THE

W O R K S

OF

SIR WILLIAM JONES.

IN SIX VOLUMES.

VOL. I.

LONDON:
PRINTED FOR G. G. AND J. ROBINSON, PATER-NOSTER-ROW;
AND R. H. EVANS (SUCCESSOR TO MR. EDWARDS), NO. 26, PALL-MALL.

MDCCXCIX.
THE TENTH

ANNIVERSARY DISCOURSE,

DELIVERED 28 FEBRUARY, 1793.

BY

THE PRESIDENT.

ON ASIATICK HISTORY, CIVIL AND NATURAL.

BEFORE our entrance, gentlemen, into the disquisition, promised at the close of my ninth annual discourse, on the particular advantages, which may be derived from our concurrent researches in Asia, it seems necessary to fix with precision the sense, in which we mean to speak of advantage or utility: now, as we have described the five Asiatick regions on their largest scale, and have expanded our conceptions in proportion to the magnitude of that wide field, we should use those words, which comprehend the fruit of all our inquiries, in their most extensive acceptation; including not only the solid conveniences and comforts of social life, but its elegances and innocent pleasures, and even the gratification of a natural and laudable curiosity; for, though labour be clearly the lot of man in this world, yet, in the midst of his most active exertions, he cannot but feel the substantial benefit of every liberal amusement,
ment, which may lull his passions to rest, and afford him a sort of re-
pose without the pain of total inaction, and the real usefulness of every
pursuit, which may enlarge and diversify his ideas, without interfering
with the principal objects of his civil station or economical duties; nor
should we wholly exclude even the trivial and worldly sense of utility,
which too many consider as merely synonymous with lucre, but should
reckon among useful objects those practical, and by no means illiberal,
arts, which may eventually conduce both to national and to private emo-
lument. With a view then to advantages thus explained, let us examine
every point in the whole circle of arts and sciences, according to the
received order of their dependence on the faculties of the mind, their
mutual connexion, and the different subjects, with which they are con-
versant: our inquiries indeed, of which Nature and Man are the primary
objects, must of course be chiefly Historical; but, since we propose to
investigate the actions of the several Asiatick nations, together with their
respective progress in science and art, we may arrange our investigations
under the same three heads, to which our European analysts have inge-
niously reduced all the branches of human knowledge; and my present
address to the Society shall be confined to history, civil and natural, or
the observation and remembrance of mere facts, independently of ratio-
cination, which belongs to philosophy, or of imitations and substi-
tutions, which are the province of art.

Were a superior created intelligence to delineate a map of general
knowledge (exclusively of that sublime and stupendous theology, which
himself could only hope humbly to know by an infinite approximation)
he would probably, begin by tracing with Newton the system of the uni-
verse, in which he would assign the true place to our little globe; and,
having enumerated its various inhabitants, contents, and productions,
would proceed to man in his natural station among animals, exhibiting
a detail of all the knowledge attained or attainable by the human race;
and thus observing, perhaps, the same order, in which he had before de-
scribed other beings in other inhabited worlds: but, though Bacon seems
to have had a similar reason for placing the history of Nature before that
of Man, or the whole before one of its parts, yet, consistently with our
chief object already mentioned, we may properly begin with the civil
history of the five Asiatick nations, which necessarily comprises their
Geography, or a description of the places, where they have acted, and
their astronomy, which may enable us to fix with some accuracy the
time of their actions: we shall thence be led to the history of such other
animals, of such minerals, and of such vegetables, as they may be supposed
to have found in their several migrations and settlements, and shall end
with the uses to which they have applied, or may apply, the rich assem-
blage of natural substances.

I. In the first place, we cannot surely deem it an inconsiderable ad-
vantage, that all our historical researches have confirmed the Mosaick
accounts of the primitive world; and our testimony on that subject ought
to have the greater weight, because, if the result of our observations had
been totally different, we should nevertheless have published them, not in-
deed with equal pleasure, but with equal confidence; for Truth is mighty,
and, whatever be its consequences, must always prevail: but, independently
of our interest in corroborating the multiplied evidences of revealed reli-
gerion, we could scarce gratify our minds with a more useful and rational
entertainment, than the contemplation of those wonderful revolutions in
kingdoms and states, which have happened within little more than
four thousand years; revolutions, almost as fully demonstrative of an all-
ruling Providence, as the structure of the universe and the final causes,
which are discernible in its whole extent and even in its minutest parts.
Figure to your imaginations a moving picture of that eventful period,
or rather a succession of crowded scenes rapidly changed. Three families
migrate in different courses from one region, and, in about four cen-

vol. i.  
y  
turies,
turies, establish very distant governments and various modes of society: Egyptians, Indians, Goths, Phenicians, Celts, Greeks, Latians, Chinese, Peruvians, Mexicans, all sprung from the same immediate stem, appear to start nearly at one time, and occupy at length those countries, to which they have given, or from which they have derived, their names: in twelve or thirteen hundred years more the Greeks overrun the land of their forefathers, invade India, conquer Egypt, and aim at universal dominion; but the Romans appropriate to themselves the whole empire of Greece, and carry their arms into Britain, of which they speak with haughty contempt: the Goths, in the fulness of time, break to pieces the unwieldy Colossus of Roman power, and seize on the whole of Britain, except its wild mountains; but even those wilds become subject to other invaders of the same Gotick lineage: during all these transactions, the Arabs possess both coasts of the Red Sea, subdue the old seat of their first progenitors, and extend their conquests on one side, through Africk, into Europe itself; on another, beyond the borders of India, part of which they annex to their flourishing empire: in the same interval the Tartars, widely diffused over the rest of the globe, swarm in the north-east, whence they rush to complete the reduction of Constantine's beautiful domains, to subjugate China, to raise in the Indian realms a dynasty splendid and powerful, and to ravage, like the two other families, the devoted regions of Iran: by this time the Mexicans and Peruvians, with many races of adventurers variously intermixed, have peopled the continent and isles of America, which the Spaniards, having restored their old government in Europe, discover and in part overcome: but a colony from Britain, of which Cicero ignorantly declared, that it contained nothing valuable, obtain the possession, and finally the sovereign dominion, of extensive American districts; whilst other British subjects acquire a subordinate empire in the finest provinces of India, which the victorious troops of Alexander were unwilling to attack. This outline of human transactions, as far as it includes the limits of
of Asia, we can only hope to fill up, to strengthen, and to colour, by the help of Asiatick literature; for in history, as in law, we must not follow streams, when we may investigate fountains, nor admit any secondary proof, where primary evidence is attainable: I should, nevertheless, make a bad return for your indulgent attention, were I to repeat a dry list of all the Muselman historians, whose works are preserved in Arabick, Persian, and Turkish, or expatiate on the histories and medals of China and Japan, which may in time be accessible to members of our Society, and from which alone we can expect information concerning the ancient state of the Tartars; but on the history of India, which we naturally consider as the centre of our enquiries, it may not be superfluous to present you with a few particular observations.

Our knowledge of civil Asiatick history (I always except that of the Hebrews) exhibits a short evening twilight in the venerable introduction to the first book of Moses, followed by a gloomy night, in which different watches are faintly discernible, and at length we see a dawn succeeded by a sunrife more or less early according to the diversity of regions. That no Hindu nation, but the Cashmirians, have left us regular histories in their ancient language, we must ever lament; but from Sanscrit literature, which our country has the honour of having unveiled, we may still collect some rays of historical truth, though time and a series of revolutions have obscured that light, which we might reasonably have expected from so diligent and ingenious a people. The numerous Purânas and Itihâsas, or poems mythological and heroick, are completely in our power; and from them we may recover some disfigured, but valuable, pictures of ancient manners and governments; while the popular tales of the Hindus, in prose and in verfe, contain fragments of history; and even in their dramas we may find as many real characters and events, as a future age might find in our own plays, if all histories of England were, like those of India, to be irrecoverably lost: for example,
example, a most beautiful poem by So'made'va, comprising a very long
chain of instructive and agreeable stories, begins with the famed revo-
lation at Pátaliputra by the murder of King Nanda, with his eight sons,
and the usurpation of Chandragupta; and the fame revolution is the
subject of a tragedy in Sanscrit, entitled the Coronation of Chandra, the
abbreviated name of that able and adventurous usurper. From these, once
concealed but now accessible, compositions, we are enabled to exhibit a
more accurate sketch of old Indian history than the world has yet seen,
especially with the aid of well-attested observations on the places of the
colures. It is now clearly proved, that the first Purána contains an ac-
count of the deluge, between which and the Mohammedan conquests the
history of genuine Hindu government must of course be comprehended;
but we know from an arrangement of the seasons in the astronomical
work of Para'sara, that the war of the Pándavas could not have hap-
pened earlier than the close of the twelfth century before Christ, and
Seleucus must, therefore, have reigned about nine centuries after that
war: now the age of Vicrama'ditya is given; and, if we can fix on an
Indian prince, contemporary with Seleucus, we shall have three given
points in the line of time between Rama, or the first Indian colony, and
Chandrabí'ja, the last Hindu monarch, who reigned in Bebár; so that
only eight hundred or a thousand years will remain almost wholly dark;
and they must have been employed in ruling empires or states, in fram-
ing laws, in improving languages and arts, and in observing the apparent
motions of the celestial bodies. A Sanscrit history of the celebrated Vi-
crama'ditya was inspected at Banares by a Pandit, who would not have
deceived me, and could not himself have been deceived; but the owner
of the book is dead and his family dispersed; nor have my friends in
that city been able, with all their exertions, to procure a copy of it:
as to the Mogul conquests, with which modern Indian history begins,
we have ample accounts of them in Persian, from Ali of Yezd and the
translations of Türkif books composed even by some of the conquerors,
to Ghulà'm Husain, whom many of us personally know, and whose impartiality deserves the highest applause, though his unrewarded merit will give no encouragement to other contemporary historians, who, to use his own phrase in a letter to myself, may, like him, consider plain truth as the beauty of historical composition. From all these materials, and from these alone, a perfect history of India (if a mere compilation, however elegant, could deserve such a title) might be collected by any studious man, who had a competent knowledge of Sanscrit, Persian, and Arabick; but, even in the work of a writer so qualified, we could only give absolute credence to the general outline; for, while the abstract sciences are all truth, and the fine arts all fiction, we cannot but own, that, in the details of history, truth and fiction are so blended as to be scarce distinguishable.

The practical use of history, in affording particular examples of civil and military wisdom, has been greatly exaggerated; but principles of action may certainly be collected from it; and even the narrative of wars and revolutions may serve as a lesson to nations and an admonition to sovereigns: a desire, indeed, of knowing past events, while the future cannot be known, and a view of the present gives often more pain than delight, seems natural to the human mind; and a happy propensity would it be, if every reader of history would open his eyes to some very important corollaries, which flow from the whole extent of it. He could not but remark the constant effect of despotism in benumbing and debasing all those faculties, which distinguish men from the herd, that grazes; and to that cause he would impute the decided inferiority of most Asiatick nations, ancient and modern, to those in Europe, who are blest with happier governments; he would see the Arabs rising to glory, while they adhered to the free maxims of their bold ancestors, and sinking to misery from the moment, when those maxims were abandoned. On the other hand he would observe with regret, that such republican governments
On Asiatick History,

governments as tend to produce virtue and happiness, cannot in their nature be permanent, but are generally succeeded by Oligarchies, which no good man would wish to be durable. He would then, like the king of Lydia, remember Solon, the wisest, bravest, and most accomplished of men, who affirms, in four nervous lines, that, "as hail and snow, which mar the labours of husbandmen, proceed from elevated clouds, and, as the destructive thunderbolt follows the brilliant flash, thus is a free state ruined by men exalted in power and splendid in wealth, while the people, from gross ignorance, chuse rather to become the flaves of one tyrant, that they may escape from the domination of many, than to preserve themselves from tyranny of any kind by their union and their virtues." Since, therefore, no unmixed form of government could both deserve permanence and enjoy it, and since changes even from the worst to the best, are always attended with much temporary mischief, he would fix on our British constitution (I mean our publick law, not the actual state of things in any given period) as the best form ever established, though we can only make distant approaches to its theoretical perfection. In these Indian territories, which providence has thrown into the arms of Britain for their protection and welfare, the religion, manners, and laws of the natives preclude even the idea of political freedom; but their histories may possibly suggest hints for their prosperity, while our country derives essential benefit from the diligence of a placid and submissive people, who multiply with such increase, even after the ravages of famine, that, in one collectorship out of twenty-four, and that by no means the largest or best cultivated (I mean Crishna-nagar) there have lately been found, by an actual enumeration, a million and three hundred thousand native inhabitants; whence it should seem, that in all India there cannot now be fewer than thirty millions of black British subjects.

Let us proceed to geography and chronology, without which history would be no certain guide, but would resemble a kindled vapour without either
either a settled place or a steady light. For a reason before intimated I shall not name the various cosmographical books, which are extant in Arabick and Persian, nor give an account of those, which the Turks have beautifully printed in their own improved language, but shall expatiate a little on the geography and astronomy of India; having first observed generally, that all the Asiatick nations must be far better acquainted with their several countries than mere European scholars and travellers; that, consequently, we must learn their geography from their own writings; and that, by collating many copies of the same work, we may correct the blunders of transcribers in tables, names, and descriptions.

Geography, astronomy, and chronology have, in this part of Asia, shared the fate of authentick history, and, like that, have been so masked and bedecked in the fantastick robes of mythology and metaphor, that the real system of Indian philosophers and mathematicians can scarce be distinguished: an accurate knowledge of Sanscrit and a confidential intercourse with learned Brāhmens, are the only means of separating truth from fable; and we may expect the most important discoveries from two of our members; concerning whom it may be safely asserted, that, if our society should have produced no other advantage than the invitation given to them for the publick display of their talents, we should have a claim to the thanks of our country and of all Europe. Lieutenant Wilford has exhibited an interesting specimen of the geographical knowledge deducible from the Puránas, and will in time present you with so complete a treatise on the ancient world known to the Hindus, that the light acquired by the Greeks will appear but a glimmering in comparison of that, which He will diffuse; while Mr. Davis, who has given us a distinct idea of Indian computations and cycles, and ascertained the place of the colures at a time of great importance in history, will hereafter disclose the systems of Hindu astronomers from Na'ed and Para'sar to Meya, Varahamihir, and Bha'scar, and will soon, I trust, lay before you
ON ASIATICK HISTORY,

you a perfect delineation of all the Indian asterisms in both hemispheres, where you will perceive so strong a general resemblance to the constellations of the Greeks, as to prove that the two systems were originally one and the same, yet with such a diversity in parts, as to show incontrovertibly, that neither system was copied from the other; whence it will follow, that they must have had some common source.

The jurisprudence of the Hindus and Arabs being the field, which I have chosen for my peculiar toil, you cannot expect that I should greatly enlarge your collection of historical knowledge; but I may be able to offer you some occasional tribute, and I cannot help mentioning a discovery, which accident threw in my way; though my proofs must be reserved for an essay which I have destined for the fourth volume of your Transactions. To fix the situation of that Palibothra (for there may have been several of the name), which was visited and described by Megasthenes had always appeared a very difficult problem; for, though it could not have been Prayag, where no ancient metropolis ever stood, nor Canyakubja, which has no epithet at all resembling the word used by the Greeks, nor Gaur, otherwise called Lacshmanaavati, which all know to be a town comparatively modern, yet we could not confidently decide that it was Pataliputra, though names and most circumstances nearly correspond, because that renowned capital extended from the confluence of the Sone and the Ganges to the scite of Patna, while Palibothra stood at the junction of the Ganges and Erannobas, which the accurate M. D'Anville had pronounced to be the Yamuna: but this only difficulty was removed, when I found in a classical Sanscrit book, near two thousand years old, that Hiranyakabhu, or golden-armed, which the Greeks changed into Erannobas, or the river with a lovely murmur, was in fact another name for the Sona itself, though Megasthenes, from ignorance or inattention, has named them separately. This discovery led to another of greater moment; for Chandragupta, who, from a military
military adventurer, became, like Sandracottus, the sovereign of upper Hindustān, actually fixed the seat of his empire at Pataliputra, where he received ambassadors from foreign princes, and was no other than that very Sandracottus, who concluded a treaty with Seleucus Nicator; so that we have solved another problem, to which we before alluded, and may in round numbers consider the twelve and three hundredth years before Christ as two certain epochs between Ra'ama, who conquered Silān a few centuries after the flood, and Vicrama'ditya, who died at Ujjayini fifty-seven years before the beginning of our era.

II. Since these discussions would lead us too far, I proceed to the history of Nature distinguished, for our present purpose, from that of Man; and divided into that of other animals, who inhabit this globe, of the mineral substances, which it contains, and of the vegetables, which so luxuriantly and so beautifully adorn it.

1. Could the figure, instincts, and qualities of birds, beasts, insects, reptiles, and fishes be ascertained, either on the plan of Buffon, or on that of Linnaeus, without giving pain to the objects of our examination, few studies would afford us more solid instruction or more exquisite delight; but I never could learn by what right, nor conceive with what feelings, a naturalist can occasion the misery of an innocent bird and leave its young, perhaps, to perish in a cold nest, because it has gay plumage and has never been accurately delineated, or deprive even a butterfly of its natural enjoyments, because it has the misfortune to be rare or beautiful; nor shall I ever forget the couplet of Firdausi, for which Sadi, who cites it with applause, pours blessings on his departed spirit:

Ah! spare yon emmet, rich in hoarded grain:
He lives with pleasure, and he dies with pain.
This may be only a confession of weakness, and it certainly is not meant as a boast of peculiar sensibility; but, whatever name may be given to my opinion, it has such an effect on my conduct, that I never would suffer the Cócila, whose wild native woodnotes announce the approach of spring, to be caught in my garden for the sake of comparing it with Buffon’s description; though I have often examined the domestick and engaging Mayanà, which bids us good morrow at our windows, and expects, as its reward, little more than security: even when a fine young Manis or Pangolin was brought me, against my wish, from the mountains, I solicited his restoration to his beloved rocks, because I found it impossible to preserve him in comfort at a distance from them. There are several treatises on animals in Arabick, and very particular accounts of them in Chinese with elegant outlines of their external appearance; but I have met with nothing valuable concerning them in Persian, except what may be gleaned from the medical dictionaries; nor have I yet seen a book in Sanscrit, that expressly treats of them: on the whole, though rare animals may be found in all Asia, yet I can only recommend an examination of them with this condition, that they be left, as much as possible, in a state of natural freedom, or made as happy as possible, if it be necessary to keep them confined.

2. The history of minerals, to which no such objection can be made, is extremely simple and easy, if we merely consider their exterior look and configuration, and their visible texture; but the analysis of their internal properties belongs particularly to the sublime researches of Chymistry, on which we may hope to find useful disquisitions in Sanscrit, since the old Hindus unquestionably applied themselves to that enchanting study; and even from their treatises on alchymy we may possibly collect the results of actual experiment, as their ancient astrological works have preserved many valuable facts relating to the Indian sphere and the precession of the equinox: both in Persian and Sanscrit there are
are books on metals and minerals, particularly on gems, which the Hindu philosophers considered (with an exception of the diamond) as varieties of one crystalline substance either simple or compound: but we must not expect from the alchemists of Asia those beautiful examples of analysis, which have but lately been displayed in the laboratories of Europe.

3. We now come to Botany, the loveliest and most copious division in the history of nature; and, all disputes on the comparative merit of systems being at length, I hope, condemned to one perpetual night of undisturbed slumber, we cannot employ our leisure more delightfully, than in describing all new Asiatick plants in the Linnean style and method, or in correcting the descriptions of those already known, but of which dry specimens only, or drawings, can have been seen by most European botanists: in this part of natural history we have an ample field yet unexplored; for, though many plants of Arabia have been made known by Garcias, Prosper Alpinus, and Forskœl, of Persia, by Gar¬
cin, of Tartary, by Gmelin and Pallas, of China and Japan, by Köempfer, Osbeck, and Thunberg, of India, by Rheede and Rumphius, the two Burmans, and the much-lamented Köentig, yet none of those naturalists were deeply versed in the literature of the several countries, from which their vegetable treasures had been procured; and the numerous works in Sanscrit on medical substances, and chiefly on plants, have never been inspected, or never at least understood, by any European attached to the study of nature. Until the garden of the India Company shall be fully stored (as it will be, no doubt, in due time) with Arabian, Persian, and Chinese plants, we may well be satisfied with examining the native flowers of our own provinces; but, unless we can discover the Sanscrit names of all celebrated vegetables, we shall neither comprehend the allusions, which Indian poets perpetually make to them, nor (what is far worse) be able to find accounts of their tried virtues in the writings of Indian physicians; and (what is worst of
all) we shall mis an opportunity, which never again may present itself; for the Pandits themselves have almost wholly forgotten their ancient appellations of particular plants, and, with all my pains, I have not yet ascertained more than two hundred out of twice that number, which are named in their medical or poetical compositions. It is much to be deplored, that the illustrious Van Rheede had no acquaintance with Sanscrit, which even his three Bràhmens, who composed the short preface engraved in that language, appear to have understood very imperfectly, and certainly wrote with disgraceful inaccuracy: in all his twelve volumes I recollect only Punarnava, in which the Nâgari letters are tolerably right; the Hindu words in Arabian characters are shamefully incorrect; and the Malabar, I am credibly informed, is as bad as the rest. His delineations, indeed, are in general excellent; and, though Linnaeus himself could not extract from his written descriptions the natural character of every plant in the collection, yet we shall be able, I hope, to describe them all from the life, and to add a considerable number of new species, if not of new genera, which Rheede, with all his noble exertions, could never procure. Such of our learned members, as profess medicine, will, no doubt, cheerfully assist in these researches, either by their own observations, when they have leisure to make any, or by communications from other observers among their acquaintance, who may reside in different parts of the country: and the mention of their art leads me to the various uses of natural substances, in the three kingdoms or classes to which they are generally reduced.

III. You cannot but have remarked, that almost all the sciences, as the French call them, which are distinguished by Greek names and arranged under the head of philosophy, belong for the most part to history; such are philology, chymistry, physicks, anatomy, and even metaphysics, when we barely relate the phenomena of the human mind; for, in all branches of knowledge, we are only historians, when we announce facts,
facts, and philosophers, only when we reason on them: the same may be confidently said of law and of medicine, the first of which belongs principally to civil, and the second chiefly to natural, history. Here, therefore, I speak of medicine, as far only as it is grounded on experiment; and, without believing implicitly what Arabs, Persians, Chinese, or Hindus may have written on the virtues of medicinal substances, we may, surely, hope to find in their writings what our own experiments may confirm or disprove, and what might never have occurred to us without such intimations.

Europeans enumerate more than two hundred and fifty mechanical arts, by which the productions of nature may be variously prepared for the convenience and ornament of life; and, though the Silpasāstra reduce them to sixty-four, yet Abū'Lfażl had been assured, that the Hindus reckoned three hundred arts and sciences: now, their sciences being comparatively few, we may conclude, that they anciently practised at least as many useful arts as ourselves. Several Pandits have informed me, that the treatises on art, which they call Upavēdas and believe to have been inspired, are not so entirely lost, but that considerable fragments of them may be found at Banares; and they certainly possess many popular, but ancient, works on that interesting subject. The manufactures of sugar and indigo have been well known in these provinces for more than two thousand years; and we cannot entertain a doubt, that their Sanscrit books on dying and metallurgy contain very curious facts, which might, indeed, be discovered by accident in a long course of years, but which we may soon bring to light, by the help of Indian literature, for the benefit of manufacturers and artists, and consequently of our nation, who are interested in their prosperity. Discoveries of the same kind might be collected from the writings of other Asiatick nations, especially of the Chinese; but, though Persian, Arabick, Turkish, and Sanscrit are languages now so accessible, that, in order to obtain a sufficient knowledge of
of them, little more seems required than a strong inclination to learn them, yet the supposed number and intricacy of the Chinese characters have deterred our most diligent students from attempting to find their way through so vast a labyrinth: it is certain, however, that the difficulty has been magnified beyond the truth; for the perspicuous grammar by M. Fourmont, together with a copious dictionary, which I possess, in Chinese and Latin, would enable any man, who pleased, to compare the original works of Confucius, which are easily procured, with the literal translation of them by Couplet; and, having made that first step with attention, he would probably find, that he had traversed at least half of his career. But I should be led beyond the limits assigned to me on this occasion, if I were to expatiate farther on the historical division of the knowledge comprised in the literature of Asia; and I must postpone till next year my remarks on Asiatick philosophy and on those arts, which depend on imagination; promising you with confidence, that, in the course of the present year, your inquiries into the civil and natural history of this eastern world will be greatly promoted by the learned labours of many among our associates and correspondents.