.

Document 4.8

From Rousseau, *The Social Contract*

Modern History Sourcebook: <http://www.fordham.edu/halsall/mod/rousseau-soccon.asp>

BACKGROUND: Jean-Jacques Rousseau stresses, like John Locke, the idea of a social contract as the basis of society. Locke's version emphasised a contract between the governors and the governed: Rousseau's was in a way much more profound - the social contract was between all members of society, and essentially replaced "natural" rights as the basis for human claims.

ORIGIN AND TERMS OF THE SOCIAL CONTRACT

Man was born free, but everywhere he is in chains. This man believes that he is the master of others, and still he is more of a slave than they are. How did that transformation take place? I don't know. **How may the restraints on man become legitimate?** I do believe I can answer that question....

At a point in the state of nature when the obstacles to human preservation have become greater than each individual with his own strength can cope with . . . , an adequate combination of forces must be the result of men coming together. Still, each man's power and freedom are his main means of self-preservation. How is he to put them under the control of others without damaging himself . . . ?

This question might be rephrased: "How is a method of associating to be found which will defend and protect-using the power of all-the person and property of each member and still enable each member of the group to obey only himself and to remain as free as before?" This is the fundamental problem; the social contract offers a solution to it.

The very scope of the action dictates the terms of this contract and renders the least modification of them inadmissible, something making them null and void. Thus, although perhaps they have never been stated in so many words, they are the same everywhere and tacitly conceded and recognized everywhere. And so it follows that each individual immediately recovers his primitive rights and natural liberties whenever any violation of the social contract occurs and thereby loses the contractual freedom for which he renounced them.

The social contract's terms, when they are well understood, can be reduced to a single stipulation: the individual member alienates himself totally to the whole community together with all his rights. This is first because conditions will be the same for everyone when each individual gives himself totally, and secondly, because no one will be tempted to make that condition of shared equality worse for other men....

Once this multitude is united this way into a body, an offense against one of its members is an offense against the body politic. It would be even less possible to injure the body without its members feeling it. Duty and interest thus equally require the two contracting parties to aid each other mutually. The individual people should be motivated from their double roles as individuals and members of the body, to combine all the advantages which mutual aid offers them....

INDIVIDUAL WILLS AND THE GENERAL WILL

In reality, each individual may have one particular will as a man that is different from-or contrary to-the general will which he has as a citizen. His own particular interest may suggest other things to him than the common interest does. His separate, naturally independent existence may make him imagine that what he owes to the common cause is an incidental contribution - a contribution which will cost him more to give than their failure to receive it would harm the others. He may also regard the moral person of the State as an imaginary being since it is not a man, and wish to enjoy the rights of a citizen without performing the duties of a subject. This unjust attitude could cause the ruin of the body politic if it became widespread enough.

So that the social pact will not become meaningless words, it tacitly includes this commitment, which alone gives power to the others: **Whoever refuses to obey the general will shall be forced to obey it by the whole body politic, which means nothing else but that he will be forced to be free.** This condition is indeed the one which by dedicating each citizen to the fatherland gives him a guarantee against being personally dependent on other individuals. It is the condition which all political machinery depends on and which alone makes political undertakings legitimate. Without it, political actions become absurd, tyrannical, and subject to the most outrageous abuses.

Whatever benefits he had in the state of nature but lost in the civil state, a man gains more than enough new ones to make up for them. His capabilities are put to good use and developed; his ideas are enriched, his sentiments made more noble, and his soul elevated to the extent that-if the abuses in this new condition did not often degrade him to a condition lower than the one he left behind-he would have to keep blessing this happy moment which snatched him away from his previous state and which made an intelligent being and a man out of a stupid and very limited animal....

INDIVISIBLE, INALIENABLE SOVEREIGNTY

The first and most important conclusion from the principles we have established thus far is that the general will alone may direct the forces of the State to achieve the goal for which it was founded, the common good.... Sovereignty is indivisible ... and is inalienable.... A will is general or it is not: it is that of the whole body of the people or only of one faction...

Our political theorists, however, unable to divide the source of sovereignty, divide sovereignty into the ways it is applied. They divide it into force and will; into legislative power and executive power; into the power to tax, the judicial power, and the power to wage war; into internal administration and the power to negotiate with foreign countries. Now we see them running these powers together. Now they will proceed to separate them. They make the sovereign a being of fantasy, composed of separate pieces, which would be like putting a man together from several bodies, one having eyes, another arms, another feet-nothing more...

If we follow up in the same way on the other divisions mentioned, we find that we are deceived every time we believe we see sovereignty divided....

NEED FOR CITIZEN PARTICIPATION, NOT REPRESENTATION

It follows from the above that the general will is always in the right and inclines toward the public good, but it does not follow that the deliberations of the people always have the same rectitude. **People always desire what is good, but they do not always see what is good. You can never corrupt the people, but you can often fool them, and that is the only time that the people appear to will something bad....**

If, assuming that the people were sufficiently informed as they made decisions... the general will would always be resolved from a great number of small differences, and the deliberation would always be good. But when blocs are formed, associations of parts at the expense of the whole, the will of each of these associations will be general as far as its members are concerned but particular as far as the State is concerned. Then we may say that there are no longer so many voters as there are men present but as many as there are associations. The differences will become less numerous and will yield less general results. Finally, when one of these associations becomes so strong that it dominates the others, you no longer have the sum of minor differences as a result but rather one single [unresolved] difference, with the result that there no longer is a general will, and the view that prevails is nothing but one particular view....

It is agreed that everything which each individual gives up of his power, his goods, and his liberty under the social contract is only that part of all those things which is of use to the community, but it is also necessary to agree that the sovereign alone is the judge of what that useful part is....

Government... is wrongly confused with the sovereign, whose agent it is. What then is government? It is an intermediary body established between the subjects and the sovereign to keep them in touch with each other. It is charged with executing the laws and maintaining both civil and political liberty.... The only will dominating government ... should be the general will or the law. The government's power is only the public power vested in it. As soon as [government] attempts to let any act come from itself completely independently, it starts to lose its intermediary role. If the time should ever come when the [government] has a particular will of its own stronger than that of the sovereign and makes use of the public power which is in its hands to carry out its own particular will-when there are thus two sovereigns, one in law and one in fact-at that moment the social union will disappear and the body politic will be dissolved.

Once the public interest has ceased to be the principal concern of citizens, once they prefer to serve State with money rather than with their persons, the State will be approaching ruin....

Sovereignty cannot be represented.... Essentially, it consists of the general will, and a will is not represented: either we have it itself, or it is something else; there is no other possibility. The deputies of the people thus are not and cannot be its representatives. They are only the people's agents and are not able to come to final decisions at all. Any law that the people have not ratified in person is void, it is not a law at all.

SOVEREIGNTY AND CIVIL RELIGION

Now then, it is of importance to the State that each citizen should have a religion requiring his devotion to duty; however, the dogmas of that religion are of no interest to the State except as they relate to morality and to the duties which each believer is required to perform for others. For the rest of it, each person may have whatever opinions he pleases....

It follows that it is up to the sovereign to establish the articles of a purely civil faith, not exactly as dogmas of religion but as sentiments of social commitment without which it would be impossible to be either a good citizen or a faithful subject.... While the State has no power to oblige anyone to believe these articles, it may banish anyone who does not believe them. This banishment is not for impiety but for lack of social commitment, that is, for being incapable of sincerely loving the laws and justice or of sacrificing his life to duty in time of need. As for the person who conducts himself as if he does not believe them after having publicly stated his belief in these same dogmas, he deserves the death penalty. He has lied in the presence of the laws.

The dogmas of civil religion should be simple, few in number, and stated in precise words without interpretations or commentaries. These are the required dogmas: the existence of a powerful, intelligent Divinity, who does good, has foreknowledge of all, and provides for all; the life to come; the happy rewards of the just; the punishment of the wicked; and the sanctity of the social contract and the laws. As for prohibited articles of faith, I limit myself to one: intolerance. Intolerance characterizes the religious persuasions we have excluded.

From Jean Jacques Rousseau, *Contrat social ou Principes du droit politique* (Paris: Garnier Frères 1800), pp. 240-332, passim. Translated by Henry A. Myers.

Document 4.9

From Rousseau, *Emile or On Education*

Hanover Historical Texts Project: <http://history.hanover.edu/courses/excerpts/165rouss-em.html>

From BOOK FIVE

Man should not be alone. Emile is now a man. We have promised him a companion; we must give her to him. That companion is Sophie.

Sophie should be a woman as Emile is a man. That is to say, she should have everything that suits the constitution of her species and of her sex so as to take her place in the physical and moral order. Let us begin, therefore, by examining the similarities and differences between her sex and ours.

In all that does not relate to sex, woman is man. She has the same organs, the same needs, the same faculties. The machine is constructed in the same manner, the parts are the same, the workings of the one are the same as the other, and the appearance of the two is similar. From whatever aspect one considers them, they differ only by degree.

In the union of the sexes, each alike contributes to the common end but not in the same way. From this diversity springs the first difference which may be observed in the moral relations between the one and the other. The one should be active and strong, the other passive and weak. It is necessary that the one have the power and the will; it is enough that the other should offer little resistance.

Once this principle is established it follows that woman is specially made to please man. If man ought to please her in turn, the necessity is less urgent. His merit is in his power; he pleases because he is strong. This is not the law of love, I admit, but it is the law of nature, which is older than love itself....

If woman is made to please and to be subjected, she ought to make herself pleasing to man instead of provoking him. Her strength is in her charms; by their means she should compel him to discover his strength and to use it....

There is no parity between the two sexes when it comes to the consequence of sex. The male is only a male in certain instances; the female is female all her life or at least all her youth. Everything reminds her of her sex, and to fulfill well her functions she needs a constitution that relates to them. She needs care during pregnancy and rest when her child is born; she must have a quiet, sedentary life while she nurses her children; their education calls for patience and gentleness, for a zeal and affection which nothing can dismay. She serves as a liaison between them and their father; she alone can make him love them and give him the confidence to call them his own. What tenderness and care is required to maintain a whole family as a unit! **And finally all this must not come from virtues but from feelings without which the human species would soon be extinct.**

Once it is demonstrated that men and women neither are nor ought to be constituted the same, either in character or in temperament, it follows that they ought not to have the same education. . . . After having tried to form the natural man, in order not to leave our work incomplete let us see how to also to form the woman who suits this man.

Prevent young girls from getting bored with their tasks and infatuated with their amusements.... A little girl who is fond of her mother or her friend will work by her side all day without getting tired; the chatter alone will make up for any loss of liberty. But.... children who take no delight in their mother's company are not likely to turn out well.... They are flatterers and deceitful and soon learn to conceal their thoughts. Neither should they be told that they ought to love their mother. Affection is not the result of duty, and in this respect constraint is out of place. Continual attachment, constant care, habit itself, all these will lead a child to love her mother as long as the mother does nothing to deserve the child's hate. The very control she exercises over the child, if well directed, will increase rather than diminish the affection, for women being made for dependence, girls feel themselves made to obey.

For the same reason that they have, or ought to have, little freedom, they are apt to indulge themselves too fully with regard to such freedom as they do have. They carry everything to extremes, and they devote themselves to their games with an enthusiasm even greater than that of boys.... This enthusiasm must be kept in check, for it is the source of several vices commonly found among women -- caprice and that extravagant admiration which leads a woman to regard a thing with rapture to-day and to be quite indifferent to it to-morrow.... Do not leave them for a moment without restraint...

This habitual restraint produces a docility which woman requires all her life, for she will always be in subjection to a man, or to man's judgment, and she will never be free to set her own opinion above his. What is most wanted in a woman is gentleness. Formed to obey a creature so imperfect as man, a creature often vicious and always faulty, she should early learn to submit to injustice and to suffer the wrongs inflicted on her by her husband without complaint. She must be gentle for her own sake, not his. Bitterness and obstinacy only multiply the sufferings of the wife and the misdeeds of the husband; the man feels that these are not the weapons to be used against him. Heaven did not make women attractive and persuasive that they might degenerate into bitterness, or meek that they should desire the mastery; their soft voice was not meant for hard words, nor their delicate features for the frowns of anger. When they lose their temper they forget themselves. Often enough they have just cause of complaint; but when they scold they always put themselves in the wrong. Each should adopt the tone that befits his or her sex. A too gentle husband may make his wife impertinent, but unless a man is a monster, the gentleness of a woman will bring him around and sooner or later will win him over....

I would not altogether blame those who would restrict a woman to the labours of her sex and would leave her in profound ignorance of everything else. But that would require either a very simple, very healthy public morality or a very isolated life style. In large cities, among immoral men, such a woman would be too easily seduced. Her virtue would too often be at the mercy of circumstances. In this philosophic century, virtue must be able to be put to the test. She must know in advance what people might say to her and what she should think of it.

The search for abstract and speculative truths, for principles and axioms in science, for all that tends to wide generalization, is beyond a woman's grasp; their studies should be thoroughly practical. It is their business to apply the principles discovered by men, it is their place to make the observations which lead men to discover those principles... For the works of genius are beyond her reach, and she has neither the accuracy nor the attention for success in the exact sciences.... Woman has more wit, man more genius; woman observes, man reasons. Together they provide the clearest light and the profoundest knowledge which is possible to the unaided human mind -- in a word, the surest knowledge of self and of others of which the human race is capable. In this way art may constantly tend to the perfection of the instrument which nature has given us.