

On Education

by John Milton

I AM long since persuaded, that to say, or do aught worth memory and imitation, no purpose or respect 1 should sooner move us, than simply the love of God, and of mankind. Nevertheless to write now the reforming of education, though it be one of the greatest and noblest designs that can be thought on, and for the want whereof this nation perishes, I had not yet at this time been induced, but by your earnest entreaties, and serious conjurements; 2 as having my mind for the present half diverted in the pursuance of some other assertions, 3 the knowledge and the use of which, can not but be a great furtherance both to the enlargement of truth, and honest living, with much more peace. Nor should the laws of any private friendship have prevailed with me to divide thus, or transpose 4 my former thoughts, but that I see those aims, those actions which have won you with me the esteem 5 of a person sent hither by some good providence from a far country to be the occasion and the incitement of great good to this island. And, as I hear, you have obtained the same repute with men of most approved wisdom, and some of highest authority among us. Not to mention the learned correspondence which you hold in foreign parts, and the extraordinary pains and diligence which you have used in this matter both here, and beyond the seas; either by the definite will of God so ruling, or the peculiar sway of nature, which also is God's working. Neither can I think that so reputed, and so valued as you are, you would to the forfeit of your own discerning ability, impose upon me an unfit and over-ponderous argument, but that the satisfaction which you profess to have received from those incidental discourses which we have wandered into, hath pressed and almost constrained you into a persuasion, that what you require from me in this point, I neither ought, nor can in conscience defer beyond this time both of so much need at once, and so much opportunity to try what God hath determined. I will not resist therefore, whatever it is either of divine, or human obligation that you lay upon me; but will forthwith set down in writing, as you request me, that voluntary Idea, which hath long in silence presented itself to me, of a better education, in extent and comprehension far more

large, and yet of time far shorter, and of attainment far more certain, than hath been yet in practise.

Brief I shall endeavor to be; for that which I have to say, assuredly this nation hath extreme need should be done sooner than spoken. To tell you therefore what I have benefited herein among old renowned authors. I shall spare; and to search what many modern Januas 6 and Didactics 7 more than ever I shall read, have projected, my inclination leads me not. But if you can accept of these few observations which have flowered off, and are, as it were, the burnishing 8 of many studious and contemplative years altogether spent in the search of religious and civil knowledge, and such as pleased you so well in the relating, I here give you them to dispose of.

The end then of learning is to repair the ruins of our first parents by regaining to know God aright, and out of that knowledge to love him, to imitate him, to be like him, as we may the nearest by possessing our souls of true virtue, which being united to the heavenly grace of faith makes up the highest perfection. But because our understanding can not in this body found itself but on sensible 9 things, nor arrive so clearly to the knowledge of God and things invisible, as by orderly conning over the visible and inferior creature, the same method is necessarily to be followed in all discreet teaching. And seeing every nation affords not experience and tradition enough for all kind of learning, therefore we are chiefly taught the languages of those people who have at any time been most industrious after wisdom; so that language is but the instrument conveying to us things useful to be known. And though a linguist should pride himself to have all the tongues that Babel cleft the world into, yet if he have not studied the solid things in them as well as the words and lexicons, he were nothing so much to be esteemed a learned man, as any yoeman or tradesman competently wise in his mother dialect only. Hence appear the many mistakes which have made learning generally so unpleasing and so unsuccessful; first we do amiss to spend seven or eight years merely in scraping together so much miserable Latin and Greek, as might be learned other wise easily and delightfully in one year. And that which casts our proficiency therein so much behind, is our time lost partly in too oft idle vacancies 10 given both to schools and universities, partly in a preposterous 11 exaction, forcing the empty wits of children to compose themes, verses and orations,

which are the acts of ripest judgment and the final work of a head filled by long reading and observing, with elegant maxims, and copious invention. These are not matters to be wrung from poor striplings, like blood out of the nose, or the plucking of untimely fruit: besides the ill habit which they get of wretched barbarizing against the Latin and Greek idiom, with their untutored Anglicisms, odious to be read, yet not to be avoided without a well continued and judicious conversing ¹² among pure authors digested, which they scarce taste, whereas, if after some preparatory grounds of speech by their certain forms got into memory, they were led to the praxis ¹³ thereof in some chosen short books lessoned throughly to them, they might then forthwith proceed to learn the substance of good things, and arts in due order, which would bring the whole language quickly into their power. This I take to be the most rational and most profitable way of learning languages, and whereby we may best hope to give account to God of our youth spent herein: and for the usual method of teaching arts, I deem it to be an old error of universities not yet well recovered from the scholastic grossness of barbarous ages, that instead of beginning with arts most easy, and those be such as are most obvious to the sense, they present their young unmatriculated novices at first coming with the most intellective ¹⁴ abstractions of logic and metaphysics; so that they having but newly left those grammatic flats and shallows where they stuck unreasonably to learn a few words with lamentable construction, and now on the sudden transported under another climate to be tossed and turmoiled with their unballasted wits in fathomless and unquiet deeps of controversy, do for the most part grow into hatred and contempt of learning, mocked and deluded all this while with ragged notions and babblements, while they expected worthy and delightful knowledge, till poverty or youthful years call them importunately their several ways, and hasten them with the sway ¹⁵ of friends either to an ambitious and mercenary, or ignorantly zealous divinity; some allured to the trade of law, grounding their purposes not on the prudent and heavenly contemplation of justice and equity which was never taught them, but on the promising and pleasing thoughts of litigious terms, fat contentions and flowing fees; others betake them to State affairs, with souls so unprincipled in virtue and true generous breeding, that flattery, and court shifts ¹⁶ and tyrannous aphorisms appear to them the highest points of wisdom; instilling their barren hearts with a conscientious slavery, ¹⁷ if, as I rather think, it be not feigned. Others lastly of a more delicious and airy spirit, ¹⁸ retire themselves knowing no better, to

the enjoyments of ease and luxury, living out their days in feast and jollity; which indeed is the wisest and the safest course of all these, unless they were with more integrity undertaken. And these are the fruits of misspending our prime youth at the schools and universities as we do, either in learning mere words or such things chiefly, as were better unlearned.

I shall detain you no longer in the demonstration of what we should not do, but straight conduct ye to a hill side where I will point ye out the right path of a virtuous and noble education; laborious indeed at the first ascent, but else so smooth, so green, so full of goodly prospect, and melodious sounds on every side, that the harp of Orpheus 19 was not more charming. I doubt not but ye shall have more ado to drive our dullest and laziest youth, our stocks and stubs from the infinite desire of such a happy nurture, than we have not to hale and drag our choicest and hopefulest wits to that asinine feast of sowthistles and brambles which is commonly set before them, as all the food and entertainment of their tenderest and most docible 20 age. I call therefore a complete and generous education that which fits a man to perform justly, skilfully and magnanimously all the offices both private and public, of peace and war. And how all this may be done between twelve, and one and twenty, less time than is now bestowed in pure trifling at grammar and sophistry, is to be thus ordered.

First to find out a spacious house and ground about it fit for an academy, and big enough to lodge a hundred and fifty persons, whereof twenty or thereabout may be attendants, all under the government of one, who shall be thought of desert sufficient, and ability either to do all, or wisely to direct, and oversee it done. This place should be at once both school and university, not heeding a remove to any other house of scholarship, except it be some peculiar College of Law, or Physic, where they mean to be practitioners; but as for those general studies which take up all our time from Lilly 21 to the commencing, 22 as they term it, Master of Art, it should be absolute. After this pattern, as many Edifices may be converted to this use, as shall be needful in every city throughout this land, which would tend much to the increase of learning and civility everywhere. This number, less or more thus collected, to the convenience of a foot company, or interchangeably two troops of cavalry, should divide their day's work into three parts, as it lies orderly. Their studies, their exercise, and their diet.

For the studies, first they should begin with the chief and necessary rules of some good grammar, either that now used, or any better: and while this is doing, their speech is to be fashioned to a distinct and clear pronunciation, as near as may be to the Italian, especially in the vowels. For we Englishmen being far northerly, do not open our mouths in the cold air, wide enough to grace a southern tongue; but are observed by all other nations to speak exceeding close and inward: So that to smatter Latin with an English mouth, is as ill a hearing as Law-French. Next to make them expert in the usefulest points of grammar, and withal to season 23 them, and win them early to the love of virtue and true labor, ere any flattering seducement, or vain principle seize them wandering, some easy and delightful book of education would be read to them; whereof the Greeks have store, as Cebes, 24 Plutarch, 25 and other Socratic discourses. But in Latin we have none of classic authority extant, except the two or three first books of Quintilian, 26 and some select pieces elsewhere. But here the main skill and groundwork will be, to temper 27 them such lectures and explanations upon every opportunity as may lead and draw them in willing obedience, inflamed with the study of learning, and the admiration of virtue; stirred up with high hopes of living to be brave men, and worthy patriots, dear to God, and famous to all ages. That they may despise and scorn all their childish, and ill-taught qualities, to delight in manly, and liberal exercises: which he who hath the art, and proper eloquence to catch them with, what with mild and effectual persuasions, and what with the intimation of some fear, if need be, but chiefly by his own example, might in a short space gain them to an incredible diligence and courage: infusing into their young breasts such an ingenuous and noble ardor, as would not fail to make many of them renowned and matchless men. At the same time, some other hour of the day, might be taught them the rules of arithmetic, and soon after the elements of geometry even playing, as the old manner was. After evening repast, till bed-time their thoughts will be best taken up in the easy grounds of religion, and the story of Scripture. The next step would be to the authors on agriculture, Cato, Varro, and Columella, for the matter is most easy, and if the language be difficult, so much the better, it is not a difficulty above their years. And here will be an occasion of inciting and enabling them hereafter to improve the tillage of their country, to recover the bad soil, and to remedy the waste that is made of good; for this was one of Hercules' praises. Ere half these authors be read (which will soon be with plying 28 hard, and daily) they can not choose but be

masters of any ordinary prose. 29 So that it will be then seasonable for them to learn in any modern author, the use of the globes, and all the maps; first with the old names, and then with the new: or they might be then capable to read any compendious method of natural philosophy. And at the same time might be entering into the Greek tongue, after the same manner as was before prescribed in the Latin: whereby the difficulties of grammar being soon overcome, all the historical physiology of Aristotle and Theophrastus 30 are open before them, and as I may say, under contribution. The like access will be to Vitruvius, 31 to Seneca's natural questions, 32 to Mela, 33 Celsus, 34 Pliny, 35 or Solinus. 36. And having thus passed the principles of arithmetic, geometry, astronomy, and geography with a general compact of physics, they may descend in mathematics to the instrumental science of trigonometry and from thence to fortification, architecture, engineering, or navigation. And in natural philosophy they may proceed leisurely from the history of meteors, minerals, plants and living creatures as far as anatomy. Then also in course might be read to them out of some not tedious writer the institution of physic; that they may know the tempers, 37 the humors, the seasons, and how to manage a crudity; 38 which he who can wisely and timely do, is not only a great physician to himself, and to his friends, but also may at some time or other, save an army by this frugal and expenseless means only; and not let the healthy and stout bodies of young men rot away under him for want of this discipline; which is a great pity, and no less a shame to the commander. To set forward all these proceedings in nature and mathematics, what hinders, but that they may procure, as often as shall be needful, the helpful experiences of hunters, fowlers, fisherman, shepherds, gardeners, apothecaries; and in the other sciences, architects, engineers, mariners, anatomists; who doubtless would be ready some for reward, and some to favor such a hopeful seminary. And this will give them such a real tincture of natural knowledge, as they shall never forget, but daily augment with delight. Then also those poets which are now counted most hard, will be both facile and pleasant, Orpheus, Hesiod, Theocritus, Aratus, Nicander, Oppian, Dionysius, and in Latin Lucretius, Manilius, and the rural part of Virgil.

By this time, years and good general precepts will have furnished them more distinctly with that act of reason which in ethics is called proairesis 39 that they may with some judgment contemplate upon moral good and evil. Then will be required a special reenforcement of constant and sound indoctrinating to set them

right and firm, instructing them more amply in the knowledge of virtue and the hatred of vice: while their young and pliant affections are led through all the moral works of Plato, Xenophon, Cicero, Plutarch, Laertius 40 and those Locrian remnants; 41 but still to be reduced 42 in their nightward studies wherewith they close the day's work, under the determinate 43 sentence of David or Solomon, or the evanges 44 and apostolic scriptures. Being perfect in the knowledge of personal duty, they may then begin the study of economics. And either now, or before this, they may have easily learned at any odd hour the Italian tongue. And soon after, but with wariness and good antidote, it would be wholesome enough to let them taste some choice comedies, Greek, Latin, or Italian: Those tragedies also that treat of household matters, as Trachiniæ, 45 Alcestis 46 and the like. The next remove must be to the study of politics; to know the beginning, end, and reasons of political societies; that they may not in a dangerous fit of the commonwealth be such poor, shaken, uncertain reeds, of such a tottering conscience, as many of our great counselors have lately shown themselves, but steadfast pillars of the state. After this they are to dive into the ground of law and legal justice; delivered first, and with best warrant by Moses; and as far as human prudence can be trusted, in those extolled remains of Grecian lawgivers, Lycurgus, Solon, Zaleucus, Charondas, 47 and thence to all the Roman edicts and tables with their Justinian; and so down to the Saxon and common laws of England, and the statutes. Sundays also and every evening may be now understandingly spent in the highest matters of theology, and church history ancient and modern: and ere this time the Hebrew tongue at a set hour might have been gained, that the Scriptures may be now read in their own original; whereto it would be no impossibility to add the Chaldey, 48 and the Syrian 49 dialect. When all these employments are well conquered, then will the choice histories, heroic poems, and Attic tragedies of stateliest and most regal argument, with all the famous political orations offer themselves; which if they were not only read; but some of them got by memory, and solemnly pronounced with right accent, and grace, as might be taught, would endow them even with the spirit and vigor of Demosthenes, or Cicero, Euripides, or Sophocles. And now lastly will be the time to read with them those organic 50 arts which enable men to discourse and write perspicuously, elegantly, and according to the fitted style of lofty, mean or lowly. Logic therefore so much as is useful, is to be referred to this due place with all her well couched 51 heads and topics, until to be time to open her contracted

palm into a graceful and ornate rhetoric taught out of the rule of Plato, Aristotle, Phalereus, Cicero, Hermogenes, Longinus. To which poetry would be made subsequent, or indeed rather precedent, as being less subtle and fine, but more simple, sensuous and passionate. I mean not here the prosody of a verse, which they could not have hit on before among the rudiments of grammar; but that sublime art which in Aristotle's Poetics, in Horace, and the Italian commentaries of Castelvetro, Tasso, Mazzoni, and others, teaches what the laws are of a true epic poem, what of a dramatic, what of a lyric, what decorum is, which is the grand masterpiece to observe. This would make them soon perceive what despicable creatures our common rimers and playwrights be, and show them, what religious, what glorious and magnificent use might be made of poetry both in divine and human things. From hence and not till now will be the right season of forming them to be able writers and composers in every excellent matter, when they shall be thus fraught with an universal insight into things. Or whether they be to speak in Parliament or council, honor and attention would be waiting on their lips. There would then also appear in pulpits other visages, other gestures, and stuff otherwise wrought than what we now sit under, oftentimes to as great a trial of our patience as any other that they preach to us. These are the studies wherein our noble and our gentle youth ought to bestow their time in a disciplinary way from twelve to one and twenty; unless they rely more upon their ancestors dead, than upon themselves living. In which methodical course it is so supposed they must proceed by the steady pace of learning onward, as at convenient times for memories' sake to retire back into the middle ward, 52 and sometimes into the rear of what they have been taught, until they have confirmed, and solidly united the whole body of their perfected knowledge, like the last embattling of a Roman legion. Now will be worth the seeing what exercises and recreations may best agree, and become these studies.

The course of study hitherto briefly described, is, what I can guess by reading, likest to those ancient and famous schools of Pythagoras, Plato, Isocrates, Aristotle and such others, out of which were bred up such a number of renowned philosophers, orators, historians, poets and princes all over Greece, Italy, and Asia, besides the flourishing studies of Cyrene and Alexandria. But herein it shall exceed them, and supply a defect as great as that which Plato noted in the commonwealth of Sparta, whereas that city trained up their youth most for war, and these in their Academies and Lycæum, all for the gown, 53 this institution of breeding which I

here delineate, shall be equally good both for peace and war. Therefore about an hour and a half ere they eat at noon should be allowed them for exercise and due rest afterward: but the time for this may be enlarged at pleasure, according as their rising in the morning shall be early. The exercise which I commend first, is the exact use of their weapon, to guard and to strike safely with edge, or point; this will keep them healthy, nimble, strong, and well in breath, is also the likeliest means to make them grow large and tall, and to inspire them with a gallant and fearless courage, which being tempered with seasonable lectures and precepts to them of true fortitude and patience, will turn into a native and heroic valor, and make them hate the cowardice of doing wrong. They must be also practised in all the locks and grips of wrestling, wherein Englishmen were wont to excel, as need may often be in fight to tug or grapple, and to close. And this perhaps will be enough, wherein to prove and heat their single strength. The interim of unsweating 54 themselves regularly, and convenient rest before meat may both with profit and delight be taken up in recreating and composing their travailed 55 spirits with the solemn and divine harmonies of music heard or learned; either while the skilful organist plies his grave and fancied descant, in lofty fugues, or the whole symphony with artful and unimaginable touches adorn and grace the well studied chords of some choice composer, sometimes the lute, or soft organ stop waiting on elegant voices either to religious, martial, or civil ditties; which if wise men and prophets be not extremely out, 56 have a great power over dispositions and manners, to smooth and make them gentle from rustic harshness and distempered passions. The like also would not be unexpedient after meat to assist and cherish Nature in her first concoction, 57 and send their minds back to study in good tune and satisfaction. Where having followed it closer under vigilant eyes till about two hours before supper, they are by a sudden alarum or watchword, to be called out to their military motions, under sky or covert, according to the season, as was the Roman wont: first on foot, then as their age permits, on horseback, to all the art of cavalry; that having in sport, but with much exactness, and daily muster, served out the rudiments of their soldiership in all the skill of embattling, marching, encamping, fortifying, besieging and battering, with all the helps of ancient and modern stratagems, tactics and warlike maxims, they may as it were out of a long war come forth renowned and perfect commanders in the service of their country. They would not then, if they were trusted with fair and hopeful armies, suffer them for want of

just and wise discipline to shed away from about them like sick feathers, though they never so oft supplied: they would not suffer their empty and unrecrutable 58 colonels of twenty men in a company to quaff out, 59 or convey, 60 into secret hoards, the wages of a delusive list, and a miserable remnant: yet in the meanwhile to be overmastered with a score or two of drunkards, the only soldiery left about them, or else to comply with all rapines and violences. No certainly, if they knew aught of that knowledge that belongs to good men or good governors, they would not suffer these things. But to return to our own institute, besides these constant exercises at home, there is another opportunity of gaining experience to be won from pleasure itself abroad; in those vernal seasons of the year, when the air is calm and pleasant, it were an injury and sullenness against nature not to go out, and see her riches, and partake in her rejoicing with heaven and earth. I should not therefore be a persuader to them of studying much then, after two or three years that they have well laid their grounds, but to ride out in companies with prudent and staid guides, to all the quarters of the land: learning and observing all places of strength, all commodities 61 of building and of soil, for towns and tillage, harbors and ports for trade. Sometimes taking sea as far as to our navy, to learn there also what they can in the practical knowledge of sailing and of sea-fight. These ways would try all their peculiar gifts of nature, and if there were any secret excellence among them, would fetch it out, and give it fair opportunities to advance itself by, which could not but mightily redound to the good of this nation, and bring into fashion again those old admired virtues and excellencies, with far more advantage now in this purity of Christian knowledge. Nor shall we then need the monsieurs of Paris, to take our hopeful youth into their slight 62 and prodigal custodies and send them over back again transformed into mimics, apes, and kickshaws. But if they desire to see other countries at three or four and twenty years of age, not to learn principles but to enlarge experience, and make wise observation, they will by that time be such as shall deserve the regard and honor of all men where they pass, and the society and friendship of those in all places who are best and most eminent. And perhaps then other nations will be glad to visit us for their breeding, or else to imitate us in their own country.

Now lastly for their diet there can not be much to say, save only that it would be best in the same house; for much time else would be lost abroad, and many ill habits got; and that it should be plain, healthful, and moderate I suppose is out of

controversy. Thus Mr. Hartlib, you have a general view in writing, as your desire was, of that which at several times I had discoursed with you concerning the best and noblest way of education; not beginning as some have done from the cradle, which yet might be worth many considerations, if brevity had not been my scope, many other circumstances also I could have mentioned, but this to such as have the worth in them to make trial, for light and direction may be enough. Only I believe that this is not a bow for every man to shoot in that counts himself a teacher; but will require sinews almost equal to those which Homer gave Ulysses, yet I am withal persuaded that it may prove much more easy in the assay, 63 than it now seems at distance, and much more illustrious: howbeit not more difficult than I imagine, and that imagination presents me with nothing but very happy and very possible according to best wishes; if God have so decreed, and this age have spirit and capacity enough to apprehend.