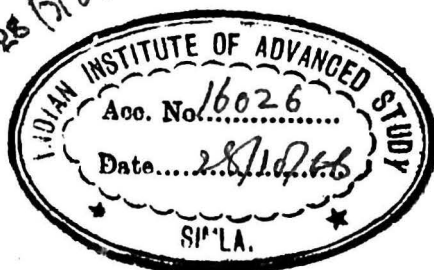


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XXIII.

ON THE DISSECTION OF THE PANGOLIN,

In a Letter to General Carnac from
Adam Burt, Esq.

COMMUNICATED BY THE GENERAL.

SIR,

IN compliance with your desire, I most willingly do myself the honour to present to you my observations and reflections on the dissection of one of those animals, of which we have a print, with a very short account, in the *First Volume* of the *Transactions of the Asiatic Society*. The animal, from which that likeness has been taken, was sent, by Mr. Leslie, from Chitra, to the President, Sir William Jones. It is distinguished in the *Transactions* by a name, which I do not at present remember; but probably the animal is of the same genus with the *Manis*, as described in the former edition of the *Encyclopædia Britannica*, or, perhaps, not different from the *Pangolin* of Buffon.

The representation of this animal in the *Memoirs of the Asiatic Society*, makes it unnecessary for me to enter into any general description of its external figure and appearance. There are on each foot five claws, of which the outer and inner are small when compared with the other three. There are no distinct toes; but each nail is moveable by a joint at its root. This creature is extremely inoffensive: it has no teeth; and its feet are unable to grasp. Hence it would appear that Nature, having furnished it with a coat of mail for its protection, has, with some regard to justice, denied it the powers of acting with hostility against

its fellow-creatures. The nails are well adapted for digging in the ground; and the animal is so dexterous in eluding its enemies, by concealing itself in holes and among rocks, that it is extremely difficult to procure one.

The upper jaw is covered with a cross cartilaginous ridge, which though apparently not at all suited to any purposes of mastication, may, by increasing the surface of the palate, extend the sense of taste. The œsophagus admitted my fore-finger with ease. The tongue at the bottom of the mouth is nearly about the size of the little finger, from whence it tapers to a point. The animal at pleasure protrudes this member a great way from the mouth. The tongue arises from the ensiform cartilage, and the contiguous muscles of the belly, and passes in form of a round distinct muscle from over the stomach, through the thorax, immediately under the sternum, and interior to the wind-pipe in the throat. When dissected out, the tongue could be easily elongated so as to reach more than the length of the animal, exclusive of its tail. There is a cluster of salivary glands seated around the tongue, as it enters the mouth. These will necessarily be compressed by the action of the tongue, so as occasionally to supply a plentiful flow of their secretion.

* The stomach is *cartilaginous*, and analogous to that of the gallinaceous tribe of birds. It was filled with small stones and gravel, which in this part of the country, are almost universally calcareous. The inner surface of the stomach was rough to the feel, and formed into folds, the interstices of which were filled with a frothy secretion. The guts were filled with a sandy pulp, in which, however, were interspersed a few distinct small stones. No vestiges of any animal or vegetable food could be traced in the whole *primæ viæ*. The gall-bladder was distended with a

fluid, resembling in colour and consistence the dregs of beer.

The subject was a female: its dugs were two, seated on the breast. The uterus and organs of generation were evidently those of a viviparous animal.

Forcibly struck with the phenomena which this quadruped exhibited, my imagination at once overleaped the boundaries by which science endeavours to circumscribe the productions and the ways of Nature; and believing with *Buffon, que tout ce qui peut etre est*, I did not hesitate to conjecture that this animal might possibly derive its nourishment from mineral substances. This idea I accordingly hazarded in an address to Colonel *Kyd*. The spirit of inquiry, natural to that gentleman, could be ill satisfied by ideas thrown out apparently at random; and he soon called on me to explain my opinion, and its foundation.

Though we have perhaps no clear idea of the manner in which vegetables extract their nourishment from earth, yet the fact being so, it may not be unreasonable to suppose that some animal may derive nutriment by a process somewhat similar. It appears to me, that facts produced by *Spallanzani* directly invalidate the experiments, from which he has drawn the inference, that fowls swallow stones merely from stupidity; and that such substances are altogether unnecessary to those animals. He reared fowls, without permitting them ever to swallow sand or stones; but he also established the fact, that carnivorous animals may become frugivorous; and herbivorous animals may come to live on flesh. A wood-pigeon he brought to thrive on putrid meat. The experiment on fowls, then, only corroborates the proof, that we have it in our power by habits to alter the natural constitution of animals. Again the eminent investigator of truth found, that fowls died when fed

on stones alone; but surely that fact is far short of proving that such substances are not agreeable to the original purposes of nature in the digestive process of these animals. When other substances shall have been detected in the stomach of this animal, my inference, from what I have seen, must necessarily fall to the ground. But if, like other animals with muscular and cartilaginous stomachs, this singular quadruped consumes grain, it must be surprising that no vestige of such food was found present in the whole alimentary canal, since in that thinly inhabited country, the wild animals are free to feed without intrusion from man. Nor can it be inferred from the structure of the stomach, that this animal lives on ants or on insects. Animals devoured as food, though of considerable size and solidity, with a proportionably small extent of surface to be acted on by the gastric juice and the action of the stomach, are readily dissolved and digested by animals possessing not a cartilaginous, but a membranaceous stomach; as for instance, a frog in that of a snake.

In the stomach many minerals are soluble, and the most active things which we can swallow. Calcareous substances are readily acted on. Dr. *Priestly* has asked, "May not phlogistic matter be the most essential part of the food and support of both vegetable and animal bodies?" I confess, that Dr. *Priestly's* finding cause to propose the question, inclines me to suppose that the affirmative to it may be true. Earth seems to be the basis of all animal matter. The growth of the bones must be attended with a constant supply; and in the human species there is a copious discharge of calcareous matter thrown out by the kidneys and salivary glands. May not the quadruped in question derive phlogiston from earth? salt, from mineral substances? And, as it is not deprived of the power of drinking water,

what else is necessary to the subsistence of his corporeal machine?

Considering the scaly covering of this animal, we may conceive that it may be at least necessary for its existence, on that account, to imbibe a greater proportion of earth than is necessary to other animals. It may deserve consideration, that birds are covered with feathers, which in their constituent principles approach to the nature of horn and bone. Of these animals the gallinaceous tribe swallow stones; and the carnivorous take in the feathers and bones of their prey; the latter article is known to be soluble in the membranaceous stomachs; and hence is a copious supply of the earthy principles. In truth, I do not know that any thing is soluble in the stomach of animals, which may not be thence absorbed into their circulating system; and nothing can be so absorbed without affecting the whole constitution.

What I have here stated is all that I could advance to the Colonel; but my opinion has been since not a little confirmed, by observing the report of experiments by M. *Bruquatelli* of *Pavia*, on the authority of M. *Crell*, by which we learn, that some birds have so great a dissolvent power in the gastric juice, as to dissolve in their stomachs flints, rock-crystal, calcareous stones, and shells.

I beg only farther to observe, that some things in *Buffon's* description of the Pangolin, not apparently quite applicable to this animal, might have been owing to his description being only from the view of a dried preparation, in which the organs of generation would be obliterated, and the dugs shrivelled away so as to be imperceptible; else that elegant philosopher could not have asserted that, "*tous les animaux quadrupèdes, qui sont couverts d'écailles, sont ovipares.*"

Excuse my prolixity, which is only in me the necessary attendant of my superficial knowledge of things. In ingenuousness, however, I hope that I am not inferior to any man: and I am proud to subscribe myself,

Sir,

Your most obedient and humble servant,

ADAM BURT.

Gya, September 14, 1789.

A Letter from Doctor Anderson to Sir William Jones.

DEAR SIR,

THE male *Lac* insect having hitherto escaped the observation of naturalists, I send the enclosed description, made by Mr. *William Roxburgh*, surgeon on this establishment, and botanist to the Honourable Company, in hopes you will give it a place in the publication of your Society, as Mr. *Roxburgh's* discovery will bring *Lac* a genus into the class Hemiptera of *Linnaeus*.

I am, with esteem,

Dear Sir,

Your very obedient servant,

JAMES ANDERSON.

Fort St. George, January 2, 1790.

ON THE LACSHA, OR LAC INSECT.

BY MR. WILLIAM ROXBURGH.

SOME pieces of very fresh-looking lac adhering to small branches of *mimosa cinerea*, were brought me from the mountains on the 20th of last month. I kept them carefully, and to-day, the 4th of *December*, fourteen days from the time they came from the hills, myriads of exceedingly minute animals were observed creeping about the lac and branches it adhered to, and more still issuing from small holes over the surface of the cells: other small and perforated excrescences were observed with a glass amongst the perforations, from which the minute insects issued, regularly two to each hole, and crowned with some very fine white hairs. When the hairs were rubbed off, two white spots appeared. The animals, when single, ran about pretty briskly; but in general they were so numerous as to be crowded over one another. The body is oblong, tapering most towards the tail, below plain, above convex, with a double, or flat margin: laterally on the back part of the thorax are two small tubercles, which may be the eyes: the body behind the thorax is crossed with twelve rings; legs six; feelers (antennæ) half the length of the body, jointed, hairy; each ending in two hairs as long as the antennæ; rump, a white point between two terminal hairs, which are as long as the body of the animal; the mouth I could not see. On opening the cells, the substance that they were formed of cannot be better described, with respect to appearance, than by saying it is like the transparent amber that beads are made of: the external covering of the cells may be about half a line thick, is remarkably strong and able to resist injuries; the partitions are much thinner; the cells are in general

irregular squares, pentagons, and hexagons, about an eighth of an inch in diameter, and $\frac{1}{4}$ deep; they have no communication with each other: all these I opened during the time the animals were issuing, contained in one-half a small bag filled with a thick red jelly-like liquor, replete with what I take to be eggs; these bags, or utriculi, adhere to the bottom of the cells, and have each two necks, which pass through perforations in the external coat of the cells, forming the fore-mentioned excrescences, and ending in some very fine hairs. The other half of the cells have a distinct opening, and contain a white substance, like some few filaments of cotton rolled together, and numbers of the insects themselves ready to make their exit. Several of the same insects I observed to have drawn up their legs, and to lie flat; they did not move on being touched, nor did they show any signs of life with the greatest irritation.

December 5. The same minute hexapedes continue issuing from their cells in numbers; they are more lively, of a deepened red colour, and fewer of the motionless sort. To-day I saw the mouth; it is a flat-taped point, about the middle of the breast, which the little animal projects on being compressed.

December 6. The male insects I have found to-day. A few of them are constantly running among the females most actively: as yet they are scarce more, I imagine, than one to 5000 females, but twice their size. The head is obtuse; eyes black, very large; antennæ clavated, feathered, about two-thirds the length of the body; below the middle an articulation, such as those in the legs; colour between the eyes a beautiful shining green; neck very short; body oval, brown; abdomen oblong, the length of body and head; legs six; wings membranaceous, four, longer than the body, fixed to the

sides of the thorax, narrow at their insertions, growing broader for two-thirds of their length, then rounded; the anterior pair is twice the size of the posterior; a strong fibre runs along their anterior margins; they lie flat, like the wings of a common fly, when it walks or rests; no hairs from the rump; it springs most actively to a considerable distance on being touched; mouth in the under part of the head; maxillæ transverse. To-day the female insects continue issuing in great numbers, and move about as on the 4th.

December 7. The small red insects still more numerous, and move about as before: winged insects, still very few, continue active. There have been fresh leaves and bits of the branches of both *mimosa cinerea* and *corinda* put into the wide mouthed bottle with them: they walk over them indifferently, without showing any preference, nor inclination to work nor copulate. I opened a cell whence I thought the winged flies had come, and found several, eight or ten, more in it, struggling to shake off their incumbrances: they were in one of those utriculi mentioned on the 4th, which ends in two mouths, shut up with fine white hairs, but one of them was open for the exit of the flies; the other would no doubt have opened in due time: this utriculus I found now perfectly dry, and divided into cells by exceeding thin partitions. I imagine, before any of the flies made their escape, it might have contained about twenty. In these minute cells with the living flies, or whence they had made their escape, were small dry dark coloured compressed grains, which may be the dried excrements of the flies.

Note by the President.

THE *Hindus* have six names for *Lac*; but they generally call it *Lacsha*, from the *multitude* of small insects, who, as they believe, discharge it from their

stomachs, and at length destroy the tree on which they form their colonies. A fine *Pippala* near *Crishnanagar*, is now almost wholly destroyed by them.

XXV.

THE SEVENTH
ANNIVERSARY DISCOURSE,

DELIVERED 25 FEBRUARY, 1790.

BY THE PRESIDENT.

Gentlemen,

ALTHOUGH we are at this moment considerably nearer to the frontier of *China* than to the farthest limit of the *British* dominions in *Hindustan*, yet the first step that we should take in the philosophical journey, which I propose for your entertainment at the present meeting, will carry us to the utmost verge of the habitable globe known to the best geographers of *Old Greece* and *Egypt*; beyond the boundary of whose knowledge we shall discern from the heights of the northern mountains an empire nearly equal in surface to a square of fifteen degrees; an empire, of which I do not mean to assign the precise limits, but which we may consider, for the purpose of this dissertation, as embraced on two sides by *Tartary* and *India*, while the ocean separates its other sides from various *Asiatic* isles of great importance in the commercial system of *Europe*. Annexed to that immense tract of land is the peninsula of *Corea*, which a vast oval bason divides from *Nipon*, or *Japan*, a celebrated and imperial island, bearing in arts and in arms, in advantage of situation, but not in felicity of government, a pre-eminence among eastern kingdoms analogous to that of *Britain* among the nations of the west. So many climates are included in so prodigious an area, that while the principal emporium of *China* lies nearly under the tropic, its metropolis enjoys the temperature of Sa-

markand: such too is the diversity of soil in its fifteen provinces, that, while some of them are exquisitely fertile, richly cultivated, and extremely populous, others are barren and rocky, dry and unfruitful, with plains as wild or mountains as rugged as any in *Scythia*, and those either wholly deserted, or peopled by savage hordes, who, if they be not still independent, have been very lately subdued by the perfidy, rather than the valour, of a monarch, who has perpetuated his own breach of faith in a *Chinese* poem, of which I have seen a translation.

The word *China*, concerning which I shall offer some new remarks, is well known to the people whom we call the *Chinese*; but they never apply it (I speak of the learned among them) to themselves or to their country. Themselves, according to Father *Visdelou*, they describe as the *people of Han*, or of some other illustrious family, by the memory of whose actions they flatter their national pride; and their country they call *Chum-cue*, or the *Central Kingdom*, representing it in their symbolical characters by a parallelogram exactly bisected. At other times they distinguish it by the words *Tien-hia*, or *What is under Heaven*; meaning *all that is valuable on earth*. Since they never name themselves with moderation, they would have no right to complain, if they knew that *European* authors have ever spoken of them in the extremes of applause or of censure. By some they have been extolled as the oldest and the wisest, as the most learned and most ingenious of nations; whilst others have derided their pretensions to antiquity, condemned their government as abominable, and arraigned their manners as inhuman, without allowing them an element of science, or a single art for which they have not been indebted to some more ancient and more civilized race of men. The truth perhaps lies, where we usually find it

between the extremes; but it is not my design to accuse or to defend the *Chinese*, to depress or to aggrandize them: I shall confine myself to the discussion of a question connected with my former discourses, and far less easy to be solved than any hitherto started: "Whence came the singular people, who long had governed *China*, before they were conquered by the "*Tartars*?" On this problem (the solution of which has no concern, indeed, with our political or commercial interests, but a very material connection, if I mistake not, with interests of a higher nature) four opinions have been advanced, and all rather peremptorily asserted than supported by argument and evidence. By a few writers it has been urged, that the *Chinese* are an original race, who have dwelt for ages, if not from eternity, in the land which they now possess; by others, and chiefly by the missionaries, it is insisted that they sprang from the same stock with the *Hebrews* and *Arabs*; a third assertion is that of the *Arabs* themselves and of M. *Pauw*, who hold it indubitable, that they were originally *Tartars* descending in wild clans from the steeps of *Imaus*; and a fourth, at least as dogmatically pronounced, as any of the preceding, is that of the *Brahmans*, who decide, without allowing any appeal from their decision, that the *Chinas* (for so they are named in *Sanscrit*) were *Hindus* of the *Cshatriya*, or military class, who, abandoning the privileges of their tribe, rambled in different bodies to the north-east of *Bengal*; and, forgetting by degrees the rites and religion of their ancestors, established separate principalities, which were afterwards united in the plains and valleys, which are now possessed by them. If any one of the three last opinions be just, the first of them must necessarily be relinquished; but of those three, the first cannot possibly be sustained, because it rests on no firmer support than a foolish remark, whether true or false, that *Sem* in *Chinese* means *life* and *procreation*; and because a tea-plant is not more different

from a palm than a *Chinese* from an *Arab*. They are men, indeed, as the tea and the palm are vegetables; but human sagacity could not, I believe, discover any other trace of resemblance between them. One of the *Arabs*, indeed (an account of whose voyage to *India* and *China* has been translated by *Renaudot*) thought the *Chinese* not handsomer (according to his ideas of beauty) than the *Hindus*; but even more like his own countrymen in features, habiliments, earriage, manners, and ceremonies: and this may be true, without proving an actual resemblance between the *Chinese* and *Arabs*, except in dress and complexion. The next opinion is more connected with that of the *Brahmans* than M. *Pauw*, probably, imagined; for, though he tells us expressly that by *Scythians* he meant the *Turks*, or *Tartars*, yet the Dragon on the standard, and some other peculiarities, from which he would infer a clear affinity between the old *Tartars* and the *Chinese*, belonged indubitably to those *Scythians* who are known to have been *Goths*; and the *Goths* had manifestly a common lineage with the *Hindus*, if his own argument, in the preface to his *Researches on the Similarity of Language* be, as all men agree that it is, irrefragable. That the *Chinese* were anciently of a *Tartarian* stock, is a proposition which I cannot otherwise disprove for the present, than by insisting on the total dissimilarity of the two races in manners and arts, particularly in the fine arts of imagination, which the *Tartars*, by their own account, never cultivated; but, if we show strong grounds for believing that the first *Chinese* were actually of an *Indian* race, it will follow that M. *Pauw* and the *Arabs* are mistaken. It is to the discussion of this new and, in my opinion, very interesting point, that I shall confine the remainder of my discourse.

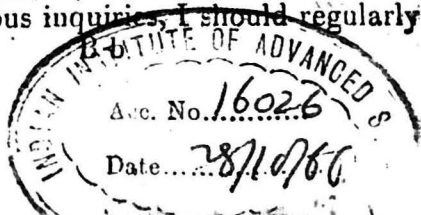
In the *Sanscrit Institutes* of civil and religious duties, revealed, as the *Hindus* believe, by *Menu*, the son of *Brahma*, we find the following curious passage:

“Many families of the military class having gradually abandoned the ordinances of the *Veda*, and the company of *Brahmans*, lived in a state of degradation; as the people of *Pundraca* and *Odra*, those of *Dravira* and *Camboja*, the *Xavanas* and *Sacas*, the *Paradas* and *Pahlavas*, the *Chinas*, and some other nations.” A full comment on his text would here be superfluous; but, since the testimony of the *Indian* author, who, though certainly not a divine personage, was as certainly a very ancient lawyer, moralist, and historian, is direct and positive, disinterested and unsuspected, it would, I think, decide the question before us, if we could be sure that the word *China* signified a *Chinese*, as all the *Pandits*, whom I have separately consulted, assert with one voice. They assure me, that *Chinas* of *Menu* settled in a fine country to the north-east of *Gaur*, and to the east of *Camarup* and *Nepal*; that they have long been, and still are, famed as ingenious artificers; and that they had themselves seen old *Chinese* idols, which bore a manifest relation to the primitive religion of *India* before *Buddha*’s appearance in it. A well-informed *Pandit* showed me a *Sanscrit* book in *Cashmirian* letters, which, he said, was revealed by *Siva* himself, and entitled *Sac-tisangama*: he read to me a whole chapter of it on the heterodox opinions of the *Chinas*, who were divided, says the author, into near two hundred clans. I then laid before him a map of *Asia*; and, when I pointed to *Cashmir*, his own country, he instantly placed his finger on the north-western provinces of *China*, where the *Chinas*, he said, first established themselves; but he added, that *Mahachina*, which was also mentioned in his book, extended to the eastern and southern oceans. I believe, nevertheless, that the *Chinese* empire, as we now call it, was not formed when the laws of *Menu* were collected; and for this belief, so repugnant to the general opinion, I am bound to offer my reasons. If the outline of history and chronology for the last two thousand years be correctly traced, and we must

be hardy sceptics to doubt it) the poems of *Calidas* were composed before the beginning of our era. Now it is clear, from internal and external evidence, that the *Ramayan* and *Mahabharat* were considerably older than the productions of that poet; and it appears from the style and metre of the *Dherma Sastra*, revealed by *Menu*, that it was reduced to writing long before the age of *Valmic* or *Vyasa*, the second of whom names it with applause. We shall not, therefore, be thought extravagant if we place the compiler of those laws between a thousand and fifteen hundred years before *Christ*; especially as *Buddha*, whose age is pretty well ascertained, is not mentioned in them; but, in the twelfth century before our era, the *Chinese* empire was at least in its cradle. This fact it is necessary to prove; and my first witness is *Confucius* himself. I know to what keen satire I shall expose myself by citing that philosopher, after the bitter sarcasms of *M. Pauw* against him and against the translators of his mutilated, but valuable works; yet I quote without scruple the book entitled *Lun Yu*, of which I possess the original with a verbal translation, and which I know to be sufficiently authentic for my present purpose. In the second part of it *Con-fu-tsu* declares, that "Altho' he, like other men, could relate, as mere lessons of morality, the histories of the first and second imperial houses, yet, *for want of evidence*, he could give no certain account of them." Now, if the *Chinese* themselves do not even pretend that any historical monument existed in the age of *Confucius*, preceding the rise of their third dynasty, about eleven hundred years before the *Christian* epoch, we may justly conclude that the reign of *Vuvam* was in the infancy of their empire, which hardly grew to maturity till some ages after that prince; and it has been asserted by very learned *Europeans*, that even of the third dynasty, which he has the fame of having raised, no unsuspected memorial can now be produced. It was not till the eighth century before the birth of our

Saviour, that a small kingdom was erected in the province of *Shen-si*, the capital of which stood nearly in the *thirty-fifth* degree of northern latitude, and about *five* degrees to the west of *Si-gan*; both the country and its metropolis were called *Chin*; and the dominion of its princes was gradually extended to the east and west. A king of *Chin*, who makes a figure in the *Shahnamah* among the allies of *Afrasiyab*, was, I presume, a sovereign of the country just mentioned: and the river of *Chin*, which the poet frequently names as the limit of his eastern geography, seems to have been the *Yellow River*, which the *Chinese* introduce at the beginning of their fabulous annals. I should be tempted to expatiate on so curious a subject, but the present occasion allows nothing superfluous, and permits me only to add, that *Man-gukhan* died in the middle of the thirteenth century, before the city of *Chin*, which was afterwards taken by *Kublai*, and that the poets of *Iran* perpetually allude to the districts around it which they celebrate, with *Chegil* and *Khoten*, for a number of musk-animals roving on their hills. The territory of *Chin*, so called by the old *Hindus*, by the *Persians*, and by the *Chinese* (while the *Greeks* and *Arabs* were obliged by their defective articulation to miscall it *Sin*) gave its name to a race of emperors, whose tyranny made their memory so unpopular, that the modern inhabitants of *China* hold the word in abhorrence, and speak of themselves as the people of a milder and more virtuous dynasty; but it is highly probable that the whole nation descended from the *Chinas* of *Menu*, and, mixing with the *Tartars* (by whom the plains of *Honan* and the more southern provinces were thinly inhabited) formed by degrees the race of men whom we now see in possession of the noblest empire in *Asia*.

In support of an opinion, which I offer as the result of long and anxious inquiries, I should regularly
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proceed to examine the language and letters, religion and philosophy of the present *Chinese*, and subjoin some remarks on their ancient monuments, on their sciences, and on their arts, both liberal and mechanical; but their spoken *language* not having been preserved in the usual symbols of articulate sounds, must have been for many ages in a continual flux; their *letters*, if we may so call them, are merely the symbols of ideas; their popular *religion* was imported from *India* in an age comparatively modern; and their *philosophy* seems yet in so rude a state as hardly to deserve the appellation; they have no *ancient monuments*, from which their origin can be traced even by plausible conjecture; their *sciences* are wholly exotic; and their *mechanical arts* have nothing in them characteristic of a particular family; nothing which any set of men, in a country so highly favoured by nature, might not have discovered and improved. They have indeed both national music and national poetry, and both of them beautifully pathetic; but of painting, sculpture, or architecture, as arts of imagination, they seem (like other *Asiatics*) to have no idea. Instead, therefore, of enlarging separately on each of those heads, I shall briefly inquire, how far the literature and religious practices of *China* confirm or oppose the proposition which I have advanced.†

The declared and fixed opinion of M. *De Guignes*, on the subject before us, is nearly connected with that of the *Brahmans*; he maintains that the *Chinese* were emigrants from *Egypt*: and the *Egyptians*, or *Ethiopians* (for they were clearly the same people) had indubitably a common origin with the old natives of *India*, as the affinity of their languages and of their institutions, both religious and political, fully evince; but that *China* was peopled a few centuries before our era by a colony from the banks of the *Nile*, tho' neither *Persians* nor *Arabs*, *Tartars* nor *Hindus*, ever heard of such an emigration, is a paradox, which the bare authority

even of so learned a man cannot support; and since reason grounded on facts can alone decide such a question, we have a right to demand clearer evidence and stronger arguments than any that he has yet adduced. The hieroglyphics of *Egypt* bear, indeed, a strong resemblance to the mythological sculptures and paintings of *India*, but seem wholly dissimilar to the symbolical system of the *Chinese*, which might easily have been invented (as they assert) by an individual, and might very naturally have been contrived by the first *Chinas*, or outcast *Hindus*, who either never knew, or had forgotten, the alphabetical characters of their wiser ancestors. As to the table and bust of *Isis*, they seem to be given up as modern forgeries; but, if they were indisputably genuine, they would be nothing to the purpose; for the letters on the bust appear to have been designed as alphabetical; and the fabricator of them (if they really were fabricated in *Europe*) was uncommonly happy, since two or three of them are exactly the same with those on a metal pillar yet standing in the north of *India*. In *Egypt*, if we can rely on the testimony of the *Greeks*, who studied no language but their own, there were two sets of alphabetical characters; the one *popular*, like the various letters used in our *Indian* provinces; and the other *sacerdotal*, like the *Devanagari*, especially that form of it which we see in the *Veda*; besides which they had two sorts of *sacred sculpture*; the one simple, like the figures of *Buddha* and the three *Ramas*; and the other allegorical, like the images of *Ganesa*, or *Divine Wisdom*, and *Isani*, or *Nature*, with all their emblematical accompaniments; but their *real character* of the *Chinese* appears wholly distinct from any *Egyptian* writing, either mysterious or popular: and, as to the fancy of M. de Guignes, that the complicated symbols of *China* were at first no more than *Phenician* monograms, let us hope that he has abandoned so wild a conceit, which he started probably with no other view than to display his ingenuity and learning.

We have ocular proof that the few radical characters of the *Chinese* were originally (like our astronomical and chymical symbols) the pictures or outlines of visible objects, or figurative signs for simple ideas, which they have multiplied by the most ingenious combinations and the liveliest metaphors; but, as the system is peculiar, I believe, to themselves and the *Japanese*, it would be idly ostentatious to enlarge on it at present; and, for the reasons already intimated, it neither corroborates nor weakens the opinion which I endeavour to support. The same may as truly be said of their *spoken* language; for, independently of its constant fluctuation during a series of ages, it has the peculiarity of excluding four or five sounds which other nations articulate, and is clipped into monosyllables, even when the ideas expressed by them, and the written symbols for those ideas, are very complex. This has arisen, I suppose, from the singular habits of the people; for, though their common tongue be so *musically* accented as to form a kind of recitative, yet it wants those *grammatical* accents, without which all human tongues would appear monosyllabic. Thus *Amita*, with an accent on the first syllable, means, in the *Sanscrit* language, *immeasurable*; and the natives of *Bengal* pronounce it *Omito*; but when the religion of *Buddha*, the son of *Maya*, was carried hence into *China*, the people of that country, unable to pronounce the name of their new God, called him *Foe*, the son of *Mo-ye*, and divided his epithet *Amita* into three syllables *O-mi-to*, annexing to them certain ideas of their own, and expressing them in writing by three distinct symbols. We may judge from this instance, whether a comparison of their spoken tongue with the dialects of other nations can lead to any certain conclusion as to their origin; yet the instance which I have given, supplies me with an argument from analogy, which I produce as conjectural only, but which appears more and more plausible the oftener I

consider it. The *Buddha* of the *Hindus* is unquestionably the *Foe of China*; but the great progenitor of the *Chinese* is also named by them *Fo-hi*, where the second monosyllable signifies, it, seems. a *victim*. Now the ancestor of that military tribe, whom the *Hindus* call the *Chandravansa*, or *Children of the Moon*, was, according to their *Puranas* or legends, *Buddha*, or the genius of the planet *Mercury*, from whom, in the *fifth* degree, descended a prince named *Druhya*, whom his father *Yatyati* sent in exile to the east of *Hindustan*, with this imprecation, "May thy progeny be ignorant of the *Veda*." The name of the banished prince could not be pronounced by the modern *Chinese*; and, though I dare not conjecture that the last syllable of it has been changed into *Yao*, I may nevertheless observe that *Yao* was the *fifth* in descent from *Fo-hi*, or at least the fifth mortal in the first imperial dynasty; that all *Chinese* history before him is considered by the *Chinese* themselves as poetical or fabulous; that his father *Ti-co*, like the *Indian* king *Yayati*, was the first prince who married several women; and that *Fo-hi*, the head of their race, appeared, say the *Chinese*, in a province of the west, and held his court in the territory of *Chin*, where the rovers, mentioned by the *Indian* legislator, are supposed to have settled. Another circumstance in the parallel is very remarkable:—According to *Father De Premare*, in his tract on *Chinese* Mythology, the mother of *Fo-hi* was the *Daughter of Heaven*, surnamed *Flower-loving*; and as the nymph was walking alone on the bank of a river with a similar name, she found herself on a sudden encircled by a *rainbow*, soon after which she became pregnant, and at the end of twelve years was delivered of a son radiant as herself, who, among ether titles, had that of *Sui*, or *Stars of the Year*. Now, in the mythological system of the *Hindus*, the nymph *Rohini*, who presides over the fourth lunar mansion, was the favourite mistress of *Soma*, or the Moon, among

whose numerous epithets we find *Cumudanayaca*, or *Delighting in a species of water-flower* that blossoms at night; and their offspring was *Buddha*, regent of a planet, and called also, from the names of his parents *Rauhineya*, or *Saumya*. It is true that the learned missionary explains the word *Sui* by *Jupiter*; but an exact resemblance between two such fables could not have been expected; and it is sufficient for my purpose, that they seem to have a family likeness. The God *Buddha*, say the *Indians*, married *Ila*, whose father was preserved in a miraculous ark from a universal deluge. Now, although I cannot insist with confidence that the *rainbow* in the *Chinese* fable alludes to the *Mosaic* narrative of the flood, nor build any solid argument on the divine personage *Niu-wa*, of whose character, and even of whose sex, the historians of *China* speak very doubtfully, I may nevertheless, assure you, after full inquiry and consideration, that the *Chinese*, like the *Hindus*, believe this earth to have been wholly covered with water, which, in works of undisputed authenticity, they describe as *flowing abundantly, then subsiding, and separating the higher from the lower age of mankind*; that the *division of time*, from which their poetical history begins, just preceded the appearance of *Fo-hi* on the mountains of *Chin*; but that the great *inundation* in the reign of *Yao* was either confined to the lowlands of his kingdom, if the whole account of it be not a fable, or, if it contain any allusion to the flood of *Noah*, has been ignorantly misplaced by the *Chinese* annalists.

The importation of a new religion into *China* in the first century of our era, must lead us to suppose that the former system, whatever it was, had been found inadequate to the purpose of restraining the great body of the people from those offences against conscience and virtue, which the civil power could not reach; and it is hardly possible that, without such restrictions, any government could long have subsisted with felicity; for no

government can long subsist without equal justice, and justice cannot be administered without the sanctions of religion. Of the religious opinions entertained by *Confucius* and his followers, we may glean a general notion from the fragments of their works translated by *Couplet*. They professed a firm belief in the Supreme God, and gave a demonstration of his being and of his providence from the exquisite beauty and perfection of the celestial bodies, and the wonderful order of nature in the whole fabric of the visible world. From this belief, they deduced a system of ethics, which the philosopher sums up in a few words at the close of the *Lun-yu*: "He," says *Confucius*, "who will be fully persuaded that the Lord of Heaven governs the universe, who shall in all things chuse moderation, who shall perfectly know his own species, and so act among them that his life and manners may conform to his knowledge of God and man, may be truly said to discharge all the duties of a sage, and to be far exalted above the common herd of the human race." But such a religion and such morality could never have been general; and we find that the people of *China* had an ancient system of ceremonies and superstitions, which the government and the philosophers appear to have encouraged, and which has an apparent affinity with some parts of the oldest *Indian* worship. They believed in the agency of genii, or tutelary spirits, presiding over the stars and the clouds, over lakes and rivers, mountains, valleys, and woods, over certain regions and towns, over all the elements (of which, like the *Hindus*, they reckoned *fire*) and particularly over *fire*, the most brilliant of them. To those deities they offered victims on high places: and the following passage from the *Shi-cin*, or *Book of Odes*, is very much in the style of the *Brahmans*:—"Even they, who perform a sacrifice with a due reverence, cannot perfectly assure themselves that the divine spirits accept their oblations; and far less can they who adore the Gods with languor and oscitancy,

“clearly perceive their sacred illapses.” These are imperfect traces indeed, but they are traces of an affinity between the religion of *Menu* and that of the *Chinas*, whom he names among the apostates from it. *M. Le Gentil* observed, he says, a strong resemblance between the funeral rites of the *Chinese* and the *Sraddha* of the *Hindus*; and *M. Bailly*, after a learned investigation, concludes, that “Even the puerile and absurd stories of the *Chinese* fabulists, contain a remnant of ancient *Indian* history, with a faint sketch of the first “*Hindu* ages.” As the *Buddhas*, indeed, were *Hindus*, it may naturally be imagined that they carried into *China* many ceremonies practised in their own country; but the *Buddhas* positively forbade the immolation of cattle; yet we know that various animals, even bulls and men, were anciently sacrificed by the *Chinese*; besides which, we discover many singular marks of relation between them and the old *Hindus*: as in the remarkable period of *four hundred and thirty-two thousand*, and the cycle of *sixty* years; in the predilection for the mystical number *nine*; in many similar fasts and great festivals, especially at the solstices and equinoxes; in the just-mentioned obsequies consisting of rice and fruits offered to the manes of their ancestors; in the dread of dying childless, lest such offerings should be intermitted; and perhaps, in their common abhorrence of red objects, which the *Indians* carried so far, that *Menu* himself, where he allows a *Brahmen* to trade, if he cannot otherwise support life, absolutely forbids “his trafficking in any sort “of *red* cloths, whether linen or woollen, or made “of woven bark.” All the circumstances, which have been mentioned under the two heads of *Literature* and *Religion*, seem collectively to prove (as far as such a question admits proof) that the *Chinese* and *Hindus* were originally the same people; but having been separated near four thousand years, have retained few strong features of their ancient consanguinity, especially as the *Hindus* have preserved their old language and

ritual, while the *Chinese* very soon lost both; and the *Hindus* have constantly intermarried among themselves, while the *Chirese*, by a mixture of *Tartarian* blood from the time of their first establishment, have at length formed a race distinct in appearance both from *Indians* and *Tartars*.

A similar diversity has arisen, I believe, from similar causes, between the people of *China* and *Japan*; on the second of which nations we have now, or soon shall have, as correct and as ample instruction as can possibly be obtained without a perfect acquaintance with the *Chinese* characters. *Kæmpfer* has taken from *M. Titsingh* the honour of being the first; and he from *Kæmpfer*, that of being the only *European* who, by a long residence in *Japan*, and a familiar intercourse with the principal natives of it, has been able to collect authentic materials for the natural and civil history of a country *secluded* (as the *Romans* used to say of our own island) *from the rest of the world*. The works of those illustrious travellers will confirm and embellish each other; and when, *M. Titsingh* shall have acquired a knowledge of *Chinese*, to which a part of his leisure in *Java* will be devoted, his precious collection of books in that language, on the laws and revolutions, the natural productions, the arts, manufactures, and sciences of *Japan*, will be in his hands an inexhaustible mine of new and important information. Both he and his predecessor assert with confidence, and, I doubt not, with truth, that the *Japanese* would resent, as an insult on their dignity, the bare suggestion of their descent from the *Chinese*, whom they surpass in several of the mechanical arts, and, what is of greater consequence, in military spirit; but they do not, I understand, mean to deny that they are a branch of the same ancient stem with the people of *China*; and, were that fact ever so warmly contested by them, it might be proved by an invinci-

ble argument, if the preceding part of this discourse, on the origin of the *Chinese*, be thought to contain just reasoning. In the first place, it seems inconceivable that the *Japanese*, who never appear to have been conquerors or conquered, should have adopted the whole system of *Chinese* literature with all its inconveniences and intricacies, if an immemorial connexion had not subsisted between the two nations, or, in other words, if the blood and ingenious race who peopled *Japan* in the middle of the thirteenth century before *Christ*, and, about six hundred years afterwards established their monarchy, had not carried with them the letters and learning which they and the *Chinese* had possessed in common; but my principal argument is, that the *Hindu* or *Egyptian* idolatry has prevailed in *Japan* from the earliest ages; and among the idols worshipped, according to *Kæmpfer*, in that country before the innovations of *Sacya* or *Buddha*, whom the *Japanese* also called *Amida*, we find many of those which we see every day in the temples of *Bengal*; particularly the goddess with many arms, representing the powers of nature; in *Egypt* named *Isis*, and here *Isani* or *Isi*; whose image, as it is exhibited by the *German* traveller, all the *Brahmans* to whom I showed it, immediately recognized with a mixture of pleasure and enthusiasm. — It is very true that the *Chinese* differ widely from the natives of *Japan* in their vernacular dialects, in external manners, and perhaps in the strength of their mental faculties; but as wide a difference is observable among all the nations of the *Gothic* family; and we might account even for a greater dissimilarity, by considering the number of ages during which the several swarms have been separated from the great *Indian* hive, to which they primarily belonged. The modern *Japanese* gave *Kæmpfer* the idea of polished *Tartars*; and it is reasonable to believe, that the people of *Japan*, who were originally *Hindus* of the mar-

tial class, and advanced farther eastward than the *Chinas*, have, like them, insensibly changed their features and characters by intermarriages with various *Tartarian* tribes, whom they found loosely scattered over their isles, or who afterwards fixed their abode in them.

Having now shown, in five discourses, that the *Arabs* and *Tartars* were originally distinct races, while the *Hindus*, *Chinese*, and *Japanese* proceeded from another ancient stem, and that all the three stems may be traced to *Iran*, as to a common centre, from which it is highly probable that they diverged in various directions about four thousand years ago, I may seem to have accomplished my design of investigating the origin of the *Asiatic* nations; but the questions which I undertook to discuss, are not yet ripe for a strict analytical argument; and it will first be necessary to examine with scrupulous attention all the detached or insulated races of men, who either inhabit the borders of *India*, *Arabia*, *Tartary*, *Persia*, and *China*, or are interspersed in the mountainous and uncultivated parts of those extensive regions. To this examination I shall, at our next annual meeting, allot an entire discourse; and if, after all our enquiries, no more than *three* primitive races can be found, it will be a subsequent consideration whether those three stocks had one common root; and, if they had, by what means that root was preserved amid the violent shocks which our whole globe appears evidently to have sustained.

XXVI.

THE TRANSLATION OF AN INSCRIPTION IN THE MAGA LANGUAGE,

*Engraved on a Silver Plate, found in a Cave
near Islamabad.*

COMMUNICATED BY JOHN SHORE, ESQ.

ON the 14th of *Magha* 904, *Chandi Lah Raja* *, by the advice of *Bowangari Rauli*, who was the director of his studies and devotions, and in conformity to the sentiments of twenty-eight other *Raulis*, formed the design of establishing a place of religious worship; for which purpose a cave was dug, and paved with bricks, three cubits in depth, and three cubits also in diameter; in which were deposited one hundred and twenty brazen images, of small dimensions, denominated *Tahmudas*; also, twenty brazen images larger than the former, denominated *Languda*; there was likewise a large image of stone, called *Langu-dagari*, with a vessel of brass, in which were deposited two of the bones of *T'hacur*. On a silver plate were inscribed the *Hauca*, or the mandates of the Deity: with that also styled *Taumah Chucksowna Tahma*, to the study of which twenty-eight *Raulis* devote their time and attention; who, having celebrated the present work of devotion with festivals and rejoicings, erected over the cave a place of religious worship for the *Magas*, in honour of the deity.

God sent into the world *Buddha Avatar* to instruct and direct the steps of angels and of men; of whose birth and origin the following is a relation:— When *Buddha Avatar* descended from the region of souls, in

* Perhaps *Sandilyah*.

the month of *Magh*, and entered the body of *Mahamaya*, the wife of *Sootah Dannah*, *Raja* of *Cailas*, her womb suddenly assumed the appearance of clear transparent crystal, in which *Buddha* appeared, beautiful as a flower, kneeling and reclining on his hands. After ten months and ten days of her pregnancy had elapsed, *Mahamaya* solicited permission from her husband, the *Raja*, to visit her father: in conformity to which the roads were directed to be repaired and made clear for her journey, fruit-trees were planted, water-vessels placed on the road-side, and great illuminations prepared for the occasion. *Mahamaya* then commenced her journey, and arrived at a garden adjoining to the road, where inclination led her to walk and gather flowers. At this time, being suddenly attacked with the pains of child-birth; she laid hold on the trees for support, which declined their boughs at the instant, for the purpose of concealing her person, while she was delivered of the child, at which juncture *Brahma* himself attended with a golden vessel in his hand, on which he laid the child, and delivered it to *Indra*, by whom it was committed to the charge of a female attendant; upon which the child, alighting from her arms, walked seven paces, whence it was taken up by *Mahamaya* and carried to her house, and, on the ensuing morning, news were circulated of a child being born in the *Raja's* family. At this time *Tapaswi Muni*, who, residing in the woods, devoted his time to the worship of the deity, learned by inspiration that *Buddha* was come to life in the *Raja's* palace: he flew through the air to the *Raja's* residence, where, sitting on a throne, he said, "I have repaired hither for the purpose of visiting the child." *Buddha* was accordingly brought into his presence. The *Muni* observed two feet fixed on his head, and divining something both of good and bad import, began to weep and laugh alternately. The *Raja* then questioned him with regard to his present impulse, to whom he answered, "I must not reside in the same place

“with *Buddha* when he shall arrive at the rank of *Avatar*; this is the cause of my present affliction; but I am even now affected with gladness by his presence, as I am hereby absolved from all my transgressions.” The *Muni* then departed; and, after five days had elapsed, he assembled four *Pandits* for the purpose of calculating the destiny of the child; three of whom divined, that, as he had marks on his hands resembling a wheel, he would at length become a *Raja Chacraverti*: another divined, that he would arrive at the dignity of *Avatar*.

The boy was now named *Sacya*, and had attained the age of sixteen years; at which period it happened that the *Raja Chuhidan* had a daughter named *Vasutara*, whom he had engaged not to give in marriage to any one, till such time as a suitor should be found who could brace a certain bow in his possession, which hitherto many *Rajas* had attempted to accomplish without effect. *Sacya* now succeeded in the attempt, and accordingly obtained the *Raja's* daughter in marriage, with whom he repaired to his own place of residence.

One day, as certain mysteries were revealed to him, he formed the design of relinquishing his dominion; at which time a son was born in his house, whose name was *Raghu*. *Sacya* then left his palace with only one attendant and a horse, and, having crossed the river *Ganga*, arrived at *Balucali*, where, having directed his servant to leave him and carry away his horse, he laid aside his armour.

“When the world was created, there appeared five flowers, which *Brahma* deposited in a place of safety; three of them were afterwards delivered to the three *T'hacurs*, and one was presented to *Sacya*, who

discovered, that it contained some pieces of wearing-apparel, in which he clothed himself, and adopted the manners and life of a mendicant. A traveller one day passed by him with eight bundles of grass on his shoulders, and addressed him, saying, "A long period of time has elapsed since I have seen the *Thacur*; but now since I have the happiness to meet him, I beg to present him an offering, consisting of these bundles of grass." *Sacya* accordingly accepted of the grass, and reposed on it. At that time there suddenly appeared a golden temple, containing a chair of wrought gold; and the height of the temple was thirty cubits, upon which *Brahma* alighted and held a canopy over the head of *Sacya*: at the same time *Indra* descended, with a large fan in his hand, and *Naga*, the *Raja* of serpents, with shoes in his hand, together with the four tutelar deities of the four corners of the universe; who all attended to do him service and reverence. At this time likewise the chief of *Asurs* with his forces arrived, riding on an elephant, to give battle to *Sacya*; upon which *Brahma*, *Indra*, and the other deities deserted him and vanished. *Sacya*, observing that he was left alone, invoked the assistance of the earth; who, attending at his summons, brought an inundation over all the ground, whereby the *Asur* and his forces were vanquished, and compelled to retire.

At this time five holy scriptures descended from above, and *Sacya* was dignified with the title of *Budha Avatar*. The scriptures confer powers of knowledge and retrospection, the ability of accomplishing the impulses of the heart, and of carrying into effect the words of the mouth. *Sacya* resided here, without breaking his fast, twenty-one days, and then returned to his own country, where he presides over *Rajas*, governing them with care and equity.

Whoever reads the *Caric*, his body, apparel, and the place of his devotions must be purified; he shall be thereby delivered from the evil machinations of demons and of his enemies; and the ways of redemption shall be open to him. *Buddha Avatar*, instructed a certain *Rauli*, by name *Anguli Mala*, in the writings of the *Caric*, saying, "whoever shall read and study them, his soul shall not undergo a transmigration:" and the scriptures were thence called *Anguli Mala*. There were likewise five other books of the *Caric*, denominated *Vachanam*, which if any one peruse, he shall therefore be exempted from poverty and the machinations of his enemies; he shall also be exalted to dignity and honours, and the length of his days shall be protracted. The study of the *Caric* heals afflictions and pains of the body; and whoever shall have faith therein, Heaven and bliss shall be the reward of his piety.