

acid 0.19, sugar 2.10, albuminoids 1.86, fat 1.78, salts 0.509, carbonic acid 0.177, and water 93.46. A distilled spirit is prepared from koumiss, which is drunk among the Tartars under the name of araca or arsa. Koumiss has of late years come into prominent notice as a remedial agent in cases of pulmonary consumption, and generally as a nutritious form of food easily assimilated by delicate stomachs. It is probable that all its virtues reside in the original milk from which it is prepared, in which case the koumiss can only be regarded as valuable in so far that it is a convenient form under which the essential properties of the milk can be preserved for use. Under the name of koumiss a preparation of cow's milk is now very generally sold. It is made by adding to each quart of new milk about a tablespoonful of common sugar and brewer's yeast, allowing the fermentation to proceed a sufficient length, then bottling and corking as in the case of aerated waters. Such a preparation contains about the same proportion of alcohol as genuine koumiss, but a non-alcoholic variety can also be obtained, made by a process of natural fermentation, which continuing after bottling develops a large amount of carbonic acid and renders the liquor highly effervescent. (J. P. A.)

MILL, JAMES (1773-1836), historian and political and mental philosopher, was born 6th April 1773, in the little village called Northwater Bridge (Bridge of North Esk), in the parish of Logie-Pert, in the county of Forfar. His father, James Mill, was a shoemaker; his mother, Isabel Fenton, belonged to a race of respectable farmers. The father was industrious, good-natured, and pious, but not known as specially intelligent. The mother was of a proud disposition, and resolved to educate James, her eldest son, for a superior destiny. He began his education at the parish school, and went on to the Montrose Academy, where he remained till the unusual age of seventeen and a half, when he went to the college of Edinburgh (1790). According to the usage of the time and neighbourhood, he ought to have been sent about thirteen or fourteen to Marischal College, Aberdeen. His remaining so long at the Montrose Academy, and his going to Edinburgh for his university course, must be connected with his being taken up by Sir John and Lady Jane Stuart of Fettercairn, who engaged him to be tutor to their only daughter, known for having inspired the affection of Sir Walter Scott, and for being the mother of Principal James David Forbes. Sir John and Lady Jane Stuart contracted a warm attachment for Mill, which lasted throughout their lives. At Edinburgh University Mill was distinguished as a Greek scholar. But he received his greatest impulse from Dugald Stewart, for whom he always expressed unbounded admiration. In October 1798 he was licensed as a preacher, but seems to have preached very seldom. His years from 1790 to 1802, besides being occupied with incessant studies extending into history and moral and political philosophy, were devoted to various tutorships.

Failing to find a career to his mind in Scotland, in 1802 he went to London in company with Sir John Stuart, then member of parliament for Kincardineshire. He soon obtained literary occupation, to which he applied himself with untiring energy. His first important venture was to start a periodical on a new plan, entitled *The Literary Journal*, which began to appear in January 1803, and continued under his editorship till the end of 1806. It was the most comprehensive in its aims of any periodical hitherto in existence, being a summary view of all the leading departments of human knowledge. Thomas Thomson, the chemist, took charge of science; and many other men of ability co-operated. Mill himself wrote largely in biography, history, political philosophy, political economy, and also in theology, on which his views at the time were broad without being sceptical. The publisher of the journal was Baldwin, who was also the proprietor of the *St James's Chronicle*, a Conservative paper appearing three times a week. For two or three years, from 1805 onwards, Mill was editor, but at last gave it up, partly on conscientious grounds, although in conducting

it he never lent himself to the expression of any illiberal views, but often made it the vehicle of the opposite.

In 1804 he wrote a pamphlet on the *Corn Trade*, advocating the impolicy of a bounty on the exportation of grain. This was the beginning of his career as a political economist. In 1805 he published a translation of Villers's work on the *Reformation*, an unsparing exposure of the vices of the papal system. He added notes and quotations by way of confirmation of the author's views. On this subject also he continued to hold strong opinions all through life, and often recurred to it in his articles in the reviews. In 1805 he married Harriet Burrow, whose mother, a widow, kept an establishment for lunatics in Hoxton. He then took a house in Rodney Street, Pentonville, where his eldest son, John Stuart, was born in 1806. It was about the end of 1806 that he entered upon the composition of the *History of India*, which he expected to finish in three or four years. He was actually engaged upon it for twelve, giving, however, a considerable portion of his time to other writing for the support of his family. The strain upon his energies for those years was enormous.

He became acquainted with Jeremy Bentham in 1808, and was for many years Bentham's chief companion and ally. In 1810 Bentham, to have Mill nearer him, gave him Milton's house, which adjoined his own, and was his property. After a few months' trial Mill had to give up this house on account of his wife's health, and went to live in Newington Green; but in 1814 Bentham leased the house No. 1 Queen's Square, now 40 Queen Anne's Gate, close to his own garden, and gave it to Mill at a reduced rent; here he remained till 1831. The intimacy with Bentham was rendered still closer. For four years, from 1814 to 1817, Bentham was at Ford Abbey, near Chard, in Somersetshire, and there Mill and his family were domesticated with him nine or ten months each year,—in which retirement it is probable that Mill was able to accelerate the completion of his history.

In the twelve years between 1806 and 1818 he wrote a great many articles for various periodicals. Among these were the *Anti-Jacobin Review*, the *British Review*, and the *Eclectic Review*; but there is no means of tracing his contributions. In 1808 he began to write for the *Edinburgh Review*, and contributed steadily till 1813, most of his articles being known. In the *Annual Review* for 1808 two articles of his are traced—a "Review of Fox's History," and an article on "Bentham's Law Reforms," probably his first published notice of Bentham. The first known article in the *Edinburgh* was on "Money and Exchange" (October 1808). In 1809 (January and July) he wrote at great length on Spanish America and General Miranda, with whom he was on terms of intimate friendship. In the July number he also wrote on China. In 1810 (April) he made a severe attack on the East India Company. He also wrote on the liberty of the press and on the Church of England in connexion with the Lancastrian schools. He was an active member of the committee for promoting education on Lancaster's plan. In 1811 a periodical named the *Philanthropist* was started by William Allen, and published in quarterly numbers till 1817. Mill co-operated with Allen both in the writing and in the management. He contributed largely to every number,—his principal topics being education, freedom of the press, and prison discipline (under which he expounded Bentham's "Panopticon"). He made powerful onslaughts on the church in connexion with the Bell and Lancaster controversy. In 1814 Macvey Napier engaged him to contribute to the supplement to the fifth edition of the *Encyclopædia Briannica*. Many of the articles became notable. The list included "Government," "Jurisprudence," "Liberty of the Press," "Prisons and Prison Discipline," "Colony,"

"Law of Nations," "Education," "Beggar," "Benefit Societies," "Banks for Savings." In "Jurisprudence" and "Prisons" he was largely indebted to Bentham; in most of the others he was either altogether or in great part original. The article on "Government" will occupy a permanent position in English history.

In 1818 was published the *History of India*, which had a great and speedy success. It was the means of changing the author's future position. The year following he was appointed an official in the India House, in the important department of the examiner of Indian correspondence. He gradually rose in rank till he was appointed, in 1830, head of the office. He introduced his eldest son into the same department in 1823.

In 1824 Bentham projected the *Westminster Review*, and Mill was a principal writer for three years. Some of his most vigorous writings are included among those contributions. The first was an elaborate criticism of the *Edinburgh Review* as a whole; it was followed by an onslaught on the *Quarterly*. Other articles dealt with English history and with ecclesiastical establishments, which he severely impugned. To a periodical of short duration, *The Parliamentary History and Review*, he contributed an elaborate political retrospect of the parliament of 1820-26. In 1829 appeared the *Analysis of the Human Mind*. From 1831 to 1833 he was largely occupied in the defence of the East India Company during the controversy attending the renewal of its charter, he being in virtue of his office the spokesman of the court of directors. In 1834 Sir William Molesworth projected the *London Review*, and Mill contributed to it during the last two years of his life. His most notable article was one entitled "The Church and its Reform," which was much too sceptical for the time, and injured the *Review*. His last published book was the *Fragment on Mackintosh*, which appeared in 1835. He died on the 23d June 1836.

A considerable space would be required to do justice to Mill's character—intellectual and moral—as shown both in his writings and in his intensely active and influential career. He was an excellent scholar, in the sense of knowing the Greek and Roman classics. His other accomplishments included general history, the philosophy of politics in the most comprehensive acceptation, logic, ethics, and mental philosophy. The type of his intellect was logical in the highest degree; he was, above all things, clear and precise, an enemy of every form of looseness of reasoning, and a crusher of prevailing fallacies. This is the most notable feature in his writings throughout. His was also an original mind. Except in a few subjects, which had been so well elaborated by Bentham that he was content to be little more than an expounder of Bentham's views, he gave a fresh turn to whatever topic he took up. At a time when social subjects were subjected almost exclusively to an empirical handling, he insisted on bringing first principles to bear at every point; in this lay both his strength and his weakness.

His greatest literary monument is the *History of India*. The materials for narrating the acquisition by England of its Indian empire were put into shape for the first time; a vast body of political theory was brought to bear on the delineation of the Hindu civilization; and the conduct of the actors in the successive stages of the conquest and administration of India was subjected to a severe criticism. The work itself, and the author's official connexion with India for the last seventeen years of his life, effected a complete change in the whole system of governing that country.

Mill played a great part as a politician and political philosopher in English affairs as well. He was, more than any other man, the founder of what was called philosophical radicalism. His writings on government and his personal influence among the Liberal politicians of his time determined the change of view from the French Revolution theories of the rights of man and the absolute equality of men to the claiming of securities for good government through a great extension of the electoral suffrage. Under this banner it was that the Reform Bill was fought and won.

His work on *Political Economy* was intended as a text-book of the subject, and shows all the author's precision and lucidity. It followed up the views of Ricardo, with whom Mill was in habitual intimacy. It urged strongly the modern application of the principle of population, and started the doctrine of taxing land for the unearned increment of value.

By his *Analysis of the Mind* and his *Fragment on Mackintosh*

Mill acquired a position in the history of psychology and ethics. Attached to the *a posteriori* school, he vindicated its claims with conspicuous ability. He took up the problems of mind very much after the fashion of the Scotch school, as then represented by Reid, Stewart, and Brown, but made a new start, due in part to Hartley, and still more to his own independent thinking. He carried out the principle of association into the analysis of the complex emotional states, as the affections, the æsthetic emotions, and the moral sentiment, all which he endeavoured to resolve into pleasurable and painful sensations. But the salient merit of the *Analysis* is the constant endeavour after precise definition of terms and clear statement of doctrines. The *Fragment on Mackintosh* is a severe exposure of the flimsiness and misrepresentations of Mackintosh's famous dissertation on ethical philosophy. It discusses, in a very thorough way, the foundations of ethics from the author's point of view of utility.

Mill's influence on the young men of his time by his conversation has been especially celebrated. Among those that came under this influence were some of the greatest names in the generation that succeeded him. He had himself a very high ideal of public virtue, which he carried out, at the risk of sacrificing all his chances of worldly advancement, and he impressed this ideal on those that surrounded him,—most of all on his own son, who has since eclipsed his father in fame, if not in genius.

See J. S. Mill's *Autobiography*, Bain's *Life of James Mill*, G. S. Bower's *Hartley and James Mill*. (A. B. *)

MILL, JOHN (c. 1645-1707), editor of an historically important critical edition of the New Testament, was born about 1645 at Shap in Westmoreland, entered Queen's College, Oxford, as a servitor in 1661, and took his master's degree in 1669. Soon afterwards he was chosen fellow and tutor of his college; in 1676 he became chaplain to the bishop of Oxford, and in 1681 he obtained the rectory of Blechingdon, Oxfordshire, and was made chaplain to Charles II. From 1685 till his death he held the appointment of principal of St Edmund's Hall; and in 1704 he was nominated by Queen Anne to a prebendal stall in Canterbury. He died on June 23, 1707, just a fortnight after the publication of his Greek Testament.

Mill's *Novum Testamentum Græcum, cum lectionibus variantibus MSS. Exemplarium, Versionum, Editionum SS. Patrum et Scriptorum Ecclesiasticorum, et in eisdem notis* (Oxford, fol. 1707), was undertaken by the advice and encouragement of Fell, his predecessor in the field of New Testament criticism; it represents the labour of thirty years, and is admitted to mark a great advance on all that had previously been achieved. The text indeed is that of E. Stephanus (1550), but the notes, besides embodying all previously existing collections of various readings, add a vast number derived from his own examination of many new MSS. and Oriental versions (the latter unfortunately he used only in the Latin translations). He was the first to notice, though only incidentally, the value of the concurrence of the Latin evidence with the Codex Alexandrinus, the only representative of an ancient non-Western Greek text then sufficiently known; this hint was not lost on Bentley (see Westcott and Hort, *Introduction to New Testament*). Mill's various readings, numbering about thirty thousand, were attacked by Whitty in his *Examen* as destroying the validity of the text; Antony Collins also argued in the same sense though with a different object. The latter called forth a reply from Bentley (*Philoleutherus Lipsiensis*). In 1710 Kuster reprinted Mill's Testament at Amsterdam with the readings of twelve additional MSS.

MILL, JOHN STUART (1806-1873), son of JAMES MILL (q.v.), was born in London on the 20th May 1806. His education was from first to last undertaken by his father, and is likely long to remain a standing subject for wonder and discussion. Much of the wonder is no doubt due to his father's monstrous inversion of custom, the boy being set almost as soon as he could speak to work at our time-honoured subjects of secondary and higher education. He was taught the Greek alphabet at the age of three, and one of his earliest recollections, as he has recorded in his autobiography, was learning lists of common Greek words with their English meanings, written for him by his father on cards. By his eighth year he had gone through in the original a great many Greek books. "Of grammar," he says, "until some years later, I learnt no more than the inflexions of the nouns and verbs, but after a course of vocables proceeded at once to translation; and I faintly

remember going through *Æsop's Fables*, the first Greek book which I read. The *Anabasis*, which I remember better, was the second. I learnt no Latin until my eighth year. At that time I had read under my father's tuition a number of Greek prose authors, among whom I remember the whole of Herodotus and of Xenophon's *Cyropædia* and *Memorials of Socrates*, some of the lives of the philosophers by Diogenes Laertius, part of Lucian, and Isocrates *Ad Demonicum* and *Ad Nicoclem*. I also read, in 1813, the first six dialogues (in the common arrangement) of Plato, from the *Euthyphron* to the *Theætetus* inclusive." Besides all these Greek books, he had read a great deal of history in English—Robertson's histories, Hume, Gibbon, Watson's *Philip II. and III.*, Hooke's *Roman History*, Rollin's *Ancient History*, Langhorne's *Plutarch*, Burnet's *History of My Own Times*, thirty volumes of the *Annual Register*, Millar's *Historical View of the English Government*, Mosheim's *Ecclesiastical History*, M'Crie's *Knox*, and two histories of the Quakers.

That Mill "knew Greek" and "read Plato" before he was eight years old is often repeated, sometimes as an instance of amazing precocity, sometimes as an awful example of injudicious parental forcing. The astonishment that a child should have done so much at such an age is probably as little grounded in reason as was Mill's own opinion that any child might have done the same. It is forgotten that many thousands of persons have known Greek before the age of eight without a knowledge of the technicalities of Greek grammar. In presence of the fact that Mill was never distinguished for great memory of detail or richness of historical or literary allusion, it is a fair conclusion that the matter of his reading at this age was of as little service to him in after life as if he had read the trashiest of boy's own books. This is not to say that for educational purposes his early years were wasted as in his own and his father's opinion they generally are. But undoubtedly the main factor in Mill's education was not the literature put into his hands, but his constant intercourse with the active richly stored mind and strenuous character of his father. If any should be tempted to imitate the method, they should bear in mind that this was the cardinal element of it. The tutor was of more importance than the books. The reading of Plato's dialogues would have been only an exercise in rough translation if the boy had not had a Socrates with him in living communion. The child was a constant inmate of his father's study, and trotted by his side in his walks, giving from jottings on slips of paper as good an account as he could of what he had read. He thus learnt at an unusually early age by example, precept, and practice the habit of strenuous application to difficult work. The fact that Mill was taught thus early to take his chief pleasure in overcoming intellectual difficulties, and to realize the meaning of general terms, accounts for the singular and altogether unparalleled ease which he acquired in the treatment of political and social generalizations, not in barren abstract vagueness, but in close relation with facts. This on the intellectual side; and on the moral side the child was almost from the dawn of consciousness instructed to regard himself as consecrated to a life of labour for the public good; his ambition was kindled to follow in the footsteps of the great men of all ages, and at the same time the utmost care was taken to purify that ambition from unworthy motives.

A contemporary record of Mill's studies from eight to thirteen is published in Dr Bain's sketch of his life. It shows that the *Autobiography* rather understates than overstates the amount of work done. At the age of eight he began Latin, Euclid, and algebra, and was appointed schoolmaster to the younger children of the family a

post, he hints, more serviceable to his intellect than to his manners. His main reading was still history, but he went through all the Latin and Greek authors commonly read in the schools and universities, besides several that are not commonly read by undergraduates. He was not taught to compose either in Latin or in Greek, and he was never an exact scholar in the academic sense; it was for the subject-matter that he was required to read, and by the age of ten he could read Plato and Demosthenes with ease. His father's *History of India* was published in 1818; immediately thereafter, about the age of twelve, John, under his energetic direction, began a thorough study of the scholastic logic, at the same time reading Aristotle's logical treatises in the original. In the following year he was introduced to political economy. And there, when the pupil was nearly fourteen, this remarkable education terminated. From that time he worked less immediately under his father's eye. It was an inevitable incident of such an education that Mill should acquire many of his father's speculative opinions, and his father's way of defending them. But his mind did not receive the impress passively and mechanically. "One of the grand objects of education," according to the elder Mill, "should be to generate a constant and anxious concern about evidence"; and he laboured with all the energy of his strong will against allowing his son to become a parrot of his own opinions and arguments. The duty of collecting and weighing evidence for himself was at every turn impressed upon the boy; he was taught to accept no opinion upon authority; he was soundly rated if he could not give a reason for his beliefs. John Stuart Mill was deliberately educated as an apostle, but it was as an apostle of reasoned truth in human affairs, not as an apostle of any system of dogmatic tenets. It was purposely to prevent any falling off from this high moral standard till it should become part of his being that his father kept the boy so closely with himself. Much pity has been expressed over the dreary cheerless existence that the child must have led, cut off from all boyish amusements and companionship, working day after day on his father's treadmill; but a childhood and boyhood spent in the daily enlargement of knowledge, with the continual satisfaction of difficulties conquered, buoyed up by day-dreams of emulating the greatest of human benefactors, need not have been an unhappy childhood, and Mill expressly says that his was not unhappy. It seems unhappy only when we compare it with the desires of childhood left more to itself, and when we decline to imagine its peculiar enjoyments and aspirations. Mill complains that his father often required more than could reasonably be expected of him, but his tasks were not so severe as to prevent him from growing up a healthy, hardy, and high-spirited boy, though he was not constitutionally robust, and his tastes and pursuits were so different from those of other boys of the same age.

Most of Mill's fifteenth year was spent in France in the family of Sir Samuel Bentham. Away from his father, he maintained his laborious habits; the discipline held. Copious extracts from a diary kept by him at this time are given by Dr Bain, and show how methodically and incessantly he read and wrote, studied botany, tackled advanced mathematical problems, made notes on the scenery and the people and customs of the country. On his return in 1821 he continued his old studies with the addition of some new ones. One of the new studies was Roman law, which he read with John Austin, his father having half decided on the bar as the best profession open to him. Another was psychology. In 1823, when he had just completed his seventeenth year, the notion of the bar as a livelihood was abandoned, and he entered as a clerk in the examiner's office of the India House, "with the under-

standing that he should be employed from the beginning in preparing drafts of despatches, and be thus trained up as a successor to those who then filled the highest departments of the office."

Mill's work at the India House, which was henceforth his livelihood, did not come before the public, and those who have scouted his political writings as the work of an abstract philosopher, entirely unacquainted with affairs, have ignored the nature of his duties. From the first he was more than a clerk, and after a short apprenticeship he was promoted, in 1828, to the responsible position of assistant-examiner. The duty of the so-called examiners was to examine the letters of the agents of the Company in India, and to draft instructions in reply. The character of the Company's government was almost entirely dependent upon their abilities as statesmen. For twenty years, from 1836 to 1856, Mill had charge of the Company's relations with the native states. In the hundreds of despatches that he wrote in this capacity, much, no doubt, was done in accordance with established routine, but few statesmen of his generation had a wider experience of the responsible application of principles of government to actual emergencies. That he said so little about this work in the *Autobiography* was probably because his main concern there was to expound the influences that affected his moral and mental development. A man of different temperament might have found abundance of dramatic interest in watching the personal and political changes in so many distinct states. But Mill makes no reminiscences of this kind, nor does he give any clue to the results of his own initiative.

To return to his extra-official activity, which received an immense impulse about the time of his entering the India House from what must strike a man of the world as a strange source. The reading of Dumont's exposition of Bentham's doctrines in the *Traité de Législation* was an epoch in Mill's life. It awoke in him an ambition as enthusiastic and impassioned as a young man's first love. The language that he uses about it in his autobiography reveals a warmth of inner life that few people would suspect from the record of his dry studies. When he laid down the last volume, he says, he had become a different being. It gave unity to the detached and fragmentary component parts of his knowledge and beliefs. "I now had opinions—a creed, a doctrine, a philosophy—in one among the best senses of the word, a religion, the inculcation and diffusion of which could be made the principal outward purpose of a life. And I had a grand conception laid before me of changes to be effected in the condition of mankind through that doctrine." He had been carefully bred to contemplate work for human welfare as the ruling motive of his life; that motive had now received definite direction.

Many a youth has entered the world with ambition equally high, but few have felt as Mill felt the first shock of despair, and fewer still have rallied from that despair with such indomitable resolution. The main secret of the great "crisis" of his youthful life is probably to be found in the lofty ardour of the aspirations then conceived and shaped. For four years he worked with faith and hope in his mission, and these were years of incessant propagandist activity. The enthusiast of seventeen, burning to reorganize human affairs so as to secure the greatest happiness of the greatest number, set siege to the public mind through several approaches. He constituted a few of his youthful friends, imbued with the principles of his new creed, into a society which he called the "Utilitarian" Society, taking the word, as he tells us, from one of Galt's novels. Two newspapers were open to him—the *Traveller*, edited by a friend of Bentham's, and the *Chronicle*, edited by his father's friend Black. One of his first efforts was a solid

argument for freedom of discussion, in a series of letters to the *Chronicle* apropos of the prosecution of Richard Carlile. But he watched all public incidents with a vigilant eye, and seized every passing opportunity of exposing departures from sound principle in parliament and courts of justice. Another outlet was opened up for him in 1824 by the starting of the *Westminster Review*, and still another in the following year in the *Parliamentary History and Review*. This year also he found a congenial occupation in editing Bentham's *Rationale of Judicial Evidence*. Into this he threw himself with zeal. And all the time, his mind full of public questions, he discussed and argued eagerly with the many men of promise and distinction who came to his father's house. He engaged in set discussions at a reading society formed at Grote's house in 1825, and in set debates at a Speculative Society formed in the same year.

"A very disquisitive youth," was Peacock's description of young Mill at this period, and this was probably how the enthusiast struck most of his outside acquaintances. But the glow of a great ambition as well as the energy of a piercing intellect might have been felt in his writings. His mission was none the less arduous that he proposed to convert the world by reason. Only the fullness of unbroken hope could have supported his powers, if he had had a frame of iron, under the strain of such incessant labour. All of a sudden, a misgiving which he compares to the Methodist's "first conviction of sin" made a rift in the wholeness of his faith in his mission. "It was in the autumn of 1826. I was in a dull state of nerves, such as everybody is occasionally liable to; unsusceptible to enjoyment or pleasurable excitement; one of those moods when what is pleasure at other times becomes insipid or indifferent. . . . In this frame of mind it occurred to me to put the question directly to myself, 'Suppose that all your objects in life were realized, that all the changes in institutions and opinions which you are now looking forward to could be completely effected at this very instant, would this be a great joy and happiness to you?' And an irrepressible self-consciousness distinctly answered, 'No!' At this my heart sank within me; the whole foundation on which my life was constructed fell down. All my happiness was to have been found in the continual pursuit of this end. The end had ceased to charm, and how could there ever again be any interest in the means? I seemed to have nothing left to live for."

The passage in his autobiography in which Mill gives an account of this prostrating disenchantment and his gradual release from its benumbing spell is one of the most interesting chapters in personal history. The first break in the gloom came, he tells us, from his reading in Marmontel's *Mémoires* "the passage which relates his father's death, the distressed position of the family, and the sudden inspiration by which he, then a mere boy, felt and made them feel that he would be everything to them—would supply the place of all that they had lost." Mill was moved to tears by the narrative, and his burden grew lighter at the thought that all feeling was not dead within him, that he was not a mere intellectual machine. This incident, and the delight that he now began to take in Wordsworth's "Poems founded on the Affections," gives a clue to one of the secrets of Mill's despondency. It was an unsatisfied longing for personal affection, for love and friendship, of which his life hitherto had been barren. His father seems to have been reserved, and demonstrative even to the pitch of chilling sternness in his intercourse with his family; and among young Mill's comrades contempt of feeling was almost a watchword, because it is so often associated with mischievous prejudice and wrong conduct. Himself absorbed in abstract questions and pro-

jects of general philanthropy, he had been careless of winning or keeping personal attachment. But it was not till despair first seized him, as he looked back at the poverty of the results of his work as an apostle, that Mill began to feel the void in his affections and the need of human sympathy. We must remember how little when his ambition was formed he knew of the living world around him. He knew in terms that political and social change must be slow; he could whisper patience to himself, and say to himself that his life must be happy because the attainment of his great object must occupy the whole of it; but without experience he could not have been prepared for the actual slowness of the reformer's work, or armed against its terribly oppressive influence. Inevitably he underrated the stolidity and strength of the forces arrayed against him. Four years seems a long time at that age. In 1826 Mill could look back to four years of eager toil. What were the results? He had become convinced that his comrades in the Utilitarian Society, who never numbered more than ten, had not the stuff in them for a world-shaking propaganda; the society itself was dissolved; the *Parliamentary Review* was a failure; the *Westminster* did not pay its expenses; Bentham's *Judicial Evidence* produced little effect on the reviewers. His own reception at the Speculative Debating Society, where he first measured his strength in public conflict, was calculated to produce self-distrust. He found himself looked upon with curiosity as a precocious phenomenon, a "made man," an intellectual machine set to grind certain tunes. The most clear and cogent reasoning failed to sway his audience. Great things had been expected of this society as a means of bringing together for close discussion the leading young men then in public life or looking forward to it. Its first session proved a fiasco. The leaders that had been expected stayed away. With these repulses to his hopes along the whole line of his activity, Mill must also have suffered from the nervous exhaustion that only the hope and heat of the fight had kept him from feeling before. No wonder that he was disheartened, began to feel defects in his father's training, to question and analyse his own faith, to yearn for the solace of personal affection, and to reconstitute his scheme of life.

That in spite of this rude shock the foundations laid by his early training remained stable appears from the facts that all through the period of his gloom he continued working as before, and that he considered himself bound, once convinced that his old plan of life was insufficient, to build up a thoroughly reasoned new plan wherewith to give new heart and hope to his work. The new system was much less different from the old than might be supposed from what he says of the struggle that it cost him to reach it. Regard for the public good was still his religion, the ruling motive that gave unity to his conduct. But he now recognized that this was too vague and insubstantial an object to be sufficient of itself for the satisfaction of a man's affections. It is a proof of the dominating force of his father's character that it cost the younger Mill such an effort to shake off his stern creed about poetry and personal emotion. Like Plato, the elder Mill would have put poets under ban as ministers of prejudice and enemies of truth. And he often insisted on the wisdom of restricting as much as possible the private affections, while expanding as much as possible the public affections. Landor's maxim of "few acquaintances, fewer friends, no familiarities" had his cordial approval. These doctrines the younger Mill at first took up with boyish enthusiasm and pedantry, but it was against this part of his father's creed that he now felt himself forced in reason to revolt. He stood too much in awe of his father to make him the confidant of his difficulties. He wrestled with them in

the gloomy solitude of his own mind. He was victorious; he reached firm ground at last; but the struggle left him in several respects changed. He carried out of the struggle as the fruits of victory a more catholic view of the elements of human happiness, a delight in the poetry of nature and the affections as well as the poetry of heroic unselfish character and action, a disposition to study more sympathetically the point of view of opponents, a more courteous style of polemic, a hatred of sectarianism, an ambition no less noble and disinterested but moderated to practical possibilities.

In the course of the next few years Mill wrote comparatively little, but he "carried on," as he says, "a quantity of thinking respecting a host of subjects." It was a period of search, deliberation, germination, and striking root. Coincident if not causally connected with the relief from his spiritual crisis came his first consciousness of power as "an original and independent thinker." In the dialectic conversations with a small band of students at Grote's house, he regained the self-confidence that had been shaken in the larger and rougher arena of the Speculative Debating Society. The beginning of his works on logic and political economy may be traced back to those discussions, and he learnt from them, he tells us, the habit of "never accepting half solutions of difficulties as complete; never abandoning a puzzle, but again and again returning to it until it was cleared up; never allowing obscure corners of a subject to remain unexplored, because they did not appear important; never thinking that he perfectly understood any part of a subject until he understood the whole." He learnt also an important moral lesson from the Speculative Society, besides learning the strong points of other political and social creeds and the weak points of Benthamism from defending it point by point against all comers. With all his despondency, he did not abandon the meetings of the society after the fiasco of the first session. He stood by it firmly, and in a short time had the triumph of seeing its debates famous enough to attract men with whom it was profitable for him to interchange opinions, among others Maurice and Sterling. He ceased to attend the society in 1829, but he carried away from it the strengthening memory of failure overcome by persevering effort, and the important doctrinal conviction that a true system of political philosophy was "something much more complex and many-sided than he had previously had any idea of, and that its office was to supply, not a set of model institutions, but principles from which the institutions suitable to any given circumstances might be deduced."

The first sketch of Mill's political philosophy appeared in a series of contributions to the *Examiner* in the autumn of 1830 on "Prospects in France." He was in Paris soon after the July Revolution, made the acquaintance of the leading spirits among the younger men; and in his discussion of what they were doing and what they should do in making a new constitution we find the germs of many thoughts afterwards more fully developed in his *Representative Government*.

The division of a man's life into periods must always be a rough partition, but we may conveniently and with tolerable accuracy take these letters as marking the close of his period of meditative search, of radication, and his return to hopeful aspiring activity. It was characteristic of the nature of the man that he should be stirred to such delight by the Revolution in France, and should labour so earnestly to make his countrymen understand with what gravity and sobriety it had been effected. Their own Reform Bill came soon after, and it is again characteristic of Mill—at once of his enthusiasm and of his steady determination to do for humanity the work that nobody else

seemed able or willing to do—that we find him in the heat of the struggle in 1831 writing to the *Examiner* a series of letters on "The Spirit of the Age" which drew from Carlyle the exclamation, "Here is a new mystic!" We can easily see now what it was in these remarkable essays that fascinated Carlyle; it was the pervading opinion that in every natural state of society power must be in the hands of the wisest. This was the condition of stability; when power and wisdom ceased to coincide, there was a disturbance of the equilibrium till this coincidence was again effected. But whether Carlyle was right in the epithet "mystic" may be judged from the fact that Mill's inductive logic was the direct result of his aspirations after political stability as determined by the dominion of the wisest. "Why is it," he asked, "that the multitude accept implicitly the decisions of the wisest, of the specially skilled, in physical science?" Because in physical science there is all but complete agreement in opinion. "And why this agreement?" Because all accept the same methods of investigation, the same tests of truth. Is it possible then to obtain unanimity as to the methods of arriving at conclusions in social and political matters, so as to secure similar agreement of opinion among the specially skilled, and similar general respect for their authority? The same thought appears in a review of Herschel's *Natural Philosophy*, written about the same time. Mill remarks that the uncertainty hanging over the very elements of moral and social philosophy proves that the means of arriving at the truth in those sciences are not yet properly understood. "And whither," he adds, "can mankind so advantageously turn, in order to learn the proper means, and to form their minds to the proper habits, as to that branch of knowledge in which by universal acknowledgment the greatest number of truths have been ascertained, and the greatest possible degree of certainty arrived at?"

By 1831 Mill's enthusiasm for humanity had been thoroughly reawakened, and had taken the definite shape of an aspiration to supply an unimpeachable method of search for conclusions in moral and social science. From the platform on which Carlyle and Mill met in 1831 they travelled different roads,—the one to preach the duty of obedience to the wisest, the other to search for a means by which wisdom might be acquired such as would command respect and win the assent of free conviction. No mystic ever worked with warmer zeal than Mill. But his zeal encountered a check which baffled him for several years, and which left its mark in various inconsistencies and incoherences in his completed system. He had been bred by his father in a great veneration for the syllogistic logic as an antidote against confused thinking. He attributed to his early discipline in this logic an impatience of vague language which in all likelihood was really fostered in him by his study of the Platonic dialogues and of Bentham, for he always had in himself more of Plato's fertile ingenuity in canvassing the meaning of vague terms than the schoolman's rigid consistency in the use of them. Be this as it may, enthusiastic as he was for a new logic that might give certainty to moral and social conclusions, Mill was no less resolute that the new logic should stand in no antagonism to the old. In his *Westminster* review of Whately's *Logic* in 1828 (invaluable to all students of the genesis of Mill's logic) he appears, curiously enough, as an ardent and brilliant champion of the syllogistic logic against highfliers such as the Scotch philosophers who talk of "superseding" it by "a supposed system of inductive logic." His inductive logic must "supplement and not supersede." It must be concatenated with the syllogistic logic, the two to be incorporated in one system. But for several years he searched in vain for the means of concatenation.

Meantime, while recurring again and again, as was his custom, to this cardinal difficulty, Mill worked indefatigably in other directions where he saw his way clear, expatiating over a wide range of political, social, economical, and philosophical questions. The working of the new order in France, and the personalities of the leading men, had a profound interest for him; he wrote on the subject in the *Examiner*. He had ceased to write for the *Westminster* in 1828; but during the years 1832 and 1833 he contributed many essays to *Tait's Magazine*, the *Jurist*, and the *Monthly Repository*. In 1835 the *London Review* was started, with Mill as editor; it was amalgamated with the *Westminster* in 1836, and Mill continued editor till 1840. Much of what he wrote then was subsequently incorporated in his systematic works; some of his essays were reprinted in his first two volumes of *Dissertations and Discussions* (1859). The essays on Bentham and Coleridge constituted the first manifesto of the new spirit which Mill sought to breathe into English Radicalism. But the reprinted papers give no just idea of the immense range of Mill's energy at this time. His position in the India Office, where alone he did work enough for most men, cut him off from entering parliament; but he laboured hard though ineffectually to influence the legislature from without by combating the disposition to rest and be thankful. In his *Autobiography* he admits that the attempt to form a Radical party in parliament at that time was chimerical.

It was in 1837, on reading Whewell's *Inductive Sciences* and re-reading Herschel, that Mill at last saw his way clear both to formulating the methods of scientific investigation and joining on the new logic as a supplement to the old. Epoch-making as his logic undoubtedly was, from the multitude of new views opened up, from the addition of a new wing to the rambling old building, and from the inspiring force with which every dusty chamber was searched into and illuminated, Mill did not escape all the innumerable pitfalls of language that beset the pioneer in such a subject. It is evident from a study of his purposes and the books from which he started that his worst perplexities were due to his determination to exhibit scientific method as the complement of scholastic logic. In his defence of the syllogism he confounds the syllogistic forms with deductive reasoning. Every deductive reasoning may be thrown into the form of a syllogism, but not every syllogism is deductive. The reasoning in several of the syllogistic forms is not deductive at all in the sense of involving a movement from general to particular. Although he knew Aristotle in the original, Mill did not recognize the fact that the syllogistic machinery was primarily constructed for the reasoning together of terms. As regards the word induction, Mill uses it in different connexions to cover three or four distinguishable meanings—induction viewed as the establishment of predications about a general term, induction viewed as inference from the known to the unknown, induction viewed as verification by experiment, and induction viewed as the proof of propositions of causation. The form of his system was really governed by the scholastic notion of induction as a means of establishing general propositions; the inductive part of his system is introduced after the deductive under this character; while the greater portion of the substance of what he treats of under the name of induction, and especially the so-called experimental methods, have nothing whatever to do with the establishment of general propositions, in the technical sense of general propositions.

But the permanent value and influence of Mill's inductive logic is not to be measured by technical inaccuracies and inconsistencies, to which an academic mind may easily attach undue importance. In the technical history of the science, Mill's *Logic* may be viewed as an attempt to fuse