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EDITED BY

P. V. KANE H. D. VELANKAR
ASAF A. A. FYZEE GEORGE M. MORAES

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SURAT IN 1663 AS DESCRIBED BY FR. MANUEL GODINHO

BY

GEORGE M. MORAES

In 1661 Portugal, threatened at home with the extinction of her independence by Spain and with the annexation of her dominions overseas by the Dutch, sought to save herself from a critical situation by concluding a defensive alliance with the English. The latter had long been casting covetous eyes on the Portuguese possessions in Western India. They had already in 1626 all but succeeded in taking forcible possession of the island of Bombay ; and trying more peaceful means twenty-six years later had offered to purchase a portion of the Portuguese territories. Consequently, when England demanded the island of Bombay as the price of her help against Holland and Spain, disagreeable though the prospect was, Portugal had no alternative but to agree.

In 1662 Charles II of England sent a squadron under Lord Marlborough to take possession of the island of Bombay. But the Portuguese Governor, Antonio Melo e Castro, refused to surrender it on the ground that the English admiral had failed to assist in defending their fortress of Cochin against the Dutch, who were besieging it.[1] He defeated the efforts of Marlborough to seize Bombay by force by marching all the Portuguese forces in Bassein to its defence. In his letters to the Portuguese Crown, the Governor and his

[1] In his letter to the Portuguese Crown dated 28th December, 1662, the Governor gives among the reasons which prevented him from ceding the Island to the English the fact that they had not fulfilled the terms of the capitulations. In his own words :

"The terms of the capitulations required that the King of England shall first arrange the treaty of peace (i.e., with the Dutch) ; that the Dutch should first either agree to the terms or not and continue the war, and that a sufficient fleet should be sent to help us in the latter case. . . . . If Your Majesty orders me to surrender in the mode and form of these capitulations, and in no other manner. . . when the treaty of peace is neither accepted nor refused, and no fleet has arrived, except three ships, without neither force nor orders to help us, how can I account to Your Majesty for delivering the Island of Bombay ?" J. Gerson da Cunha, *The Origin of Bombay* (*The Journal of the Bombay Branch Royal Asiatic Society*, Extra Number, 1900), pp. 246-47.

Council defended their stand, pleading that the cession of the island would deal a fatal blow to the Portuguese Empire in India. As the arguments could not be driven home with sufficient force by correspondence, the Governor despatched Fr. Manuel Godinho, an able and astute Jesuit, as his personal representative who could press before the Crown the point of view of the authorities in India.[2] But few Portuguese ships were sailing to the East in those days, and it was manifestly perilous to proceed by an English vessel on a secret and important mission which precisely concerned English interests.

[2] Fr. Godinho who was the bearer of the letter of the Portuguese Governor dated 28th December, says in the prologue to his *Relação do Novo Caminho* (see note 3 for bibliographical details) that his mission to the Crown had a threefold object : (1) "the salvation of the many thousands of souls", (2) the "well-being" of Portugal, and (3) "the conservation of the (Portuguese) state in India,"—objects which are clearly set out in the letter he was carrying with him to Lisbon : "Moreover, I see the best port Your Majesty possesses in India, with which that of Lisbon is not to be compared, treated as of little value by the Portuguese themselves. I see in the Island of Bombay so many Christian souls which some day will be forced to change their religion by the English. How will they allow Catholics to reside in their territories when they hand over Catholics in the island of Anjuanne to the Moors ? I considered also that Your Majesty has no other place to receive and shelter Your Majesty's ships and the galleons of your fleet, when that bar is closed. The English once there, and the island fortified, Your Majesty will lose all to the north, as they will take away all Your Majesty's trade. They bring the same articles as we do, and of better quality ; they will compel all vessels to be put into that harbour, and lay duties, as we did formerly ; we shall have to receive from them what Europe sought from us ; even the provisions of our lands, which supply all our fortresses, we shall have to buy from them. . . . Lastly, the criminals will find a shelter there . . . . The English are at peace with us now, but what would it be in the case of war ? How can those islands which are the granaries of India, once wedged in between the British and the Mogores (Moghals) be defended ?" Da Cunha, *op. cit.*, pp. 247-48.

The cession of Bombay was also opposed by the landed interests in the Island who feared that their properties would be sequestrated by the new government. For, in his reply dated 8th February 1664 to the letter of the Governor, the Portuguese Monarch found it necessary to reassure the inhabitants on this point : "By your letter which has been brought to us overland by Manuel Godinho, a Religious of the Company of Jesus, I saw with great pain the difficulties which have arisen with regard to the delivery of Bombay to the King of Britain, my brother and cousin, according to the capitulations, and the orders I gave you when you left. Whatever is stipulated in "the capitulations" and reasons for giving contentment to the King, my brother, admits of no doubt, and I trust that with your prudence you have now arranged matters so far that you will carry out my instructions without further delay. Should any fresh difficulties present themselves, I order you to overcome them in a manner that I may feel grateful to you. *To the inhabitants of the island you must say that they have misunderstood the Article of Capitulation shown them, as their estates (fazendas) will not be confiscated, but they will be allowed to remain in possession of them as heretofore.*" Da Cunha, *op. cit.*, pp. 253-55 (Our italics). Indeed there must have been a general alarm among the land-owners at the imminent transfer of the Island over their heads to the foreign government.

In view of the efforts made by a recent writer (J. H. Gense, *How Bombay was ceded*, Bombay: Taraporewala, n. d., pp. 57-65) to show that the Jesuits had nothing to do in this affair, it must be pointed out that the Jesuits owned considerable landed property in the Island, which partly comprised what is now called the "Parel Government House and Ground" where at present the Haffkine Institute is housed. (The property had been purchased out of the endowment of Rs. 27,000 made in 1619 to the Jesuit College at Agra by Mirza Zulqarnain, a Christian official of the Mughal Government of high rank, so that the College may have a steady income and be independent of the caprices of the Mughal Emperors. Edward Maclagan, *The Jesuits and the Great Mogul* (London : Burns Oates, 1932), pp. 175-76 and note 38).

The apprehensions of the Portuguese landlords, which in the case of the Jesuits came true in 1719, may have very naturally been shared at the time by the Jesuits, who along with the former brought their pressure to bear on the Governor. As the English Factors at Surat reported to the Company: "My Lord (the Earl of Marlborough) with Sir Abraham not prevailing upon the Vice Roy and the more emanent inhabitants and owners of the island of Bombay etc. (who indeed are the Jesuites more particularly and principally, (and who consider the Island) as a place fittest for them to owne and be owners off, in respect of its fruitfullness and pleasantness), Sir Abraham resolved for Goa." William Foster, *The English Factories in India, 1661-64* (Oxford : Clarendon Press, 1923), p. 139. It is difficult to agree with Father Gense that the Jesuits were only absentee landlords,

It was, therefore, judged safer to take the overland route through Persia. Fr. Manuel Godinho accordingly left Bassein in December 1662 for Surat in order to take ship to the Persian Gulf. To conceal his identity he entered Damaun dressed as a soldier. At Nargol he changed into Moorish clothes, as he ran the risk of being recognized as a Portuguese by the inimical Arabs, and he also did not wish to attract undue notice from the Europeans. He spent the whole of January 1663 in Surat pending the departure of the ship. He reached Lisbon in October 1663. In his *Relacao do Novo Caminho da India para Portugal* which describes his journey, he has left perhaps the very best account of Surat, *pace* his odium theologicum, ever written by any writer of the 17th Century.

Fr. Godinho was born in 1630 at Montalvão, a town in the district of Alentejo in Portugal. His parents were Manuel Nunes de Abreu and Joana de Reis. He entered the Society of Jesus at the early age of fifteen. Assigned to the Indian Mission, Fr. Godinho worked in Goa. He left the Society and became a secular priest, holding successively the post of prior of the Church of St. Nicholas at Santarem, and of beneficiary of the Church of Saint Nicholas at Lisbon. He was prior of the Church of St. Mary at Loares and was also Protonotary and Commissioner of the Holy Office. He died in 1712.[3]

His chief work, as mentioned above, is the *Narrative of the Journey which Fr. Manuel Godinho made taking a new route by land and sea from India to Portugal in the year 1663*. Published in 1665 it was reprinted in 1842 and again recently in 1944. It is notable for the historical importance of the narrative, as well as for the beauty of its form, revealed particularly in the vivid description of the journey. He also wrote (1) a life of the Venerable Fr. Antonio das Chagas, (2) the Evangelical time-table showing the forty hours given in the Gospels with as many sacramental meditations for them, (3) interesting descriptions of some of the events which took place at Constantinople after the

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implying thereby that there were no Jesuits, present on the Island at the time, when the Jesuit College at Bandra was at a distance of barely four miles from Parel.

We would like to add that it was not the "fruitfullness and the pleasantness" of the Island alone for which its cession was opposed by "the more emanent inhabitants", who, the Jesuits apart, were very likely all Portuguese. As the letter of the Portuguese sovereign expressly observes, "The inhabitants of the island are so closely allied by nationality, parentage, and convenience to the best of the Portuguese all over India." To them it was no light matter to pass under the dominion of a foreign nation, and they must have been grieved at the action of their sovereign in seeking to barter them away in the manner proposed. It was only the consideration that they were being called upon to make a sacrifice of their nationality in *order that the nation to which they belonged may live* that must have reconciled them to their fate, and it must have indeed been a wrench to them to hear the concluding words of their King in his letter to the Governor : "The only difference will be that they will live under the dominion of the King of Great Britain my brother, who will rule them with justice and in the freedom of the Roman Catholic religion."

[3] *Relação do Novo Caminho que fez por Terra e Mar vindo da India para Portugal no Ano de 1663 o Padre Manuel Godinho*. Com uma introdução por Augusto Reis Machado (3rd ed. Lisbon (?): Agencia Geral das Colonias, 1944), p. xv. The year 1633 in the title of this edition is obviously a mistake for 1663.

march of the Turkish troops on Vienna, which description he sent from Constantinople to a Maltese Knight, and (4) a penegyric on Saint Anthony preached at the Church of St. Mary at Lisbon.

We translate here Chapter VI of his *Relacão do Novo Caminho da India para Portugal* entitled :

Description of the city and port of Surat, the major emporium of India

"In ancient times, Surat was a poor town and the port was hardly known. But to-day thanks to the patronage of the Hollanders and the English, it is the richest city and the most celebrated emporium in the whole of the Orient. It lies twelve leagues to the north of Damaun on the banks of the river Tapti, three leagues from its mouth and bar. It is not suitable for ships of heavy draft, which can enter it only after first discharging their cargo without. The river as such is not deep, but certain deep hollows have been excavated in its bed by human industry so as to allow heavy vessels to lie on the silt at low tide. The first Portuguese who sounded the bar was Antonio da Silveira, who proceeded thither by the order of Nuno da Cunha with a fleet to destroy this city and that of Reiner[4] which lies higher up the river on the opposite bank behind a promontory. The water of this river is sweet at low tide and brackish at high tide. In a hollow which the sea has made a league to the north of the river called Soali,[5] the ships of the English and the Hollanders that come to Surat ride at anchor, and are so close to the land that they can cover the landing place of their sloops with the artillery from their ships. There these two nations have their own custom-houses, through which they send their goods. In this hollow of Soali both the Hollanders and the English were attacked by our fleet, but with little credit to our arms. The greatest of these reverses was suffered by D. Jeronimo de Azevedo, the twentieth Viceroy of India who after attacking four Dutch vessels which were at Soali with a fleet of six galleons, three pinnaces and sixty rowing vessels had to withdraw with hardly three pinnaces which he left in flames.

"The City is rather narrow, and surpasses our Evora in grandeur as in the number of its inhabitants, which I reckon to be more than 100,000, the white Mongals, the Hindustani Moors, Hindus of every class, Christians of various nations, in short, people from all over the world who live a settled

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4 Rander.

5 "The haven of Surat at the village of Suhaly", says Mendelslo (1638) "is not above 500 paces broad before the village, sandy at the bottom, and most of the banks are bare and dry at low water, and so sharp and steep, that soundings there is to no purpose at all. 'Tis very safe riding there being no danger of any wind, but that of the South-West." *The Voyages and Travels of J. Albert de Mendelslo,* trans. John Davies (London : J. Starkley and T. Basset, 1669), p. 18.

life there or frequent that port on business. You will find there Spaniards, Frenchmen, Germans, Englishmen, Hollanders, Flemings, men from Dunkirk, Italians, Hungarians, Poles, Swedes, Turks, Arabs, Persians, Tartars, Georgeans, Scythians, Chinese, Malabarians, Bengalis, Ceylonese, Armenians, with other infinite variety of barbaric and strange nationalities. The buildings are mostly humble with roofs of olas (that is interlaced palm leaves). This is the reason why, if by some chance a house is set on fire, it consumes many an entire street. But the city is not without some noble and stately houses belonging to the chief lords.[6] The exterior is hardly imposing, because these men like the other Moors take care to embellish the interior of their houses, purposely leaving the exterior uncouth, as they are building apartments for their women and not habitations for men. If you should look at one of these better class houses from the street, they give an appearance of hell, but once you enter them they are like paradise, because everything is of gold and rich with paintings on the ceilings and exquisite decorations on the walls, the finest carpets spread on the floors, and in place of chairs couches draped with the best of silk for reclining, and with cloisters, gardens, fountains and everything else that can help to amuse those who live there. On the other hand, the Bania gentiles of Surat build their houses, curiously paying greater attention to the exterior than to the comforts within. They build them of stone and lime up to the first floor, and thereafter there is nothing else but works carved in relief on teak, interspersed with enamel and lacquers of variegated hues.

"There are in the city a large number of mosques for worship, and each nation among the Muslims has set apart for it a portion of the mosque where they gather on Fridays. The chief mosque is outside the city gates. It faces east, and is a majestic and lofty structure with imposing houses adjoining the minaret. Here lives the Sheriff (as the Moors call the relatives of their Mafoma)[7] universally respected and venerated by the high and the low alike, and it is deemed a merit to be able to kiss his hand or even a part of his tunic.

"Not the least sumptuous of the buildings are the two caravansaries (that is to say public inns) built in the style of cloisters with living rooms on the sides. The caravansaries have only one main gate which is closed at night and opened at day-break so that the goods of the merchants who lodge therein may be all the more secure. Another building worthy of mention is the public bath. It is a low spacious house which caters for a variety of baths, and is open to Muslims. It is staffed by a large number of servants who are paid for by the city to serve the wants of those who take their bath there,

[6] Hardly nine or ten according to Tavernier, *Travels in India*, trans. V. Ball (London : Macmillan, 1889), Vol. I, p. 7. These chief lords were evidently Mughals.

[7] Muhammad, the Prophet.

and to supply them hot water without expectation of any payment from the individual visitors.

"The city is not walled, but has a low enclosure pierced by four gateways.[8] These are heavily guarded and whoever enters with his goods is taken by the guards to the custom-house in order that the customs duty on the goods they bring is not lost. On coming out, he is further interrogated and required to produce the receipt of the assessor of customs, without which no one is allowed to proceed. There are two custom-houses in Surat. They are close to the river and face each other. Through the bigger are despatched the goods that are brought by sea, and through the smaller those that come to the city from inland. For export there are other custom-houses or rather offices at the same place. The duties which they pay at the custom-houses are five per cent.[9] To the Dutch, however, one per cent rebate is given by the present Emperor in consideration of a rich and exquisite present which Mansucar, the governor of Jacatara, made to him in the name of the Company in the year 1661.

"The defence of the whole city rests with the citadel which stands on the banks of the river. The citadel has three bulwarks and a horseman in the centre with twenty pieces of artillery partly of bronze and partly of iron. But almost all these have been dismantled being either without gun-carriages or having burst. The ditch of this citadel is very deep, but narrow. The garrison consists of 200 native soldiers under a Mughal captain. The latter holds authority independent of the Nawab or Governor of the Province. Nevertheless, save for the fact that he is lord of that fortress, he cannot set his foot outside its limits without the express permission of the king.[10] The captain is also the treasurer of many millions; for in the fortress are deposited the revenues of the province,[11] the customs dues and most of the coins that are struck in this city continuously. These coins are the finest in the whole of India, because here are refined the *patakas* that come from Spain, and from these and the *larins* of Persia which contain the finest silver their rupees are made, corresponding to our crusados.[12] At sunrise and sunset they

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8 Twenty-five years earlier Mandelslo had reported that the city had only three gates, "whereof one goes towards the village of Brion, where those who go to Cambaya and Amadabad, cross the river; another goes to Barampour; and the third to Nassary." *Op. cit.*, p. 17.

9 When Mandelslo visited Surat in 1638 the duty levied on merchandise was 3½ per cent, excepting gold and silver which paid but 2 per cent. *Op. cit.*, p. 18.

10 Cf. *Ibid.*, also Tavernier, *loc. cit.*

11 Thevenot, who visited Surat in 1666 agrees that "the revenues of the king that are collected in the Province are kept there, which are never sent to court but by express orders." *The Travels of Monsieur de Thevenot into the Levant* (London: Faithorne, Adamson, and Newborough, 1687), p. 15. The yearly revenue from Customs according to him was "twelve lakhs of roupies, each lakh being worth about an hundred thousand French liveres." *Op. cit.*, p. 27.

12 Observations on this point of some other travellers may be noted. Thevenot for example remarks: "It is to be observed that the silver money of the great Mogul is finer than any other; for whenever a stranger enters the Empire, he is made to change the silver he hath whether piastres

beat cattle-drums in the fortress which are like atabalas and which the Moors use as tamboors in battle. Around the fort there are no houses, in order that they may not stand in the way of the artillery, but there is a beautiful open square in which a fair is held every evening, and everything can be had there that is asked for.

"Surat is the greatest emporium in India and perhaps the richest in the whole world because of the choice merchandise that is carried there by land and sea. It is carried by the English and the Dutch from Europe, by the ships of the Red Sea from Africa, and by the natives from Asia Minor. The best of goods come into Surat from inland by caravans or bullocks and camels which enter its gates every hour.[13] The merchants and those that have business dealings in this city are very rich, some of them being estimated to be worth more than 5 to 6 millions. They have 50 ships of their own going out to all the countries and there is no count of the foreign ships that call at this port. There will be found at all times of the year in Surat ships from China, Malaca, Macassar, Maluca, Jacatara, Maldives, Bengal, Tenacerim, Ceylon, Cochin, Cananore, Calicut, Mecca, Eden, Suez, Magadaxo, Caxem, Mascut, Madagascar, Ormuz, Basra, Sind, England; in short from every part of the world.

"The country round Surat abounds in wheat, pulses and rice, but hardly any food or coconut trees grow there save the date-palm from which wine is produced by a certain class of people.[14] These are fair-skined and are called Parsis,[15] because of their origin from Persia from where they fled at the time when Persia was converted to Islam. These are the gentiles who adore

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or Abassis into the money of the country, and at the same time they are melted down and the silver refined for the coining of roupies." *Op. cit.*, p. 18. And J. Ovington : "Whatever strange coin comes into the hands of the Mogul's officers, it is melted down and converted into rupees, which are stamped with the particular characters of the Emperor then reigning." J. Ovington, *A Voyage to Surat in the year 1689* (London : Jacob Tonson, 1696), p. 220.

[13] Ovington says, "that goods from such places as Agra, Delhi, Ahmedabad and other cities are sold off in great quantities to Europeans, Turks, Arabs, Persians and Armenians." *Op. cit.*, pp. 111-12.

[14] The method of toddy-tapping is thus described by Mandelslo : "To get out the juice they go up to the top of the tree, where they make an incision in the bark and fasten under it an earthern pot which they leave there all night, in which time it is filled with a certain sweet liquor very pleasant to the taste." *Op. cit.*, p. 17. The same method has continued down to the present day.

[15] But toddy-tapping was not the only occupation of the Parsis. Ovington who met these gentle and noble people pays a high compliment to their industry and skill in whatever trade they were engaged. He says : "In their callings they are very industrious and diligent, and careful to train up their children to arts and labour. They are the principal men at the loom in all the country, and most of the silks and stuffs at Surratt, are made by their hands." *Op. cit.*, pp. 375-76.

Nor did the sense of fellowship and brotherhood, a marked feature of the Parsi character, escape the notice of this observant Englishman : "They show a firm affection to all of their own sentiments in religion, assist the poor and are very ready to provide for the sustenance and comfort of such as want it. Their universal kindness either in employing such as are needy and able to work or bestowing a seasonable bounteous charity to such as are infirm and miserable ; leave no man destitute of relief nor suffer a beggar in all their tribe ; and herein comply with that excellent rule of Pythagorous, to enjoy a kind of community among friends." *Ibid.*, pp. 373-74. See also John Fryer (1681), *A New Account of East India and Persia* (London : Chiswell, 1698), p. 117.

the Sun, Moon and Fire, which they tend, as is related of the vestal virgins of Rome. And if by any chance a house is set on fire, they would rather have everything burnt than put it out, because that would amount to killing God whom they adore in the shape of fire.[16]

"Outside the city to the west there are two wide pieces of ground with countless tombs of the Moors, separated from one another by stones at the head of each grave. Further still are two enclosures, in one of which the Dutch and in the other the English are buried. Some of the mausoleums of the Dutch Commodores and the English Presidents are worth a visit both for their structure and finish. The epitaphs are in Latin, English and Flemish and describe who the persons were that lie there, and what offices they held in life. There is a separate graveyard for the Christians,[17] easily distinguished by the crosses which are planted on the graves.

"I shall describe the dress, food and other customs of the people of Surat when I shall speak of the Mughals.[18] The water which is used for drinking is from two well-supplied wells[19] outside the gates of the city. The Gentoos use the water from the river, not because it is better but because once the carcass of a cow was found thrown into one of the wells and they have since taken such a disgust that no one drinks the water any more.[20] The Moorish and Gentoo gentry of Surat ride beautiful Arab steeds, but without the solar

[16] Ovington noted the same veneration : "The extinction of which (fire), if it is voluntary is a crime. . . . so that if their houses were on fire they would sooner be persuaded to pour on oil to increase than water to assuage the flame." *Op. cit.* 371-72. "It being, according to them," adds Manucci (1676), "the greatest good luck and cause of rejoicing that he could have, he believing that his Gods have conferred on him an especial gift and favour, in return for the adorations he has paid to them. And if ever, through negligence, the fire goes out in any of the houses, the fire that all of them maintain with special care, there is great lamentation much more than they would make if their nearest relation had died." Niccolao Manucci, *Storia do Mogor*, trans. William Irvine (London : John Murray, 1907), Vol. I, p. 64. See also Thevenot, *op. cit.*, p. 15. "The Parsee doth superstitiously adore the fire as God," observes the Rev. John L'Escaliot, "and thinks it an unpardonable sin to throw water upon it; soe that if a house bee fired, or their clothes upon their backs be burning, they will, if they can, hinder any man from quenching it." L'Escaliot to Sir Thomas Browne, dated Surat 28th January 1664, Sloane *MSS.* No. 1861 in *English Records on Shivaji* (Poona : Shiva Charitra Karyalaya, 1931), Vol. I, p. 72. But all this is clearly an exaggeration. For, as pointed out by the late Sir Jivanji Jamshedji Modi, the *Desatir* or Sacred Writings, while admitting that "fire is the great illuminator," counsel the faithful to extinguish it with water in cases of necessity. "A glimpse into the Work of the Bombay Branch Royal Asiatic Society during the last 100 years from a Parsee point of view," *JBBRAS, The Centenary Memorial Volume* (1905), p. 180.

[17] Catholics.

[18] This is described in Chapter VIII, but the chapter deals chiefly with the dress and customs of the Mughals and not of the people of Surat.

[19] Evidently Gopi Talao which actually consisted of two cisterns "the memorial of a rich Gentoo's piety, a work not unworthy of Imperial Rome,' which the king of Gujarat did his best to give his name to, but did not succeed.' *Bombay Gazetteer*, Gujarat (Bombay : Government Central Press, 1877), Vol. II, p. 312; *The Travels of Pietro Della Valle in India*, trans. G. Havers 1664, ed. Edward Grey (London : Hakluyt Society, 1892), Vol. I, p. 34; Thevenot, *op. cit.*, p. 25.

[20] But Thevenot, visiting Surat three years later, says "The river of Tapi is always brackish at Surat, and therefore the inhabitants make no use of it, neither for drink nor watering of their grounds, but only for washing their bodies. . . They make use of well-water to drink, and it is brought in borrachoes upon oxen." *Op. cit.*, p. 26.

hats, as it is the royal headgear in the Mughal Empire. Some also go in carriages called arcolins which look like coaches and are drawn by stately and swift-footed bullocks of beautiful colours. The points of these cars shine with rings of guilded bronze for gallantry, their hoods are lined with silk and scarlet cloth, and for seats they have luxurious cushions on fine alcatifa. Nothing is known here of carts drawn by mules, because they have no mules, nor of coaches, because there are many horses.

"Ever since they first entered India, the English and the Dutch (the former during the Viceroyalty of Matias de Albuquerque, and the latter during that of Aires de Saldanha) have established themselves at the fort of Surat. The English have here the Presidents and the Dutch Commodores. Their ships anchor at this port, though the Dutch ships, since that nation possesses better ports in their city in the south, do not visit Surat as frequently as they did before. But the English having no ports of their own in India capable of harbouring their ships save the fortress of Madras-patan on the inhospitable and high seas of Coromandal, have availed themselves of the ready welcome they have always received at Surat where their ships are in great demand.[21] Here they discharge their goods and wait till they can return laden with the cargo of cloth, pepper, indigo, silk and other commodities which for this reason is purchased at this port beforehand or is sent for from other ports by their ships which for this purpose go coasting all over from Surat. And so, it is that the Dutch Commodores and the English Presidents fly their national flags from masts not only higher than the roofs of houses but also all the towers in the city.

"The administration of the whole of this district is vested in one head called the *Nawab*.[22] He is selected from among the umars, who used to be the titular lords of the Mughal Empire. He is treated with great deference and never stirs out of his palace unless accompanied by a brilliant company of cavalry and foot soldiers, preceded by an armed corps of elephants and camels and followed by a large body of horse. At the time when I passed through Surat, the Nawab was a highly respected Persian; but he was much given to hunting leopards, a weakness he paid for with his governorship. For, when it was reported that in going out on the chase, he was neglecting his duty and was never present in the city as was expected of him, the Emperor relieved him of his charge and sent another governor.

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21 Mandelslo says: "The English particularly have made it the main place of all their trading into India, and have established there a President, to whom the Secretaries of all the other Factories are obliged to give an account." *Op. cit.*, p. 18. So also Fryer: "we singly have the credit of the port, and are of most advantage to the inhabitants, and fill the custom-house with the substantialest incomes." *Op. cit.*, p. 88.

22 "To whose management and care," says Ovington, "is committed the trust of all civil affairs. He receives addresses from all civil merchants and men of note." *Op. cit.*, p. 227.

"Whenever a letter is expected from the Emperor the Nawab goes out from the city, awaits its arrival, receives it from the messengers, puts it on his head, and without opening it proceeds to his palace and reads it there. The great Mughal has at Surat a Moor[23] whose duty is to spy on the Nawab and the ministers in political as well as in other matters, who keeps him informed of his doings, at times even to the minutest details such as among Christians as well as among the Moors themselves would be regarded as trifles.

"In ancient days there was in Surat a house of the Fathers of the Society of Jesus, who had enough work in this mission and city. For besides the Portuguese and their slaves who had fled or been expelled from our territories, there are so many Christians here of the East and of the West, that even if there be a hundred religious all of them would be fully occupied with them, administering sacraments to the Catholics, converting the heretics, and undeceiving the schismatics. The Society abandoned this mission, because every time the Mughals demanded satisfaction they would take the Fathers prisoner, thus compelling the Viceroys to accede to their demand for fear of imperilling the life or liberty of the prisoners. Their place is now taken in Surat by two bearded French Capuchins sent by the Sacred Congregation of the Propaganda Fide who labour there much in the service of God, and have their chapel in their house, in which the Catholics hear Mass on Sundays and Holidays.[24]

"I saw at Surat among the Gentoo Banyas a counterfeit of our religious orders, whom the devil makes them mimick so that he may take more souls for himself to hell. I refer to the dervishes who live in a community in such poverty that not even the Order of St. Francis can equal it. They sleep on the ground with no other bed than the hard earth. They eat only rice with butter, and take no meat or fish all their lives. They wear a coarse saffron cloth, which covers only a part of their body. They go about bare-footed and bare-headed with a staff in hand, always in twos like the friars. They observe celibacy, live on alms, accompany the dead, and in this way live to a great age. Twice a day they go out to the river in community, each one with a pot full of water, which they call holy, and spend much time in praying in their manner and relating stories to whomsoever wishes to hear them. They are governed by Provincials and other local superiors.

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[23] Evidently *harkarah*, who according to Ovington, "harkens to all kinds of news, whether true or false, listens to everything that happens whether of moment or no moment, and reports to the Great Moghuls whatever is done or spoke of, but with so soft a pen, that nothing may offend, considering the profound veneration due to such a powerful prince, whose frowns are mortal." *Op. cit.*, p. 229.

[24] Referring to the house of the Capuchins, Tavernier says, "the Reverend Capuchin Fathers have built a very commodious one upon the model of the houses of Europe, with a beautiful Church." *Op. cit.*, Vol. I, p. 7.

"But these religious are not so strict as the Yogis. The ancients call them gymnosophists.[25] I would with greater propriety call them matryrs to the demon, or rather living demons. They go from place to place like the gypsies, some in torn and patched clothes, others without any clothes at all,[26] others still with only a piece of cloth to cover their shame, leaving the rest of the body bare. And although it would appear that they cover a part of their body for shame, they have in fact very little of it, and in all human matters they obey nature whenever they are so disposed, and are not ashamed to be seen, saying with the Cynics that nature can do nothing shameful. They go about with ashes smeared all over from head to foot including the eyes and mouth. These ashes are of cow-dung. The cow also gives them water with which they wash themselves. They have neither house nor bed. They sleep in the open on the bare earth. Not only do they despise luxury and all delicacies in eating and dress, but they lead penitential lives of such surprising rigour as to move one to pity. For some go about naked with heavy iron chains round their neck and body like hair-shirts. Others bury themselves alive by the road-side, leaving only an air-hole, through which may be passed a piece of reed for directing into their mouth some *conjee* or rice-water. Others fall into a trance after mounting columns or wooden pillars, from which they do not descend save after death. Others still on days of great feasts in their temples hang themselves from poles by pointed hooks which are made to pass through their naked ribs, and remain suspended in the air singing in joy hymns to their gods. One of the Yogis I saw at Surat had been holding his arms aloft and had not lowered them for ten years.[27] The nerves and the joints had become so stiff that even if he had wished it would not have been possible for him to bring them down. His hands had their fingers clenched as in dealing a blow. His nails had grown so long that if turned round the hands they could serve as chords for tying them. The hair of the head covered part of the visage and all that was exposed. I saw another Yogi with only one hand raised. Another always in a standing position whether by day or night, the only rest he took being when he caught a string, the ends of which had been tied to two windows, and balanced himself from side to side. Others went about charged with conches and rama beads about their neck. I was curious to go and see how these Yogis with the up-raised arms ate and slept, and I saw that certain boys of their company fed them;

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[25] The Italian traveller Pietro Della Valle, who saw them in 1623, writes: "There is no doubt but these are the ancient Gymnosophists so famous in the world, and, in short, those very Sophists who then went naked and exercised great patience in suffering, to whom Alexander the Great sent Onesicritus to consult with them, as Strabo reports from the testimony of the same Onesicritus." *The Travels of Pietro Della Valle in India*, p. 99. Strabo, 15. 1. 59-66.

[26] Ovington's remark on this point is noteworthy: "The constant sight of them in the city, which offers itself at every turn, abates that bashfullness in the spectators, which such an immodesty might be apt to create, and diverts neither sex from their society, from a familiar conversation and intimacy with them; and custom has worn off all that coyness even in the women, which would be startled at such an immodest spectacle at first." *Op. cit.*, p. 363.

[27] For similar details, Ovington, *op. cit.*, pp. 366-67; Fryer, *op. cit.*, p. 102.

and when it was night the Banyas brought to them many sacks of cow-dung (cakes) with which they lit a fire and sitting round it they passed the night.

"The credit of these Yogis among the Gentoos is very high. These Gentoos think that they are the greatest saints on earth, who are doing penance for all the sins of mankind, and control the wrath of God with those hands lifted up to heaven.[28] However great may be the evils they see them commit, they take everything in good part, and if any one harms them he is excommunicated and loses both body and soul. The Yogi carries a trumpet, which he sounds when he approaches a hamlet so that it may be known that the Yogi is there, and that they may bring him food. If by any chance, which is indeed very rare, a Yogi is offended with people for failing to provide him with his needs and puts them under a curse, then forthwith all of them go in a procession, taking with them whatever they have in the house in order to ask pardon of the Yogi so that he may revoke his sentence, which they think, is already being executed on them. The Yogis are more feared than respected, because to avenge a wrong done to any of their number two or three thousand of them will collect together and stand in defence of the honour of their Order.[29] When they thus forgather, they elect a chief, whom they obey just as the gipsies do in electing a count. The chief is generally of the highest lineage, since there is no dearth of such in their Order. Indeed, there are few Gentoo countries in which there are no princely Yogis, a fact which enables many to live free from danger from their brothers, and even to seize the reins of government from them with the help of their comrades. Not to speak of other instances, Bahadur Khan, the third son of Mudafar (Muzafar), king of Cambay, was at first a faquir who usurped the kingdom from his brothers Muhammad and Latif Khan. Again the present Grand Mughal,[30] who to-day rules over more kingdoms than any other monarch in the world, became king from a faquir or Yogi[31] (the Moors call their Yogis by the name of faquir,) and he secured his throne by putting to death a father and his three elder brothers.

"All these Yogis are very great sorcerers, and pretend to know medicine, though in truth they are only herbalists. They make what is known as the

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[28] Compare Ovington's remark that "from the prayers of these humble saints are expected to flow considerable blessings, and the prevention of many mischiefs." *Op. cit.*, p. 360.

[29] Ovington similarly remarks "These philosophical saints have since the first forming of their order, assumed a liberty of taking that by violence, which they find is denied their civil requests, and sometimes force a charity from the people, when entreaties cannot prevail, especially in the country villages. For their numbers render them imperious and upon pretentions of extra-ordinary sanctity, they commit a thousand villanies unbecoming their profession." *Op. cit.*, p. 361.

[30] Aurangzeb.

[31] Fryer, *op. cit.*, p. 95, also says that Aurangzeb "lived long in the order of the Fakirs or holy men till he came to the throne." And Alexander Hamilton: "When Aurangzeb came to be eighteen years of age, and had done with the school, he dissembled his ambitious thoughts and declared that he desired to live a private life in the province allotted to him, and so took up the *Fakir* habit and way of life." *A New Account of the East India* (London: C. Hitch, 1744), Vol. I, pp. 171-72.

cobra stone[32] which is the best anti-venom for the bite of any poisonous animal. Many miracles are worked every day in India where the cobra is the most deadly and kills in a matter of hours. But whoever has the cobra stone saves himself by placing it on the wound; the stone at once adheres to the wound, and drops only after it has sucked all the poison off. The stone is cleansed of this poison by immersion in milk. The Yogis also bring some other green stones for which they claim the same properties as the cobra stone when put in the mouth. But I am not aware, if this is proved by experience. These sciences which the ancient writers appreciated so much in the Yogis, calling them on this account gymnosophists or naked philosophers, are to be found only in those of them, who having learnt and practised them in the Universities of Europe, entered the kingdoms of Madura and Mysore in the interior of India. Here they dress themselves as honest Yogis to have easier access to, and be held in higher esteem by the natives, and they use their learning in converting them to the faith of our Lord Jesus Christ, thus becoming gymnosophists of the soul. The Society counts many such philosophers in these kingdoms."[33]

[32] According to Ovington, it was made of ashes of burnt roots and some kind of mud found at Diu. *Ob. cit.*, pp. 201-02. In the snake farms in Brazil where research is carried on at present, the venom from the poisonous snakes is milked out by massaging their glands. The venom is then dehydrated and turned into crystals to be dissolved in water when required. This venom is injected into animals like horses and mules and blood taken from these animals is used in the preparation of a serum suitable for human beings. This serum remains effective against snake bite for about a year, and a small phial of serum is kept ready for giving injection at any time. *Science Notes, Times of India*, May 4, 1952.

[33] The reference here is to the Jesuit missionaries of Madura and Mysore, the founder of the former Mission being Father Roberto de Nobili. Finding in the aversion of the Hindus to the beef-eating and wine-drinking European missioner the true cause of the tardy progress of Christianity in the interior of India beyond the pale of the political influence of the Portuguese, De Nobili tried a new method by adopting the ways of the Hindu Sanyasins, and thus after the example of St. Paul "made himself," as St. John de Britto, one of his successors in the same Mission, said of him, "all things to all men that he might win all to Jesus Christ." The method was so far successful that at the time of Fr. Godinho's departure from India in 1663, i.e., within fifty years of the foundation of the Mission in Madura the strength of the Christian community there had already risen to 32,000; while in the more recent Mission of Mysore the Christians already totalled 4,000. "They (the missionaries) dress as Yogis and Pandaras (vanis)," says Fr. Godinho, "who among the Gentoos are those who have renounced the world, penitentiaries and masters of the law. They so dress in order not to be recognized as Portuguese, who, as they eat beef, are ranked in these lands among the untouchable lower castes. The Fathers, therefore, do not let the people of Madura know that they profess and teach the same law as the Portuguese." Godinho, *op. cit.*, pp. 202-04. For an interesting account of the apostolate of de Nobili the reader is referred to H. Heras, *The Aravidu Dynasty of Vijayanagara* (Madras : B. G. Paul & Co., 1927), Vol. I, pp. 303-06 (Chapter VIII).

WERE ANIMALS FIRST DOMESTICATED AND BRED IN INDIA ?

By

M. Hermanns

I. Indian wild cattle and their tame descendants

(a) *The Gaur and its cross-breed Gayal.*

For a long time there has been a controversy as to whether the Gayal has its own wild ancestor which was tamed, or whether it is the cross-breed of the Gaur bull with the common cow. During my researches in the south Himalaya mountains I have found evidence to settle this dispute.

W. T. Blandford thought that there were three breeds of wild cattle ; Banteng (Bibos Sondaicus), the Gaur (Bibos Gaurus) and the Gayal, or Mithan (Bibos Frontalis).[1]

He supported his argument on the differences between the Gaur and the Gayal on the construction of the skull and the form of its horns; his conclusion was that the differences are so strong that the Gayal is a separate wild breed and has its ancestors other than those of the Gaur. E.C. St. Baker contradicts this and proves that the change in skull and horns of the Gayal is the result of domestication. There is no wild ancestor of the Gayal, the Gayal or Mithan is the cross breed of the Gaur bull and common cow.[2]

There are others who believe that the Gayal is a tamed wild Gaur, the Mithan is a cross-breed of wild bull and common cow; and they quote the opinions of the aboriginals. "The Chins tell us that Gavaeus frontalis is not a separate animal from Gavaeus Gaurus, and that their Mithans are the results of cross between the wild bison bull and common cow."[3] A fourth opinion is that "Mithan" is used for wild and tamed cattle; taming was effected largely by the use of salt. These are the contradictory opinions.

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[1] W. T. Blandford, "On the Gaur (Bos Gaurus) and its allies." From the proceedings of the Zoological Society of London, *Journal of the Bombay Natural History Society*, Vol. VI, 1891, p. 222 ff.

[2] E. C. St. Baker, "The Gaur and the Gayal. (Bos Gaurus and Bos Frontalis)", Ibid., Vol. XV, pp. 227-248.

[3] T. R. Livesey, "The Gayal or Mithan (Bos Frontalis)", *Jour. of the Bombay Nat. Hist. Soc. Ibid.*, Vol. XXXV, pp. 199 f.

The following points have to be clarified: (1) Can the Gaur be tamed, and is the Gayal the tamed descendant? (2) The Gaur cannot be tamed and Gayal is the cross-breed of wild Gaur and common cow. (3) Has Gayal its own wild ancestors different from Gaur? (4) Is Mithan identical with Gaur or Gayal, or is it a different breed? To solve these questions it is most important to clarify the names of the animals.

1. The names Gaur, Gayal, Mithan (Mithun).

The old Sanskrit word "go" means cow or bull—the plural gāvah means cattle. This root is the derivation of the Hindi names Gay or Gau=Cow, Gavā=Wild bull. Gaur comes from these names. Gaur Gay is the wild cow, Gavya or Gayāvāl="belonging to cow" or "connected with cow". Gayal comes from this word. The cross-breed Gaur bull X common cow is not common cattle but belonging to the cow, therefore the name Gayal. In Marathi the wild bull is called Gavya; in Tamil Katu-erimai, in Malayalam Karthu, in Kanarese Kar-kona.[4]

The common name in Bombay Presidency as far as the Bombay side of the Central Provinces is Ranebhainsa=Jungle buffalo, for Gaur, since the wild bull is not known in this part of India. Because of this people use the misleading term buffalo. There is a rule that unknown animals are given an inexact name. The aboriginals who know the animal well have an exact descriptive name. In English Gaur is wrongly translated as Bison. It has nothing to do with true Bison. The Hindi names Gaur and Gayal are only used in the Hindi speaking areas.

In Nepali or Khaskura, an Indo-Aryan dialect, the wild cattle of the south Himalayan regions is called Mithun. The cross-breed Mithun bull X Common cow is called Paluwa Mithun, not just Mithun. Common cattle in Nepal are called Siri gay (gay derived from Sanskrit, is the name for cow mentioned above). In Nepal there is a second breed of small cattle, cross-breeds between it and the common cattle called Pahara gay.

The Lepchas, whose language belongs to the Tibetan language group, called the wild Mithun Sa dzug big; for Siri gay their name is Niu big; for Pahare gay, nam tha. The cross-breed Sa dzug big X Niu big is Pamen.

Among the Nagas, as among the Lepchas, bull sacrifices are most important. The Sema Naga called the wild bull Aviela, the common cattle Amishi, cross-breed Aviela X Amishi=Avi. The cross-breed Avi X Achuka (black humped cattle)=Aselhu; the cross-breed Avi X Kolaghu (common cattle)=Avyega or Kiveghu. Among the Ao Naga, in Chongli (C) and Mong-

[4] S. H. Prater, *Indian Animals*, Bombay (not dated), p. 204.

sen (M) dialects we find the following names; the cross-breed wild bull X common cow=Sü (C), Atsü (M) ; Common cattle=Nashi (C) Nasü (M); cross-breed Sü X Nashi=Mukzan (C & M).

This list proves that the aboriginals have a special name for every breed and that they do not confuse the names. Exactly the same rules can be seen among the Tibetans, Chinese, Mongolians and old Turkish people. In our case the confusion of names is due to Europeans and Indians who did not distinguish between the proper definitions and their aboriginal equivalents; for instance Mithun is identified with Gayal; "Mithan (Bos Frontalis—Gayal)" is described as the tamed Gaur. The cattle (amishi) kept by Semas consists of the domestic variety of gaur "or Mithan" (Bos Frontalis) called "Avi" "Wild Mithan or Gaur (Bos gaurus) aviela".[5] When such a confusion of names is possible in scientific works we are not surprised at the confusion in the common language. The right understanding of the facts has been hampered by this confusion.

The facts are as follows : Gaur (Hindi) and Mithan (Nepali) are names for wild cattle. Both are variations of one breed. Gayal is a cross-breed, Gaur bull X common cow, the Nepali name is Paluwa Mithun. Perhaps Paluwa was dropped and they called the cross-breed just Mithun. According to the evidence of the aboriginals Gaur and Mithun cannot be tamed. Gayal does not have its own wild ancestor but is only a cross-breed, Gaur (Mithun) X common cow. In the aboriginal languages there are corresponding names for these different breeds and they distinguish every degree of cross-breed with its special name; for instance in Sema Naga, the cross-breed Avi X Achuka =Aselhu. The aboriginal names distinguish the different breed precisely and make confusion impossible, the same facts can be proved by zoological data.

2. Cattle.

(*a*) *The Gaur* (*Bibos Gaurus*)

The maximum height is 21 hands, or 6′-4″, the average height is 5′-8″ to 5′-10″, the cow is smaller. The weight of an old bull is 2000 lbs; the body is massive and muscular. Above the shoulders there is a raised, muscular ridge ending in a abrupt curve in middle of the back. The colour of the body of the old bull is black, cows and young bulls are coffee or rust coloured, young calves are light golden yellow. The forehead is grayish, the legs have yellow or white stockings up to the knees. The head is massive; the forehead, concave in adult animals, has a high dome between the horns, the upper rim is convex.

[5] J. H. Hutton, *The Sema Nagas*, London, 1921, pp. 69, 400, 402.

The horns are angular, they always follow a regular pattern. The largest curve is below the point which curves inwards. A good horn is over 30" long.

The Gaur is a wild cattle living in mountainous jungles; in the Indian peninsula it is found up to a height of 6000'. In the Sikkim district and the South Himalaya region it is found up to the Tibetan border. From this height the cattle come down in November to the forests of the foot-hills, they graze there till March. At the start of the hot season they return to the cool mountain forest. In India the Gaur comes down to the plain forests.

Mountain forests are necessary for this animal's rhythm of life. In the early morning the Gaur comes out to graze from the dense forest, he browses till about nine o'clock and then returns to the dense forest. In the late afternoon the cattle come out to graze again. The Gaur lives on grass but also eats leaves and the bark of certain trees and bushes. Here and there he looks for salt or a mineral out-crop which he licks, this is to eliminate parasites in the entrails. It is not a fact that Gaur is tamed with salt by the aboriginals. Since the Gaur is very timid and shy and difficult to handle in captivity it is impossible to domesticate this animal. Gaur has a very acute sense of smell, hearing and sight are less well developed, as in all breeds of cattle. A wounded Gaur is very dangerous and the only way to escape a charging Gaur is to lie flat on the ground, as he cannot touch the ground with his horns. It is very difficult to hunt the Gaur and only a very skilled hunter can hope to kill him with a shot through his heart. The rifle used must have a large calibre and a great striking power.

The mating time is December-January and the calves are born in September or the end of the monsoon rains. Calves are sometimes born in May or June. The cow stays with the calf for some days, when it is able to follow they rejoin the herd. A herd usually includes eight to ten animals. Some herds join together at grazing places. Except at the mating season, the bulls do not live together with the cows. The mature bulls roam about alone or together with other bulls. Old bulls are usually solitary. At the beginning of the mating season the battle for the cows starts; the strongest bull overcomes the others and he dominates the whole herd in which the immature bulls remain. In the mating season the herds do not mix. After the mating time the bulls leave the herd and lead a solitary life.

The Gaur has five different calls. The alarm is a loud hissing sound caused by the air expelled through the teeth by the tongue. The second is the warning call to which a reply is expected. An enraged bull roars furiously and in the mating season he produces a shrill call like the trill of a bird. The cows call their calves with a soft loving sound. The Gaur is shy and will not approach an inhabited settlement, but will associate with domestic

cattle that are half wild in the jungle. This cross-breeding of Gaur bull X common cow produces the Gayal.

When the jungles of India were more extensive, the Gaur was more widely distributed; when the jungles diminished and the settlements were established the wild cattle retired into the uninhabited distant regions. The distribution of Gaur nowadays is as follows : the mountainous jungle of India from the Ganges to Cape Comorin but not extending to Ceylon, the Narbadda east of Broach, is perhaps the extreme north-western limit, it is west of the 80° East longitude. The Narbadda is perhaps the northern limit. The animal is not found in the vast grass jungles of the Indus and Ganges plain which are too low lying, except from the Ganges in the east near the Himalaya Mountains. Then the Gaur is found in the Terai forests at the foot of the Himalayas from Nepal in the west to Assam, Burma and the south Himalayan regions in the east. There are also suitable forests in south Assam, Burma and the zone immediately east of the Bay of Bengal, and down to the southern part of the Malaya peninsula. The Gaur is also found in Siam but not yet in Indo-China and south China.[6]

(*b*) *The Mithun*

A Lepcha hunter described a Mithun to me in the following way : He is a huge animal like the Gaur. Once a Lepcha hunter came unexpectedly upon a sleeping bull, he was so afraid at the sight of the animal that he reeled from side to side and was afraid that his soul had left his body. "It is impossible for me to shoot this animal" he thought, "it must be the God of hunting himself." Then the bull awoke and gave the alarm call. He drove the cows and calves into the jungle and stood ready for the fray. The hunter escaped by a swift flight. According to the statements of the hunters the Mithun is the largest cattle, it is impossible to tame and breed this animal, but they associate with common, domestic cattle. The Lepcha call cross-breeds Pamen; the Nepali call them Paluwa Mithun. The Mithun roams through the mountain forests upto the Tibetan border, and comes down to the Terai forests of the foot hills for the winter. Besides Nepal, Sikkim and Bhutan, the Mithun is found in Assam in Manipur, in Chittagong, Tipperah, in north Assam, North Burma and east of Tibet. The Mithun is identical with the Gaur and only a local variation more adapted to living in high mountains. The Mithun is the largest of the Gaur breed; the Gaur in the forests of Malaya is another local variation.

(*c*) *The Gayal* (*Bibos Frontalis*)

The forehead is straight or convex, there is no dome between the horns. The horns grow straight or slightly curved, but do not curve inwards. Un-

[6] S. H. Prater, *op. cit.*, pp. 200 ff.

like the Gaur, the Gayal has a dewlap. The ridge on the crest of the shoulders is either slightly developed or altogether absent. The maximum height is 17 hands, the colour is dark brown and in adult animals it is almost black.

The difference between Gaur and Gayal in skull construction, horns and body proves that the Gayal is a cross-breed and has no original wild ancestor. The differences are not only the effects of domestication as stated by Baker. The same factors can be seen in Tibet with the Yak and its cross-breed. The Yak has its own wild ancestor and therefore the form of the horns and body are probably that of the wild ancestor but smaller. The cross-breed common bull X Yak cow produces a Dzo. This cross-breed does not have the regular curved horns of the Yak and its bushy tail. In Dzo and Gayal the parallel results of cross-breeding are apparent. The first generation Dzo is valuable and useful. The second generation Dzo is quite worthless and not used by the Tibetans.[7] In the Gayal there is no similar degeneration, but if wild blood is not introduced periodically the animal reverts to the characteristics of the original cow (according to the Mendelian law). By the facts it is clearly obvious that Gayal is only a cross-breed, and this is possible where wild Gaur has an opportunity to associate with domesticated cattle, like the Assam, Bhutan and Sikkim mountains. In the Chin mountains, where the Gaur is rare, the Gayal loses Gaur characteristics very soon.[8] These facts make it obvious that there is no wild ancestor of the Gayal, that the Gayal is not the Mithun and that we cannot speak of a wild and domesticated Mithun. Baker also reports the myth that the aboriginals tame the wild Mithun by attracting it with salt.[9]

There is another possibility to be considered. In earlier times there were many hill tribes whose cattle were half-wild and sometimes became altogether wild. This is shown by a custom of the Ao Naga : "The few (Mithun) that are kept run more or less wild in the jungle, their owners going to them every few days with salt. If a Mithan, or any other domestic animal is lost and then turns up again after a long time, the owner must relinquish all claim to it. It is "taboo" for him to keep it or sell it".[10] Many of these tribes practise the shifting cultivation and so often change their dwelling and settle in another place. The cattle used to one locality go back to his old settlement. The owner attracts the cattle with salt and so brings them to the new settlement ; but sometimes the cattle do not get used to the new settlement and so run wild. Cows of this type mate with wild Mithun bulls and the calves are similar to the Mithun. In this respect we can speak of a wild Gayal. These animals can be recaptured and tamed ; this is verified by an

7 Cf. M. Hermanns, *Die Nomaden von Tibet*, Vienna, 1949, pp. 105ff.

8 S. H. Prater, *op. cit.*, pp. 201f.

9 *Op. cit.*, 240.

10 J. P. Mills, *op. cit.*, p. 133.

old report : "The Mithun or Gayal.....there are purely domesticated Mithuns bred in captivity ; but according to many writers the herds are recruited from the wild animals, which are tempted either to interbreed or are captured and tamed." In Dr. F. Buchanan Hamilton's MS. (see Horsfield's 'Cat. Mammalia, E.I.C. Mns.'), the following account is given: "these people (i. e. the inhabitants of the frontiers) have tamed Gayals, which occasionally breed, but the greater part of their stock is bred in the woods and caught, after which, being a wild animal, it is easily domesticated. The usual manner employed to catch the full grown Gayal is to surround a field of corn with a strong fence. One narrow entrance is left, in which is placed a rope with a running noose, which secures the Gayal by the neck as he enters to eat the corn ; of ten so caught perhaps three are hanged by the noose running too tight, and by the violence of their struggling. Young Gayals are caught by leaving in the fence holes of a size sufficient to admit the calf, but which excludes the full-grown Gayal ; the calves enter by these holes, which are then shut by the natives who are watching, and who secure the calves."[11] Then follows the story of how the Kookies in the Chittagong mountains tame the 'wild' Gayal by driving the domesticated cattle towards them and then attract them with salt balls. In both cases they are Gayal which have run wild, so it is not astonishing that the animal can be tamed. About the Gaur the author states, "Hitherto most attempts to rear this animal when young has failed. It is said not to live over the third year."[12]

Even Antonius stated "The question that has been open for so long, whether the tame Gayal is the domesticated descendant of the wild Gaur, is decided by the new research of H. Gans, who states that the question must be answered in the affirmative. Just before this Schumann, in his research, denied a common ancestry."[13]

Because Mithun and Gayal were confused, and the Gayal that runs wild was supposed to be the wild ancestor, the origin of these animals was not clearly understood. Gaur and Mithun are the same wild cattle, Gayal is the cross-breed Gaur bull X common cow.

(*d*) *Banteng or Tsaine* (*Bibos Sondaicus*).

Another wild cattle is called Tsaine in Burmese, Sapi-Utan in Malaya and Banteng in Javanese. It is smaller than Gaur, about 5'-6" or a little more. The legs are longer and have white stockings. The skull is not concave and does not have the ram-like form of the Gaur. The horns are cylin-

[11] R. A. S. Sterndale. Natural History of the Mammalians of India and Ceylon, (Calcutta, 1884), pp. 486, ff.

[12] *Op. cit.*, p. 486.

[13] Stammesgeschichte der Haustiere, Jena, 1922, p. 156.

drical, they grow straight up in the cows and are slightly curved in the bulls. The shoulder ridge is not so prominent as in Gaur, and the animal is not built in the same massive, powerful form. Cows and young cattle are light chestnut brown, old bulls yellowish brown to muddy grey.

In contrast to the Gaur, the Banteng lives in the flat plains with sparse forest and bamboo. They only go to the dense forest when, as in Burma, their grazing ground is taken over for cultivation. The cattle are not so shy and timid as Gaur and approach human settlements and enter the fields. They like a warm climate, and live in fear of the tiger. Sight, hearing and smell are all very highly developed. The mating season is usually September-October and April-May is the calving time.

The distribution is as follows : Burma, Siam, Malaya peninsula, Sumatra, Java, Borneo and Bali. In these countries there are five different varieties. The Banteng was tamed in Java. There the animals are darker in colour, almost black.[14]

(*e*) *The Arni Buffalo* (*Bubalus bubalus*)

In Hindi the water buffalo is called Arna (bull), Arni (cow) or Gaval ; also called Arna in Nepali. The Lepcha call it Nin big, the Sema Naga Aghaleli. A large bull may be 6′ or more in height and weigh more than 2,000 lbs. The buffalo has angular and knotted horns, they curve backwards with points turning in. In another variety the horns curve upwards in a semi-circle. The maximum length of the horn is $77\frac{3}{4}$″. The buffalo is a heavy-boned, robust animal, steel-black in colour and the legs have white stockings.

In earlier times the animal was very widely distributed. Nowadays it lives in the grass jungles of the Nepali terai, in the plains of the Ganges and Brahmaputra and in Assam. There are some herds in Orissa and the adjoining Rajput district of the Central Provinces and also in the south-east of the Central Provinces. Wild buffalo is also found in Burma where the grass and bamboo jungles provide grazing grounds.

The buffalo is not as timid as the Gaur, it enters the fields of settlements and can be very aggressive. It is the keenest and strongest of all the wild cattle and attacks tigers. A cow with its young calves is very dangerous. Hearing and smell are very highly developed, sight not so well. The mating time is after the monsoon, the calves are born in March-May. The buffalo cannot breed with any other cattle, but the wild buffalo mate with domesticated buffalo. The domesticated buffalo is only slightly different from his wild coun-

[14] Cf. H. S. Thom, "Some notes of Bison (Bos gaurus) in Burma". *J. Bombay Nat. Hist. Soc.*, Vol. XXXVII. p. 106ff ; S. H. Prater. *Op. cit.* 206 f ; R. A. Sterndale. *Op. cit.*, 488.

ter-part. The differences are those caused by domestication ; the horns are not so well developed and often show striking evidence of degeneration. The call of the buffalo is like the grunt of a Yak (or that of a pig). The tame buffalo forms a very familar part of the Indian scene. In the Government dairy of Bombay, large herds provide milk for the towns and many private families keep small herds of buffalo. Buffalo is plentiful in the hot, wet regions of India and the people drink buffalo milk exclusively. In the dry regions where there are no buffaloes, cow's milk is drunk. Butter and ghee (clarified butter for cooking) is produced both from buffalo and cow's milk.

That the buffalo cannot breed with other cattle proves that it is the result of a separate line of evolution ; one that probably stemmed early from the common, ancestral root of the bovines. It is very interesting to note the different treatment of cattle and buffalo in mythology. Since the early times, cattle have been the most important animals for sacrifice (Mohenjo-Daro), they are closely connected with the gods and heaven, (the Nandi bull of Shiva). While in many mystery cults the bull plays an eminent role, the buffalo, on the other hand, has the opposite position ; in him the demon-king Mahisha, Mahishasur or Ghatwala deo is incarnated, the buffalo is the symbol of the demon. This demon was overthrown by Durga-Kali, she decapitated the buffalo and with her spear, pierced the demon who came forth from his neck. This event is celebrated in the famous festival of Dassera in Nepal and Sikkim, it is also celebrated by all Hindus and until recently was most extravagantly celebrated in the Princely States, for instance in Mysore, Baroda and Rajput kingdoms, the feast was celebrated with processions of elephants and buffalo fights. Recently the slaughter of buffaloes has been forbidden by law, but in the Himalayan countries of Nepal and Sikkim the Dassera celebration still follows the old pattern. The eighth day of the ten days' feast is the proper day of sacrifice, called Astami ; buffaloes and goats are sacrificed by decapitation with one blow of a khukri. In a large town like Kathmandu there is a mass slaughter, streams of blood flow on the ground and the bodies of slaughtered animals lie around. In one corner the Brahmin, who is conducting the ceremony, sits down and reads the sacred books. Blood-stained buffalo heads are placed about him in a huge pile so that the priest is hidden from view. What a contrast, the cult of sacred cow whose tail the dying Hindu takes to his hand to arrive safely in the other world and this wall of buffalo heads in a bloody court-yard.

It is difficult to explain why the buffalo came to be such a diabolical symbol. Of all cattle the buffalo cow is the most attached to man, she follows the man who milks her like a dog. Once a herdsman was attacked by a tiger, a man-eater, the cows ran away but the buffalo bulls, hearing the herdsman's cries, attacked the tiger and drove him off.[15] Perhaps the buffalo, as an

[15] R. A. Sterndale. *Op. cit.*, pp. 491ff.

animal who could challenge a tiger, wrought on itself this diabolical role. This is the meaning of sacred cow and demoniac buffalo. "The respect paid to the cow does not fully extend to the buffalo."[16]

(*f*) *The Yak* (*Poephagus grunniens*)

The wild Yak is only found in a few places in Northern India—in Ladakh and the Changchenmo valley. Some species migrate to the Sutlej and even to the passes of East Kumaon. In Sanskrit the Yak is called kamara, in Hindi ban chour, in Nepali tshangri gay, in Lepcha Yok big. The Tibetan name is Brong (abroñ). The wild Yak is used to an arctic, desert-like, high mountain region ; he likes to roll in the snow-drifts and bathe in the ice-cold glacial waters. In this way he is the striking counterpart of the water buffalo who likes to wallow in the tropical swamps. The grown bull is 6′ or more in height, and weighs about 1,200 lbs. The elegantly-curved, round horns are 30″ long. The wild Yak is the ancestor of the tame Yak. This animal breeds with other cattle only in a limited way (as mentioned above). The cross-breeds of the second and third generation are riders and are killed for meat. I have dealt extensively on the Yak and his breeding in my book "Die Nomaden von Tibet," so it is not necessary to go into detail here.[17]

(*g*) *The Zebu* (*Indian humped cattle*)

The Hindus have no specific name for Zebu, or humped cattle, it is called "cattle" generally, the cow is gay, the bullock bail, and the bull sand. In Nepali the Zebu is called Siri gay, in Lepcha Niu big, in Sema Naga Achuka for black and Kolaghu for common cattle. The Zebu's long, small skull is different from that of all other cattle, it has an extended muzzle, a high domed forehead, its brow ridges are not pronounced. The characteristic sign of a well fed bull is the high, raised hump above the shoulders. A long dewlap hangs down near the breast. The horns are rounded and turn back and upwards. The length and curvature of horns vary considerably and there are many irregularities of curvature. There are many varieties of colour. Ash-grey, silver-grey, white, chestnut-brown, black and black-and-white in the mountains. The height varies as well. The so-called Brahmin-Zebu is greyish-white, has a very pronounced hump and large legs ; the forehead has a high dome and the horns are short. The Sind Zebu is chestnut-brown, it is of a lighter build and middle height but a very good type for breeding. The government uses the Sind bull all through the country for breeding. In Middle and Southern India the Zebu is smaller but has larger horns. A white bull is kept near the Parsi fire-temple for ceremonial purposes. W. Koppers

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[16] W. Crooke: *The Popular Religion and Folklore of Northern India, Vol. II*; London, 1896, p. 236.

[17] *Op. cit.*, pp. 103ff.

mentions five types of Zebu : Malwa, medium-height ; Marwari, a good mild cow ; Magori, a tall type ; Renda, the tallest type, for which Gujerat is the breeding centre ; and the common type. There are of course many other varieties. The variations in height, colour, form of horns show that the Zebu must be a very old breed whose many varieties are due to domestication.[18]

The origin of the Zebu is not yet clear. One theory is that the Zebu is descended from the Banteng of Malaya or Borneo. This view is supported by similarities of skull construction, colour and dewlap. The high shoulder-ridge of the Banteng could have changed into the hump of the Zebu. Gans and Antonius prove that "there are only slight and superficial similarities," "most important of all, the parietal bone is different in the two types, in Zebu it is completely taurine."[19] Relying on morphological evidence they do not believe that the Zebu and Banteng are of the same stock and they trace the descent of the Zebu from the Ur. "The wild ancestor of the Zebu is, without doubt, a form near to the true Ur, perhaps a local variation of it like Bos Namadicus."[20] This opinion was stated earlier by Duerst who believed that the descendant of the wild Bos Namadicus had a small hump and a prominent ridge which can be found among the cattle of Syria and the Arabian peninsula. "This seems to show that the Zebu of Asia and Africa is but a variety of the common domestic cow, which has spread from Central Asia over all the inhabited parts of the globe."[21] Duerst thinks that this animal was first bred in Russian, Turkestan or Iran, from there it was brought via Zufilcar pass to Afghanistan and the Punjab, and so the Zebu and cattle cult were introduced into India. The Chinese Emperor Fu Hi brought the Zebu, along with other cattle, to China in 3468 B.C.[22] As the mythological Emperior Fu Hi and the year of his reign are legendary without historical backing, so the migration of Zebu-breeding nomads from Iran to India is without proof. It is amazing to see how Duerest proved selective breeding of the hump in India. "According to regulations, the Brahmin, who conducted the sacrificial rites, received, in return for his prayers and consecrations, the animals' hump and tongue.... It is easy to read between the lines of the regulations that it was the priests' interest to declare that the sacrifice of cattle with large hump was the most pleasing to the gods. In this way the priests, consciously or unconsciously, encouraged the people to breed animals with large humps by means of selection : So Indian cattle breeding has, in this respect, done some creative work, as it did in the matter of using cow's milk which was at first destined as a sacrifice

18 W. Koppers and L.Jungblut, The water buffalo and the Zebu in Central India; *Anthropos*, Vol. XXXVII/XL, Freiburg, 1942/48, p. 651.

19 O. Antonius, *op. cit.*, p. 186.

20 Ibid.

21 W. Koppers, *op. cit.*, *Concluding remarks*, p. 665.

22 *Op. cit.* pp. 664f.

to the Gods."[23] Does this mean that milking the cow and making butter were first invented ("Creative work") in India? In contrast to India he mentions the Central Asiatic Turkomens and Kirghiz, who do not milk the cow but milk the horse.

The Brahmin's share of the sacrificial offering was not only the hump, and the tongue. "The Rigvedic Aryans were primarily a pastoral people and naturally cows and bullocks were their most valued possessions. These constituted the chief form of wealth and the only original dakshina (sacrificial fee). The word "dakshina" in fact is an adjective meaning "right", or "valuable" with an elipse of go (cow) because the sacrificial fee was a cow placed "on the right side" of the singer to be rewarded."[24] The Brahmin was given the whole animal. But there are other proofs that the Zebu was not bred by Aryan selective breeding.

In the Indian pre-historic culture of Mohenjo-Daro, Harappa, we have clear proof of the existence of the Zebu. This is shown by terra-cotta figures of animals and by seals. On the seals the hump is very strongly developed, the dewlap hangs down almost the ground and the horns are majestically curved. This is the ideal of the humped Zebu.[25] The terra-cotta figures are stylised but show the hump very well.[26] Zebu is very well known at this early date. The Indus culture is connected with the West. "So for instance in Baluchistan where the bull figures are closely connected with the Indian type. In Tell Billa, North Mesopotamia, a great number of bulls, which represent the Indian humped cattle, are found in the strata just before the Hurritic invasion."[27] "The appearance of the humped bull on Mesopotamian monuments is very disputed because it can be used to prove the contact with early Indian Civilization. In any case these animals, which we know as Indian "Seal" animals, are frequently represented at the same time as we fixed above. We came across them on the pottery of Susa II and on a stone jug in Tell Agrab."[28] According to these pre-historic proofs the distribution of humped cattle spreads from India to the Near East.

Antonius arrived at the same conclusion in his "Stammesgeschichte der Haustiere." "Even in the early ancient times humped cattle spread far to the west. They are shown on Babylonian Cylinder seals of the Kassid period (fig. 24) ; they are also shown in Mesopotamia and Asia Minor, and in Cyprus, where they are partly from the Aramaic, partly from the Greek period. Even

[23] *Op. cit.*, p. 665.
[24] R. C. Majumdar. *The Vedic Age*, London, 1951, p. 395.
[25] Cf. J. Marshal, *Mohenjo-Daro and the Indus civilization*, London, 1931, Vol. III, Pl. CXI, p. 337.
[26] E. Mackay, *Further excavations at Mohenjo-Daro*, London, 1938, Pl. XCIX, C; Pl. LXX-VIII, 1.
[27] Heinz Mode, *Indische Frühkulturen*, Basel, 1944, p. 38.
[28] *Op. cit.*, p. 128.

the Pharaohs of the New Dynasty got their humped cattle from Syria, so they must have reached the sea shore in the middle of the second millennium B. C. The migratory route, which I believe I can follow till today, goes from the gulf of Persia, follows the old caravan route which perhaps corresponds to the Syrian and Baghdad railway. Alleppo, Hama, Damascus were also touched and here it crossed the Lebanon. In all the culture oases I have found characteristic Zebu descendants with long legs, remarkably long faces, mostly red brown, almost without a hump, but, even for the untrained eye, recognisable, at a first glance, as different from the little brown cattle which are bred in the steppes between. According to reliable information this type is found in Mesopotamia and increases as you go East till finally in the delta of the Twin rivers it is the characteristic humped cattle. Further north there are routes for an earlier, further distribution of the humped cattle ; restricted remains of old breeding are found nowadays south of the river districts of the Caspian Sea."[29] The Zebu found near the Caspian Sea could be used as proof of the origin of this animal in West Turkestan, if the animal is not as old as the Mohenjo-Daro culture, 2500 B. C.

If we can prove it conclusively then the Zebu is the descendant of Bos Namadicus, which is only "a local variation of a wide-spread cattle found all over Europe and North Africa, of Ur or Aur ox, Bos primigenius Boj."[30] If this is a local variation it is not proved that the Zebu was tamed outside India and introduced into India. At the Indian Pliocene we find a very long-haired cattle called Bos panifrons whose quarternary descendants are Bos namadicus Falc, "living in its Indian home upto the time of Paleolithic man."[31] "The Siwalik ancestry of the Indian camel and the buffalo is beyond any doubt, whilst the short-horned and humped cattle of India has as their progenitors the Bos primigenius of the Siwalik through Bos Namadicus of the Narmada age, with a varied and abundant animal population as their co-denizens in the fertile and well watered plains of North India it is no wonder that early man in India was among the first to tame some of the most prized varieties of companionship and domestic service."[32] The Narmada culture is parallel to the Soan culture. It is contemporaneous with Acheulian; in this early Paleolithic time there was of course no cattle breeding ; we also do not know when Bos Namadicus in India died out or dissappeared, but we can presume that he lived upto Mesolithic time, when cattle breeding first started. I do not think that the common European cattle and the Zebu both came from the same ancestor—Bos Namadicus or Ur. The morphological differences are too strong, not only in the fleshy parts, the dewlap and the hump, but also in the horns, skull and bones ; the wild Ur has no shoulder

[29] O. Antonius. *op. cit.*, p. 188.
[30] O. Antonius, *op. cit.*, p. 159.
[31] O. Antonius. *op. cit.*, p. 159.
[32] R. C. Majumdar, *op. cit.*, p. 84.

ridge but a flat back, so the hump of the Zebu could not have evolved from the shoulder ridge. Furthermore the Zebu is adapted to tropical climate while the European cow is not. It died out in India through diseases. So I believe that the Zebu is descended from its own wild ancestor which lived in the tropical zone. Ur and Bos Namadicus lived in the sub-tropical more northern regions. Perhaps they left India in the Post-Glacial time when North India became more and more tropical in climate; then the Bos Namadicus was forced to emigrate or died out, the wild ancestor of the Zebu is still to be found, if he died out we must look for fossils. Perhaps he is still living.

(*h*) *The Kouprey*

The Kouprey is a newly discovered cattle in Cambodia and Laos. It is described as follows: "The Kouprey, Gray Ox or Indo-Chinese Forest Ox, Bibos Sauveti, of Cambodia and Laos, has been known to science only for some fifteen years. It is astonishing that such a large animal should have escaped attention for so long. Its existence was first mentioned by a professional guide and hunter, Defosse. Later a living specimen was sent to the Zoological gardens in Paris. This animal has been separated generically from Bibos under the name Novibos.

The Kouprey is a large ox-like animal, distinguished by the manner in which the horns of the male become frayed at the tips, leaving 5" or so of the polished inner horn exposed. The horns are large, 'curving backward, outward, and upward, with a slight backward inclination, as of wild Yak.' The height at the shoulder is about 5'-7", cows being smaller. The spread across the horns may reach 33".

Though in some respects intermediate between the Gaur and Banting, the Kouprey is not considered to be a hybrid. The short and glossy hair is generally coloured blackish brown. There may be a white stripe along the middle of the hinder part of the back; the ears are blackish like the body, with a few white hairs. The underparts are lighter brown than the back. There are white stockings on the lower leg, with a dark stripe down the front of each fore-leg. The tail is long, its bushy tip composed of mixed black and white hairs. There is a large dewlap. Dark chestnut brown areas, connecting above, appear on each side of the muzzle. The forehead is chestnut, and the same colour surrounds each eye. There are white hairs on the upper and lower lips. The area at and behind the shoulders and behind the ridge of the back may be gray, perhaps due to the weaving of the blackish tips of the hair this fact may account for the name Gray Ox. In females and young the skin is reputed to be entirely gray. The hoofs are black, the hind ones usually slender for cattle. The length of the head and body in bulls is approximately 8', of the tail 3' 8".

It has been suggested that the Kouprey may be partly ancestral to the Zebu or humped Indian cattle."[33] This animal may have lived in India in older times and is perhaps the wild ancestor of the Zebu.

(*i*) *The Equidae*

The only wild member of the Equidae to be found in India is Equus Onager indicus, a relative of the Tibetan Kyang. It is 3'-8" to 4' tall, reddish-grey in colour, or fawn or pale chestnut. The mane is erect and dark brown, a dark stripe extends from it to the root of the tail. The mouth, belly and legs are white. The animal is not a wild ass but is between the ass and the horse, it belongs to the family of Onager and is a variation of Onager, Kyang and Kulang. It lives in the Rann district of Kutch and in parts of the North West Frontier Province and Baluchistan. The mating season is from August to October, after eleven months a foal is born. When the young foals are three months old, the sexes part and live in seperate herds. These are sometimes composed of as many as a thousand animals.[34]

In the foaling season the aboriginals hunt the herds on horse-back until the smaller foals are tired and lie on the ground, when the men capture and take the foals. These foals are easily tamed but they will not allow themselves to be harnessed. Most of the young refuse to take food and only a third survive. The aboriginals used to bring these foals to the rajas who kept them as pets, but they were not bred in captivity.[35]

The proper Indian donkey is not descended from the Onager, but has its own African or Arabian wild ancestor like all the other asses in the world. Besides the Nubian and Somali wild ass Antonius thinks there is an Arabian one.[36]

Like the donkey the Indian horse is descended from a foreign ancestor. Ass and horse taming in India is not as common as cattle-breeding; the Equidae are not so much used for riding, transport or drawing vehicles. Breeding of the Equidae is more recent than cattle-breeding in India. The ass and the horse are not found in the terra-cotta figures of Mohenjo-Daro. "It is remarkable and a characteristic sign of the Harappa culture that the representation of the horse and pig are missing. The horse is the most characteristic animal of the Indo-European people and came with them in the second millennium B.C. to the countries of the Near East. There are occasional representatives from the early time but interpretation is very uncertain, because it could be a

[33] G. H. Tate, *Mammals of Eastern Asia*, New York, 1947, p. 321.
[34] S. H. Prater, *op. cit.*, p. 189f.
[35] R. A. Sterndale, *op. cit.*, p. 400.
[36] O. Antonius, *op. cit.*, p. 271.

horse-like wild ass (probably onager. M.H.). Besides this there is no reason why an occasional animal should not have come to India and Mesopotamia through trade contact. It is very important to note that the horse, so valuable afterwards for riding and carrying, is not used in the third century."[37] Only in the most recent strata of Mohenjo-Daro are horse and camel known. "In the latest layer of Mohenjo-Daro remains of camel and horse occur, but neither animal is depicted on the seals nor in clay models. Yet model saddles occur."[38] These models of saddles could be of cattle or elephant saddles, since these animals were used for riding, while the ambiguous model of an animal, recognised as a horse by Mackay is very uncertain.[39] By this it is clear that the horse was known in India by the end of the Mohenjo-Daro culture. The horse was used afterwards by the Aryans but it could not replace cattle in their cult.

(*k*) *The Camel*

The wild camel lived in India but we do not know when it died out or emigrated. The domestic camel is found today in Sind, Rajputana, where Jodhpur is the breeding centre, eastwards as far as Benares (but not in Gaya), southwards to Hoshangabad, Khandwa (Central Provinces). It is the one-humped dromedary.

(*l*) *The Sheep*

There are different varieties of sheep in different districts of India, and the adjoining countries. The Sha po of Ladakh belongs to the circle-horn sheep (Ovis Vignei). The usual colour is grey-brown, the lower part of the body pale and the belly white. It has a short beard of stiff brown hairs. The horns are triangular, rounded at the back with sides not acutely indented. They curve out and backwards from the skull, the points diverge.

The proper circle-horn sheep is Ovis Vignei cycloceros, also called Urial. It is common in the Salt range of the Punjab, in the Suleiman range, the Hazarah hills and near Peshawar. The colour is red-brown, the face and belly white, the horns are more sharply triangular than in the Sha po, they curve back from the skull then turn inwards with points converging. The beard is long and reaches the knees. It is black with some white hairs.

The second group is the Argali (Ovis ammon). The largest representative of this kind is the Tibetan Nyan (gnyan, Ammon Hodgson). Its distribution is from North-Ladakh east to Sikkim. It emigrates to Spiti, Kumaon,

[37] H. Mode, *op. cit.*, p. 65.
[38] G. Childe, *The most ancient East*, London, 1935, p. 210.
[39] R. C. Majumdar, *op. cit.*, 194, Pl. VII, 2.

Nepal and Sikkim. A prize specimen is upto 4′ tall. The construction of the body resembles that of an antelope. It is light brown in colour, the neck, breast, belly and inner side of the legs are white. The majestically curved horns are up to 57″ long, they curve into only one circle.

It is related to the Marco Polo sheep (Amon Polii), which is found in Indian territory in Hungza. The horns are larger, extend further on and curve into more than one circle. A large horn is 75″ long. The sheep is grey-brown in colour, which is adapted to its natural environment. Like the Nyan it has long legs and is slenderly built. According to the curving horns it could be the wild ancestor of the well-known Tibetan sheep with cork-screw horns.

Differing from the above groups is the blue sheep, (Ovis Nahura). In Tibetan it is called Na po (gna po or gna o) ; in Nepali Nervati, in Hindi Bharal, Bharar or Bharut. Its distribution is Tibet, Sikkim, Nepal and Ladakh. The shape of the animal is between sheep and goat, the horns are round and curve backwards, the points turn in. The colour of the head and upper part is greyish-brown with a slate-blue tinge. The face and breast of the old rams are blackish, dark stripes run along the flanks and down the legs. Unlike the Urial it does not inter-breed with domesticated sheep and is difficult to tame.

Some of these wild sheep are ancestors of the domestic sheep. According to the curvature of the horns Ovis Ammon Polii is the ancestor of the Tibetan sheep with cork-screw horns, but this sheep inter-breeds with Nyan and has done so upto the present day. This cross-breeding effects the shape of the horns. This kind of sheep which is called "Zackel" sheep is a very old domestic breed, it is seen on Mesopotamian and Egyptian illustrations, but what is more important, it is represented on Mohenjo-Daro Seals.[40] These were the different kinds of sheep in the early Indian culture, a hairy sheep with long horns and a fine-wool sheep without horns but with a long tail.[41] Nowadays the unhorned sheep, with a long tail reaching the knee, is common over India, but the quality of wool is very different. We do not deal here with the many varieties of this kind of sheep.[42]

(*m*) *The Goat*

Different varieties of wild goat are also found in India and nearby. The Ibex is found in the western Himalayas, from Afghanistan to Kumaon. The Ibex does not cross the Sutlej, the eastern limit. The summer coat is dark-brown with light patches. The winter coat is yellowish-white. The animal

[40] H. Mode, *op. cit.*, pp. 52ff.

[41] J. Marshall, *op., cit.*, Pl. 118·3 ; E. J. Mackay, *op. cit.*, Pl. 11, p. 42 ; M. Hermanns, *op. cit.*, p. 88f.

[42] J. W. Amschler, *Anthropos*, Vienna, 1934 p. 874.

is 40" tall and stockily built. The horns which curve in a semi-circle like a sickle, are 55" long in the Gilgit Ibex and longer, up to 58" in the Tien Shen Ibex. The long beard is dark-brown. The animal is called kyin (skyin) in Tibetan, which accounts for its local name Capra Siberica Skyin. In Kashmiri it is called Kail, in Kulu, Tangrol.

A relative of this animal is Capra hircus (Hume) or Ter, Serah in Sindi, Pashin in Baluchi. It differs in the curvature of the horns which go straight up and curve back in an arc. In India it is found in the mountains of Baluchistan and West Sind, but not north and northeast of the Bolan pass and Quetta, where Markhor is found. This variety is wide spread through south-west Asia to the Caucasus; the Indian variety is the smallest.

The patriarch of the goats is Ra po che, the "big goat" as the Tibetans call it, or Markhor in Punjab and Kashmir. Its particular characteristics are the long beard and the very long mane which flows from the neck and shoulders to the knees. The winter coat is rust-grey, the summer coat reddish-brown. The curved, spiral horns are most remarkable, the length and the spiral vary. The Markhor of Astor, Gilgit and Baltistan has widely diverging horns curving in an open spiral (Capra Falconeri Falconeri). The colleague of the Kai i nag mountains and the Pirpinjal range has horns that are not so widely divergent, but curving in a double spiral (Capra f. Cashmirensis). This type is also found in Baltistan, Gilgit and Chitral. Its relative Capra f. megaceros is found in the north course of Peshwar and in north Afghanistan. He is called, therefore, Kabul Markhor, his horns are straight, but a spiral ridge curves round them in a double circle. This form of horn developed in the Capra f. jerdoni which is to be found in the Trans-Indus district of the Punjab, and in the Suleiman mountains. We can distinguish two species according to the difference of the horns, the species are also distinguished in height, colour and habits. The left horn of the falconeri curves in a left spiral, this is the great difference between it and the Prisca goat whose left horn curves in a right spiral. The tame goat has the right-curved spiral; these goats are most important for our knowledge of the oldest goat-breeding. In pre-history three kinds of goats were found in India, Capra aegagrus, Capra prisca and Capra Falconeri. The most common goat of today has short horns, long legs and a ram-like head, it is either black, brown or parti-coloured. Its left horn has the right-curved spiral.[43]

(*n*) *The Pig*

The Indian black pig is quite different from the Chinese black pig. This difference is most striking in the Himalayan region. We can understand this

[43] Cf. *Literature on sheep and goats*, S. H. Prater, *op cit.*, p. 212 ff; R. A. Sterndale, *op cit.*, p. 424, ff.

when we know the Indian wild boar, Sus cristatus Wagn., or Sus Indicus ; the head is small, long and more pointed, the forehead is flat and not concave, the ears are small, narrow, erect and pointed. Bristles are brownish, black mixed with grey, rusty and white. The mane is made of stiff, black bristles going down neck and shoulders to the back. The tusks are very well developed, projecting from the mouth they curve outwards. A well developed boar is 36" high, the length of head and body is 5' the tail 12", the weight is over 300 lbs. The wild boar is found all over India to Assam, Burma, Tennaserim and Siam.

The Indian domestic pig is the image of the wild boar, those of the Himalayan are closest to it. They are grey or rust-brown with well developed mane. The belly does not hang down like that of a Chinese pig. The Indian and Himalayan pig belongs to the Mediterranean type, the Chinese to the Sus vitatus. The white pig seen in Sikkim and India has been introduced from England, there is no indigenous white pig with short erect ears.

The tamed pig is not found among the animals represented at Mohenjo-Daro. "Swine bones, though common, seem to belong to the local wild boar and need not indicate pig breeding."[44]

Now we finish with domestic animals and their wild ancestors in this survey.

II. *Indian Cattle-Breeding*

There are two theories : (*a*) Cattle-breeding started in India and spread from this country, therefore "India, in the widest sense, can be considered as the home of cattle-breeding. In this country five breeds of wild cattle existed up to the most recent pass : Ur (including the Indian variety of Bos namadicus), Buffalo, Yak, Gaur, Banteng. (Within this we include the supposed wild ancestor of the Zebu, the Kouprey, which was probably widely distributed. M.H.) All these breeds were introduced into domestic breeding in India, while, at the same time, not a single breed had been domesticated in other parts of Asia, in Europe, Africa and America."[45] Concerning the wild ancestor of domesticated breeds, India (in the widest sense) is the ideal country because all the wild breeds are found here. If someone states that cattle-breeding started in connection with agriculture, then the nomadic tribes of herdsmen degenerated, agriculture was lost by climatic changes and cattle-breeding went on. This was Hahn's theory, and it is being supported again. If this is true then India has the best chance for the original home of

[44] Cf. G. Childe, *op. cit.*, p. 200f.

[45] E. Werth, "*Zur Verbreitung und Geschichte der Transporttiere,*" ZGE, Berlin, 1940, N 5/6 p. 186f.

cattle-breeding because agriculture is very old in India. But, why should the farmer be compelled to breed cattle? Mostly to provide animals to draw his plough. But the use of the plough is comparatively recent and cattle-breeding is far older. Did the farmer who used the hoe-and-digging-stick-agriculture and the shifting agriculture first tame animals? Consider for instance the Reddi, Gond and Baiga in India. The Baiga give their animals to the Ahir, who are the aboriginal herdsmen in the East-Central Provinces, for grazing and milking. In the South Himalayan I noticed that the use of the plough in agriculture and of cattle was very recent. Cattle breeding must be started by economic compulsion. What compulsion would drive aboriginal farmers to domesticate cattle? Agriculture ensured their vegetable diet, hunting was always connected with primitive agriculture and provided meat, so for them there was no compulsion to domesticate animals. On the contrary, domesticated animals would ravage the crops which the farmer had already to defend against the depredations of wild animals. Among the Ao Nagas it is known : "Mithan are not bred to any great extent by the Aos, who thereby avoid many quarrels and claims for damaged crops, for the Mithan is a most unruly beast. A few villages such as Ungr and Chuchu Yimlang buy them in the Phom country and in turn dispose of them to other Aos."[46]

Thus we can prove that for primitive agricultural people cattle-breeding is not necessary and in fact, they do not like it. With the introduction of the plough and cart, drought animals became important, but these are recent and not as old as cattle-breeding. The existence of the plough and cart marks a mixed culture of agriculture and cattle-breeding, as in Mohenjo-Daro, Anau, Iran, Mesopotamia, Egypt and China. Pre-history shows us that agriculture and cattle-breeding are connected but it cannot determine whether a culture is a primary one or a mixed culture combining the two previously mentioned components. We have pre-historic sites without agriculture but evidence of cattle-breeding and hunting i.e. Lo han tang in Tsing hai, China, and at the banks of the Selenga and Lena rivers in Siberia. Agriculture was impossible in the Northern regions of Asia and Europe because of the extreme cold, while in these regions wild game was not very abundant. Yet there are Neolithic settlements which could only belong to nomadic herdsmen.[47]

Antropology can certify that cattle-breeding was started by hunters (cf. detailed proof for the motives of cattle-breeding).[48] Perhaps the old Indian hunting tribes first bred cattle; the Chenchu, who are hunters, have a tradition that their ancestors possessed no domestic animals except dogs.

[46] J. P. Mills, The Ao Nagas, London, 1926, p. 105.
[47] M. Hermanns, *op. cit.*, p. 216f.
[48] M. Hermanns, *op. cit.*, p. 210ff.

Nowadays in every settlement there are some buffalo, cattle and goats. "The fact that a tribe of food collectors had and still has the desire and the aptitude to keep and breed these animals is note-worthy and shows that under certain circumstances the transition from hunting and collecting to cattle-breeding is easier than from hunting and collecting to agriculture. Although no encouragement has been given to the acquisition of cattle, whereas definite and mostly unsuccessful attempts have been made to settle the Chenchus as cultivators it is nevertheless understandable that cattle-breeding came to be readily adopted by the Chenchus, for it is fully consistent and even favoured by their nomadic habits, which on the other hand erect unsurmountable barriers in the way of cultivation."[49]

The Indian government has tried to settle the nomadic hunting tribes, the Katkari and others, as cultivators, the scheme has either failed completely or the tribes have become bad farmers, like the Bhils. Only some groups of the Bhils, called Bhilalas, who have intermarried with Rajput farmers, have proved good cultivators.

Perhaps the Toda are the original old Indian hunters who started cattle-breeding. According to Rivers they are Pre-Aryan or slightly influenced by the Aryans; they are connected with the Nambutiri, who are now Aryan or strongly influenced by the Aryans, and the Naic-Dravida.[50] Thurston disagreed with this : "Despite the hypothesis of Dr. Rivers that the Todas are derived from one or more of the races of Malabar, their origin is buried among the secrets of the past."[51] There are some other tribes of herdsmen whose origin cannot be determined, i.e. the Ahir, who arrived in India, from the north, just before the Christan era. Beginning with the Aryans there were successive immigrations of cattle-breeders. Why should it have been otherwise in the pre-Aryan, pre-Dravidian and pre-Austro-Asiatic times ?

The beginning of cattle-breeding is earlier than the Neolithic period, which began about 5000 B.C. ; it is in the Mesolithic period which began about 9000 B.C. If cattle-breeding started in India it must be proved that the oldest hunting tribes of the Negritos or Australoid and the Veddah race started it. But we cannot prove this as we do not know very much about this period of pre-history. There may be an objection to this because these old cattle-breeders do not exist in India now, but that is because they died out or were absorbed by other races. Because of this we cannot prove the origin of cattle-breeding in India by anthropological proofs. The only proof is that provided by pre-history.

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[49] Ch. Fürer-Haimendorf, *The Chenchus*, London, 1943, p. 73.

[50] W. H. R. Rivers, *The Todas*, London, 1906, p. 698ff.

[51] E. Thurston, *Castes and Tribes of Southern India*, Madras, 1909, Vol. VII, p. 133.

Most important of all, the seals, terra cotta figures and bones of the early Indus culture give a good picture of cattle-breeding of this period. First of all we must determine the stratification of these periods which are not homogeneous. The oldest is the Amri period in which we find only pure geometric motifs in ceramic designs, i.e. chequered designs or parallel lines on coloured pottery. Stylistically they resemble the ware of Susa I (Iran), El Obeid (South Mesopotamia) and Anau (Turkestan). The second period in Harappa and Mohenjo-Daro belongs to this period. The ware is decorated in a mixed style of geometric and naturalistic designs, and this proves the connection with Tell Halaf (North Syria), and Samarra (Mesopotamia). The following period, the third, is Jhukar or Chanhu-Daro II. The geometric designs are more abundant but now they are stylised natural proto-types. The upper period is Dhangar or Chanhu-Daro I. Here a new element, alien to coloured pottery, is found, a primitive dark grey ceramic with incised designs. This latest pottery is hand thrown. The earlier pottery was thrown on a wheel. Similar pottery was found in Kashmir by de Terra. These different strata prove that the Indus culture was not homogeneous and not built by one people but it consisted of different components which are connected with the Near East.

Seals and terra cotta figures provide a collection of animals. Cattle are most often depicted and the unicorn is the most remarkable. The profile of this cattle shows only one horn. These stylised images are the oldest representations of cattle in Asia. Perhaps this accounts for the tradition of a fixed old type. The long lightly-curved horn, projecting forwards from the head, shows the form of the Aur ox horn. In front of the animal there is a pedestal in two sections, probably used in the religions cult.[52] The Ur, Bos primigenius or Bos namadicus, is connected with religious cult in Asia from the earliest times. A relative of it, the Brachyceros cattle, is also present.[53] The Gaur, or the cross-breed Gayal, is represented by a bull with lowered head because of the prominent shoulder ridge. Like his wild ancestor, the Bos primigenius has a flat back. Besides there is a short-horned and long-horned Zebu with a long dewlap and a high hump. The Arni buffalo with its wide-curved horns is also portrayed. So all the cattle of India today are there, as well as some extinct cattle.

The domestic sheep has two varieties. One without horns, with a long tail and fine wool and the other with large horns and hairy wool. There is also an animal with cork-screw horns, his tail is short unlike the old Egyptian long-tailed sheep which has similar horns. One representation of

[52] Cf. H. Mode, *Indische Frühkulturen, op. cit.* p. 54f; W. Koppers, *Zentralindische Fruchtbarkeitsriten und ihre Beziehungen zur Induskultur, Geographica Helvetia* 1, 1946, H. 2. p. 172ff, E. Mackay, *Further Excavations at Mohenjo-Daro, op. cit.*, I p. 670.

[53] H.F. Friedrichs, *Die Kenntnis der frühgeschichtlichen Tierwelt Südwestasiens*, Leipzig, 1933. Fig. 2.

this sheep shows the image of a heart on his body.[54] Others compare it with a Zackel sheep. This kind of sheep appears in the pre-historic time in the Indus culture, in Egypt, Mesopotamia, North Caucasus and West Siberia.[55]

The goats are shown in three varieties : the Falconeri, Bezoar and Prisca goat. The long hair shows the planned breeding.

The elephant was also tamed. A model of a pig with a long straight head and prominent bristles resembling the modern type. The bones excavated prove that it must be the Indian wild boar. Clay models of dogs show a large mastiff-like type resembling the Tibetan dog, a small terrier and a dachshund. Better representations show the rhinoceros, tiger and Indian crocodile (gavial); a mythical animal, a bull with the head and tusks of an elephant (perhaps Ganesha). Many models of fowls prove that this bird was domesticated.

At this period perhaps all the domesticated animals of the day were tamed in the early Indus culture. Only the horse, ass and camel are not well represented. The horse appears in the Near East at a later period, but ass, onager and camel were tamed in Old-Sumer and Old-Egypt. It is remarkable that the ass and camel did not appear in the early Indus culture but at the end of Harappa only. There are a few camel bones. This proves my contention that in the Indus culture only indigenous animals are tamed. The distribution of humped cattle from India can be shown. They crossed Baluchistan to Susa, Sumer, Iran and Egypt, and the Arni buffalo is also found in Sumer and Egypt.

The same conclusions can be brought by the neolithic cultures of South and North Baluchistan. In the southern Kulli culture animals are pictured on the painted ceramics. In a standard scene usually the humped cattle dominate, but sometimes felines. Their form is grotesquely elongated. More stylised goat figures accompany the cattle. Besides the painted figures on the pottery there are many figurines of cattle and women. "A most interesting and attractive feature of the Kulli Culture, and one which marks it off from the other regional groups we have studied, is the frequent presence of baked clay figurines of women or of cattle. It must be confessed at the outset that we have no certain knowledge of the use or purpose of these little figures, and in some instances at least they can be regarded only as toys, but the female figurines at least have some claims to be thought of as deities in household shrines. The use of such clay figures as votive offerings or as the constituent deities of rural shrines is common in contemporary popular Hinduism, whose

[54] J. Marshall, *op. cit.*, Pl. 118, 3 ; H. Mackay, *op. cit.*, Pl. 11.; H. Mode, *op. cit.*, 54 and note 6 with Bibliography.

[55] M. Hermanns, *op. cit.*, 89.

roots strike back into the pre-historic past." (St. Piggott, Pre-historic India Harmondsworth, 1950, Pelican book p. 105.) These cattle figurines were found in large numbers. Clay wheels and models of carts prove that bull-drawn four-wheeled carts seem to have been used. It seems that in South Baluchistan the same animals were known as in the Indus culture.

In the highland of North Baluchistan mainly in the valley of the Zhob River is a group of cultures which are different from the buff wares of the South Baluchistan sites and which are connected with the red ceramics of Iran. The Rana Ghundai tell provides a stratified sequence from the earliest to latest strata. At Rana Ghundai I "the animal bones were very interesting, comprising the humped ox (Bos indicus), domestic sheep (Ovis vignei), the ass (Equus asinus), and, most surprising and important, four teeth of domesticated horse (Equus caballus). Nomadic, horse-riding herdsmen using the site as a camping-ground are suggested by the finds in RG.I.

In RG. II we see newcomers arriving at the site, building houses with boulder footings over the compacted debris of RG.I. and making a superb painted pottery, turned on the wheel and decorated with fine stylized figures of humped bulls and of black buck... A few sherds of the typical 'Bull' pottery of RG.II. have been found elsewhere in the Zhob Valley, notably at Sur Jangal..." (St. Piggott, op. cit. 121.)" The pottery found at R.G.I. was unpainted and not made on wheel. Flint blades do not show signs of use as sickleflints. The excavator Ross suggested that a seminomadic people seems to have occupied the site. But how does Piggott know that they were "horse-riding herdsmen" ? He pays no attention to the Equus onager indicus, the so-called "Indian wild ass," which lives even now in Baluchistan (see above p. 148). It would not be a surprise if the horse was bred in the north of Baluchistan because Iran (Sialk II) and Turkestan (Anau), the oldest horse-breeding centers, were not so far away. But we must have a more solid basis to prove the domestication of horse than four teeth can provide. If the horse was of some importance why is this animal not represented in the vase paintings and by the clay figurines ? Piggott himself admits : ". . . but one clay figurine (from Periano Ghundai) seems to represent a horse" (op. cit. 126). Below we have to deal with this question again. Cattle, sheep and goat are well represented in North and South-Baluchistan as well as in the Indus culture.

One particular representation of a fighting bull or of two fighting bulls, is the same in India, Egypt, Near East and Syria. But in the Indus and Crete the scene is quite realistic without mythological change as in Mesopotamia. The similarity with Crete is most striking. There is the fight of two bulls, and of man and bull, with the matador grasping the bull's horns; the skilled fighter leaping out of the bull's path and the unskilled fighter thrown to the ground. "There is a special, illustrated paper, composed by C.L. Fábri, com-

paring the Indian and Cretan bullfights, and showing that there were three phases of the cult; the bull fight or bull grasping, the leap and the bull sacrifice. These three are represented in the Indus culture and in Crete, but the overwhelming number of representations of bull fights and bull sacrifices in India and of the leap in Crete, makes it probable that the Harappa culture is the older phase and the Cretan sport is a later, profane development."[56] The Bull fight is only the ritualistic killing of the sacrificial victim.

Bull sacrifice, bull cult, bull-headed gods, in short the mystery of the bull, are the characteristic signs of all the coloured ceramic cultures. The mysteries are most typically developed in Harappa and Crete. That actual ritual plays and mystery rites were performed in India is proved by special seal representations.[57] "First it is proved by the type of the adorer who perhaps wore the horn mask which has been found, and secondly by the representation of people walking in procession, weaving their hair plaited and adorned with feathers and leafy branches. Moreover it is proved by the constant repetition of the whole scene on other seals, with the same thematic reproduction of an allegorical parallel of divine myths and cult, reflecting perhaps the dramatic performance of the divine myths in the Harappa towns."[58]

The bull god represents Shiva; bull and phallus are the symbols of Shiva, the name Shiva is perhaps a Dravidian name. "...in Tamil Shiva means to 'be red,' so Shiva is the god coming up from the deep undercurrent of the peoples belief, for whom there is no place in the pantheon of the Vedas and Shiva is the dravidian form of Rudra (M. Mayrhofer, Arische Landnahme und indische Altbevölkerung im Spiegel der altindischen Sprache, Saeculum, Freiburg-München 1951,H. I p.61). Shiva is the name known to the old aboriginals and replaced by the name Rudra by the conquering Aryans. Rudra means "the red one"; later on the displaced Shiva came back. Again there is an interesting parallel for the word bull; the Greek "tauros," latin "taurus," is very difficult to fit in with the Indo-Germanic language family but the Semitic parallel is : Hebrew, Śor,=cattle, cow, bull; Arabic taurun=bull, Aramaic tor=bull, bullock, Phoenician tor="bous", Dravidian—Canarese turu=cattle, cow.[59] There is a common name-root, perhaps "tor," for the word "bull" known in languages of India, the Near East, and Mediterranean countries.

In the early Indus culture cattle-breeding is very highly developed and its influence extends as far as the Near East. Moreover, the most important

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[56] H. Mode, *op. cit.*, 60 ; L. C. Fabri, "*Cretan Bull-grappling sports and the Bull Sacrifice in the Indus Valley Civilization*" ; A. R. 1934/35. pp. 93 ff.

[57] C. H. Mode, *op. cit.*, pp. 69 ff.

[58] H. Mode, *op. cit.*, p. 74.

[59] M. Mayrhofer, *Die Induskultur und ihre Westlichen Beziehungen*, Saeculum, Freiburg—München, 1951, H. 2, p. 304. Note 19.

animal, the bull, is closely connected with sacrifice, myth and religion. All this proves that Indian cattle-breeding is very old. Did the bull cult originate in India and spread from here to the Near East? We must consider this particular element in relation to the whole culture complex. All these aspects connected with the bull are typical characteristics of all coloured-ceramic-cultures. Where did this culture originate and where did it spread? Perhaps Iran was the original home. The first migration of the coloured-ceramic-culture people occurs about 4000 B.C. By this spread the connections between Susa I (Iran), Anau (Turkestan) El Obeid (Mesopotamia) and Amri (Indus) were established. Later, about 3000 B. C., the second migration started and established the connections between Susa II, Tell Halaf, (North Syria), Dschemdet Nasr (Mesopotamia) and Harappa (Indus). This period is its bloom. The third migration started after 2000 B. C., it was connected with the first Indo-Germanic migration which entered the Near East; these were the Hurrites and kindred people. Its effect is seen in the Jhukar period of the Indus valley; Jhangar period shows a completely different element which came from the north. The Indo-Aryan invasion began just after this.

What we know of these four different periods in the Indus culture does not mean that the whole population changed four times. Only a small ruling class introduced the new influence, the great mass of people remained unchanged. To which race did the Indus population belong? From the skeletons we can distinguish different races.

"Nearly half the skulls which could be classified belong to a more or less homogeneous group, into which, incidentally also comes the only well preserved skull from the Nal cemetery in Baluchistan. This group is that classed as the Mediterranean type. . .

Just as the evidence from the painted pottery of Baluchistan and that lying behind the painted wares in the Harappa Culture points to an eventual homogeneity among these various simple agricultural economies, so the actual physical type shows an essential ethnic community over the whole area, and the appearance of these early 'Mediterranean' folk in pre-historic India must be related to expansion from the west.

But there is another and more primitive element represented in the Mohenjo-daro people. Three skulls belong to what has been classed as the Proto-Australoid group (the Veddoid type of some writers), and these have some claim to represent the aboriginal inhabitants of the country."[60] Some skulls are short-headed and of a so-called Alpine type, one shows Mongolian features. The same types can be recognised, with some reserve, from artistic representations; a bronze statuette of a girl of an Australoid-like type with

[60] St. Piggott, *op. cit.*, pp. 145f.

striking similiarities to the clay figures at the Kulli culture (South Baluchistan) in hair-dressing and adornment; a lime-stone head of a bearded man with a Mediterranean facial type; an other sculpture of a short-headed Armenoid type.[61]

Within this racial complexity of the Indus population we cannot specify a race which could be a representative of the cattle-breeders. "The archaeological evidence shows that this long-headed Mediterranean type is everywhere in Western Asia associated with the earliest agricultural settlements. at Sialk or Al' Ubaid, Anau or Alishar. . The Al' Ubaid skulls show singularly close analogies to those from Mohenjo-daro, and their 'Afghanian' characteristics have been remarked upon."[62] More exactly all those peoples were already mixed farmers, for stone hoes, sickle-flints in curved wooden hafts, mortars for grinding or pounding corn into flour were found in the oldest settlements (Hassuna in Iraq, Sialk in Iran etc.); grain-storage bins were found together with bones of cattle and sheep.

These two elements in mixed farming have their two different origins. Agriculture begins according to archaeological records with the cultivation of wild barley and emmer. Food gathering women started grain-growing from these wild grasses. The region where these wild grasses grow is Middle Asia. Just in the same area we find the oldest pre-historic argriculture. Evidences of botany and archaeology point in the same way. The cultivation of rice and millet in India and China can be proved at a much later period.

Hunters undertook the domestication of wild animals. It happened in an area where the wild ancestors of the first tamed cattle, sheep, and goat could be found. It is Middle Asia again. This nomadic pastoralism involved complete mobility. The oldest cattle-breeders had no storage of grass or hay. They needed pasturage throughout the year. Was India a country in which the wild ancestors of the first tamed animals existed ? Could the wild grasses of the first grown grains be found in India ? To answer these questions the climate of India must be considered.

The climate, i. e. meteorology and temperature of India, is affected by certain physical features. "The Himalayas and the mountains in the north-west act as a barrier to keep out the air movements that occur in the lower atmosphere behind them, but not those that occur in the higher. The higher air movements, which have passed over snows precipitated on these mountains, cause considerable falls of temperature in northern India.

India is open to breezes from the sea over and along the coastline which being cooler than land breezes, lower the temperature wherever they penetrate.

[61] St. Piggott, *op. cit.*, pp. 147. ff.
[62] St. Piggott, *op. cit.*, pp. 146.

These facts have important effects in the variations of temperature in different parts of India, both seasonal and diurnal.

Though northern and north-western India lie in a temperate zone and the southern districts of Madras lie in a tropical zone, yet temperature in the former tract during the hot months are markedly higher than they are in the latter. For instance, the average mean temperatures of Jacobabad and Lahore at this time are about 95° and 90° respectively; those of Trichinopoly and Madras are about 89° and 88°."[63] Because of this meteorological peculiarity the northern border of the tropical zone rises highly to the north in India, roughly from the Indus-mouth to Delhi northeastwards to Nepal.[64] Therefore only the north-western part of India lies practically in the temperate zone.

A second important factor is the monsoon. The south-west monsoon is of oceanic origin and highly charged with humidity. It is advancing from June to September, lasts for about three months in full strength, and brings the rainfall. The north-east monsoon is a dry continental wind operating from the middle of December to the end of May and does not carry any moisture. The monsoons are responsible for India's water-supply. "There are parts of India where the monsoon is usually satisfactory—the coastline, Assam, Bengal, Bihar, the Punjab, and Gujarat. In the central parts of India, however, the rainfall is apt to fail and agriculture is accordingly precarious—the United Provinces, Rajputana, Central India, and the Deccan. This is borne out by history."[65] This very long dry season is not favourable to nomadic pastoralism. "If the monsoon is favourable, there is probably sufficient grass; but unless there is some special stock of fodder or of cereal straw, or other reserve to tide over the lean season from March to July, the development of the stock will suffer."[66] But was the climate the same in earlier times?

We have good evidence for a greater rainfall in Baluchistan and in the Indus Valley. "In the pre-historic past the population must have been enabled, by successful agriculture, to live in some prosperity in those same valleys which today support only the most scanty and nomadic human occupation under wretched conditions. . .

...they (irrigation works) must reflect not only climatic conditions with a greater rainfall, but also a large population to provide the necessary labour for their construction."[67] The same evidence for heavier rainfall, large

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[63] E. Blunt, *Social service in India*, London, 1940, p. 13.
[64] S. Passarge, "Geographische Völkerkunde", Asia, B. 5, Frankfurt, 1938, p. 2.
[65] E. Blunt, *op. cit.*, p. 12.
[66] *Op. cit.*, p. 162.
[67] St. Piggot, *op. cit.*, p. 60.

fertile lands and extensive forests in ancient times can be provided for the Indus valley. "Today the Punjab is one of the greatest corn-growing areas of Asia, but the Sind is a desert reclaimed only by the elaborate irrigation works which utilize the waters of the Indus...

...The most reasonable explanation of the climatic deterioration within comparatively recent times is the supposition that the edge of the south-western monsoon area has shifted eastwards, and that the Indus was formerly within the area of monsoon rains."[68]

The area of the neolithic Indus cultures is within the temperate zone. If this zone produced great forests in neolithic times the grazing grounds must have been much better and fit for cattle-breeding.

I suppose that cattle-breeding did not start in a tropical country. The wild ancestors of the first domesticated animals did not exist in the tropical zone and the long dry season was not favourable for nomadic pastoralism. Therefore the main part of India, the tropical area, could not be the very first centre of domestication. The Indian High-lands in the north-west which lie along the edges of two great plataux, the Iranian and the Tibetan, could be a centre of cattle-breeding. There were the ancestors of the first tamed animals, cattle, sheep, and goat. In Iran domestication is proved in Sialk I about 4000 B. C., Hassuan, Iraq, about 5000 B. C. In India such early neolithic sites are lacking. The earliest settlement in north Baluchistan containing bones of domesticated animals is Rana Ghundai I about 3000 B.C. The frequent layers of ash without structural remains suggest an occupation of the site by a semi-nomadic people. Their unpainted pottery which was not turned on the wheel shows no connection with the painted pottery of the west. These evidences suggest that the Rana Ghundai I people were cattle-breeders of a distinct type without agriculture. In the following strata we find mixed farmers who combined grain-growing and stock-breeding in one distinctive economy. This mixed economy is known in all the other neolithic settlements of India and is in use till the present days. By this economic system India possesses a very great number of cattle; oxen and buffaloes about 190 millions, sheep and goats approximately 90 millions, horses, donkeys and camels about five millions. It means that India has "between one-third and one-forth of the total bovine population of the world which is estimated at 690 millions."[69] Their contribution to the annual agricultural income is about 750 million sterling.[70]

[68] *Op. cit.*, p. 133ff.
[69] E. Blunt, *op. cit.*, p. 159.
[70] *Op. cit.*, p. 160.

The best known milk-cows are: Sindhi and Thar Parkar (Sind), Sahiwal (Punjab), Gir (Kathiawar), Ongole (Madras). The best working breeds are: Hariana or Hansi (Punjab), Malvi (Central India), Kankrej (Gujarat), Gaolao (Central Provinces), Kistna Valley (Bombay, Madras), Amrit Mahal (Mysore). The best known buffalo-breeds are: Murroh or Delhi (Rohtak), common in Punjab, Rajputana, United Provinces (western parts), North Sind; Jafarabadi (Kathiawar), Surati or Charotar (Gujarat), Mehsana, probably a cross Delhi X Surati; long, pointed horn buffalo of Central India and the Deccan.[71]

One-third of the 90 million sheep and goats are found in Madras, but their kind is inferior, because their fleeces are hair rather than wool. The best sheep are in Rajputana and north-western India. They are of many kinds. The two best known are the dumba or fat-tailed and the Bikaner sheep, which produces the best wool. Outside Madras sheep are numerous in Rajputana, Punjab, Bombay, United Provinces, Bihar.

Goats are more widely distributed than sheep, chiefly in Madras, Bengal, Bihar, United Provinces and Punjab. They are of different breeds. Sheep and goat bring in a good income to their owners.

The breeding of a better livestock of cattle is impeded by the Hindu custom to consider the cow as a sacred animal. The number of cattle is regulated by the need for bullocks. Therefore cultivators must keep a large number of useless cattle. By immature mating which occurs in the mixed herd wandering out from the village to the grazing grounds much damage is done. "In India it is generally true that the larger the amount of free grazing the more numerous are the animals and the worse is their general standard."[72] Realizing the defects of the livestock the Indian department of agriculture established cattle-breeding farms and sent out bulls to the district boards for village service. Thus some effort is made to improve Indian cattle-breeding.

III CATTLE, SHEEP AND GOATS ARE THE OLDEST DOMESTICATED ANIMALS.

Through our researches in Indian cattle breeding we can see that cattle, sheep and goats are the oldest domesticated animals in India. The domesticated horse came much later. I arrived at the same conclusion at the end of my long years of research in China and Tibet. In the country between China and India, Indo-China, the same rule applies. Also in the Near East, Iran and West-Turkestan cattle, sheep and goats are the oldest domesticated

[71] *Op. cit.*, p. 161f.
[72] *Op. cit.*, p. 162.

animals. The horse always appears later. In the Near East equides like the ass and onager were tamed much earlier than the horse. The horse appears about 2500 B.C. in these countries. These are the facts in the Far East, South-East Asia, India, Middle Asia. These facts are explained by the following theory. The wild horse did not live in these regions. But the wild horse did live in North-west China, Tibet and Turkestan, therefore we cannot use this argument for these countries. In the East there was the Przewalski horse and in the West the Tarpan. This can be proved for these countries by pre-historical research. This proves that cattle were always domesticated earlier than the horse.[73]

Opposing this statement W. Schmidt defends his old hypothesis that reindeer and horse are the oldest domesticated animals. He thinks that the home of this domestication is North-Asia, perhaps South Siberia.[74] Schmidt's arguments are not based on pre-historical facts or on primitive cattle-breeding cultures. He tries to prove the antiquity of an economic system by mythology alone. Let us look into his proofs. The Inner-Asiatic horse breeders have a new form of creation myth of the earth in which two black swans are of special importance. "Now the classic form is only among the Turks, the primary horse breeders, and a younger, richer form is found among the secondary horse breeders the Mongols and Buryats."[75]

This type of myth "did not appear in North America",[76] it begins "in direct contact with the creation myths of the world of the North-Asiatic and North-American Primitive culture."[77] Schmidt admits that the new form is the "most recent creation myth", which "did not arrive in North America", but it should have "territorial contact with North-American myths and should be spread over North-East Asia". It is difficult to understand how a myth can have territorial contact with North American myths when it is not to be found there. The connection between creation myths and cattle breeding is achieved in this way : "the breaking up of the land-bridge between North East Asia and North West America must have happened in the latest millenia of the upper Paleolithic period, and '*just after this*' (italics mine) the tribes driven from the North-East started the first attempt at reindeer and horse breeding."[78] Was it in the Upper Paleolithic or the Mesolithic period ? To prove that tribes were driven southwards by the destruction of the land bridge is impossible. Even if it could be proved, how can we know whether Altai-Turks were among these tribes, and who made the first attempt to breed reindeer and horse. Schmidt himself offers no proof at all. It is merely

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73 Cf. M. Hermanns, *op. cit.*, pp. 122, ff. pp. 245ff.

74 Cf. W. Schmidt, *Zu den Anfängen der Herdentierzucht*, *Zeitschrift für Ethnologie*, Vol. 76, No. 1, Braunschweig, 1951 pp. 1 ff.

75 W. Schmidt, *op. cit.*, p. 4.

76 *Op. cit.*, p. 4.

77 *Op. cit.*, p. 5.

78 *Op. cit.*, p. 5.

a statement without being supported by proof. Later (p. 19) Schmidt proves the antiquity of the Turks and the antiquity of horse breeding "by the fact that the Altai-Turks have the oldest and clearest creation myths, which have the closest connection with the myths of North America, which came to the country 15,000—20,000 B.C." From the antiquity of the myths and the time of the breaking up of the land bridge between Asia and America, he decided the age of an economic system like cattle-breeding. It is difficult to understand how economic systems, mythology and geological events can be in such close relation.

According to experts the passage between Asia and North-America was passable for human beings upto 20,000-15,000 B.C. "They argue that during the maximum of the Wisconsin, the ice-sheets of the Keewantin and Cordilleran centres were connected and that at an early stage of the retreat the two became separated, so that man arriving from Siberia via Behring Straits (the sea-level was low at that time) was able to penetrate the open country of Central and South-Western America."[79] About 20,000—15,000 B.C. the straits could be crossed because the glaciers retreated. But this does not necessarily mean that the climate there was an "inhabitable boreal climate", as Schmidt presumes.[80] The Felsdom people who were the oldest inhabitants of North America, lived in a cool, damp climate. "Evidence is plentiful at all these sites that man had occupied North America at a time when the climate of the South-West was cooler and damper than now and when several now extinct animals were still abundant. The overflow levels in question and the enclosed culture are considered as at least 15,000 years old (Anteves. 1937)".[81] The situation at about 20,000—15,000 B.C. is quite different from that which Schmidt presumes.[82]

North-Asia, Arctic-Asia, is a retreat for oppressed people ; the movement is towards the North. Not one instance of the movement from North to South can be proved; it is always the reverse. Most important of all is the movement of population when Turan and the Tarim-Gobi basin gradually dried up through the change of climate and turned into arid desert and salt steppes. The people living there were forced to emigrate.

The climate change can be proved by pre-history. In the upper Paleolithic period in Siberia, the sites Malta, Irkutsk, Kaiskaja, Gora on the Angara River north of the Baikal Lake have an arctic fauna ; Mammoth, wooly rhinoceros for instance. The tools are mostly made of mammoth ivory, bones and antlers. This state of affairs is also found in the following sites, Afontova I, II, Under stratas etc. The later sites show a change.

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79 Fr. E. Zeuner, Dating the Past, London, 1951, p. 282.
80 *Op. cit.*, p. 5.
81 Fr. E. Zeuner, *op. cit.*, p. 35.
82 *Op. cit.*, p. 5.

Arctic animals are not found, they are replaced by reindeer, horse, aurochs etc. Bone implements are rare, but microliths are abundant.[83] To this later period belong the sites of Sabocki near Korokewo, and "Immigrants Point" near Krasnojarsk. Finally there is the latest Strata Gromov's Group III (Afontova II Upper strata, Afontova IV). The two later groups were called post-glacial sites by the Russians. The chronology of Siberia is not sufficiently clarified, so it is impossible to date exactly these epochs. It is also difficult to find a parallel to European periods. But let us use Europe for a comparison, then the post-glacial would begin about 8000 B.C.[84] Schmidt fixed the first centre of horse-breeding in the Altai and Sajan mountains[85] which because of their altitude had an alpine climate. But it was impossible that in 8000 B.C. animal-breeding could start there. The above mentioned excavations reveal only wild-animal bones, not those of domesticated animals.

What do the later Neolithic sites prove? In the Angara district there are the Isakovo, Serovo, Kitoj and Glazkovo sites; the articles found prove that only hunters and fisher-men lived there. There is no evidence of cattle-breeding. On the sites of Afanasjevo on the Jenissei below Minusinsk bone-finds in tombs prove the existence of the following animals: Domesticated cattle (Bos taurus), wild cattle (Bos primigénius, Boj) or Bison priscus Boj., or Yak, (Poephagus mutus) sheep (ovis sp.), horse (Equus caballus), fox, stag, marmot. These animal bones prove both cattle breeding and hunting. There is no evidence of reindeer. Was the horse domesticated like the cattle? Tame and wild horse are not distinguished in the evidence presented, so we cannot prove the priority of horse-breeding in this district. The above mentioned culture is an extensively spread culture, i.e. near Bateni, Saragash, Anash, Tes, Ust-Abakanskoje, Samodurovka, Minusinsk, Krasnojarsk, on the Sidi river, east of the Jenissei, West near Biisk, Barnaul on the upper Ob, South of Elekmanara, in the north Altai mountains. This culture may be a purely neolithic one because copper utensils are believed to have been introduced from West-Turkestan through trade. Some scholars fix the date of the culture at 2500-1700 B.C.; others about 2000-1500 B.C.[86]

The excavations made by Petri in the Baikal region prove the same situation in regard to cattle-breeding. On the ravine site and in the caves of Orkhon bones of cattle, sheep, goats and horse were excavated. Because there is no evidence of agriculture the population was occupied in cattle-breeding and hunting only. The cattle show a cross-breed of Yak and common cow, as the Chief Zoologist of the Russian Academy of Science proved. Similar exca-

83 Fr. E. Zeuner, *op. cit.*, p. 165.

84 Cf. R. Pittioni, *Die Urgeschichtliche Grundlage der Europäischen Kultur*, Wien, 1949 p. 44, Tafel

85 *Op. cit.*, p. 7.

86 S. H. Gaul. *Observations of the Bronze Age in the Jenissei Valley*, Siberia, Cambridge, Mass, 1943, pp. 150ff.

vations were made by Petri at Birusa, Angara, Murina, Kuda, Selenga, Kichega on the Tunka river and the Upper Lena.[87] Along the Lena River there are proofs for the breeding of reindeer and cattle.

From the pre-historical evidence the following facts are obvious: In the Taiga neolithic period and following aeneolithic period there is proof for cattle-breeding. But in the Transbaikal districts from 2200 B. C. different domesticated animals were bred. The excavation reports show clearly that there is no priority of reindeer and horse-breeding, as Schmidt thought, relying on mythological evidence. On the Lena River cattle and reindeer appear together. In the other sites cattle and horse are together. The rock-carvings of Bischichtich Chaja at Tuwa represent cattle, yak, horse, camel and mountain goat, but never reindeer.[88] In any case cattle are found at every site, horse and reindeer are sometimes present. Schmidt, to prove his theory, omits to mention all these excavations. He mentions only the excavations of A.O. Ogrodnikov at the Upper Lena by which bones of a domesticated reindeer and parts of harness made of bones were excavated. Similar finds were made in a tomb near Wercholensk.[89] From these finds we cannot prove the priority of reindeer at the Upper Lena, and in any case there is no proof at all that "in the southern parts of the Baikal districts adjoining the Lena Basin reindeer replaced during the Neolithic period, horse in some instances and cattle in others."[90]

The above mentioned reports of excavations contradict Schmidt's statement; more than that, they prove that it is impossible to fix "the first domestication of reindeer at the end of the Upper Paleolithic or Mesolithic period."[91] The above mentioned reports make such a theory impossible. In the Upper Paleolithic period reindeer was not tamed at all. We cannot prove whether or not it was tamed in the mesolithic period because we have no excavations dating from this time. When reindeer appears in the Neolithic period, it always appears together with cattle.

Hancar comes to the same conclusions: "In the entry-region of the Desna at the eastern Ukraine are the upper palaeolithic settlements of Puskari, Mezin, Culatovo, Timonovka, Jelisecvici and the southern adjoining Honcy. In the upper Don Valley are the stations of Kostjonki, Borsevo, and Gargarino in the Voronez district; and finally in the upper Angara Valley at southeastern Siberia are the upper palaeolithic hunting camps of Malta and Buret near Irkutsk at the Lake Baikal which are known to us so exactly

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87 W. Jochelson, *The Yakut*, Anthrop. Pap of the Amer. Mus. of Nat. Hist. New York, 1933, Vol. XXXIII, Part II, p. 61.

88 O. Mänchen-Holfen, *Reisen ins asiatische Tuwa*, Berlin 1931, p. 55.

89 W. Schmidt, *op. cit.*, p. 9.

90 W. Schmidt, *op. cit.*, p. 9.

91 W. Schmidt, *op. cit.*, p. 10.

as no finds elsewhere."[92] At these places animal breeding is still unknown. "During the mesolithic period man used the tamed dog as hunting companion and for transportation of goods, and, perhaps, as store of meat. It is the oldest tamed animal."[93] Hancar supposes that animal breeding started in the beginning of the neolithic period.[94] There is no proof at all that horse was tamed in southern Siberia at the end of the upper palaeolithic or the beginning of the mesolithic period.

According to Schmidt the first domestication of animals was only possible in South Siberia. "Therefore only there in the steppes of Inner-Asia (more exactly in the Altai-Sajan mountains, M. H.) all preparations were made for a transition from hunting to cattle breeding," and only there "the necessity existed, and nowhere else in the whole world, for man to choose steppes where he was forced into contact with animals in large herds."[95] Much earlier man had come into contact with large herds of animals in different parts of the world. This is proved by the paleolithic cave-paintings and rock carvings in Europe and Africa. It can also be proved by the immense mounds of horse bones found at the foot of steep cliffs where the horses were driven to leap over the edge by the hunters.[96] During the upper palaeolithic period of western Europe wild horse and reindeer were the most important game. There were permanent settlements of hunters using large houses in eastern Ukraine, at the upper Don and at the upper Angara. The hearths consist of immense stratas of bone-ash, which illustrate the close connection between man and animal.[97] But let us suppose that the first domestication of animals evolved in the steppes of Inner-Asia. These steppes comprise an immense area from 75°—120° E. Lat., and from 35°—50° N. Long. Why should man be forced to get into contact with animals in the most northern part, in the Altai and Sajan mountains and start with reindeer and horse breeding? Reindeer and horse lived in certain districts, cattle and sheep on the contrary were widespread in all the districts. If man was forced to change from hunting to animal-breeding, why could that not happen in the Tien Shan, Pamir, Kuen lun etc., or else in a large plain? If this could only start in the Altai-Sajan mountains "and nowhere else in the whole world" then Schmidt must prove that fact by pre-historic climate evidence, ecology etc. Besides in Asia there were also West Turkestan, Iran and other countries with the possibility of animal-breeding. With the scientific

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92 F. Hancar, "Umweltkrise und schöpferische Tat in schriftloser Zeit.", Saeculum, Vol. 1, N. 1. 1950 p. 120.

93 *Op. cit.*, p. 128.

94 *Op. cit.*, p. 135.

95 W. Schmidt. *op. cit.*, p. 7.

96 Solutriée ; Cf. M. Ebert, Reallexikon für Vorgeschichte, Bd. XII, Berlin 1928 Taf. 80/1.

97 F. Hancar, *Umweltkrise und schöpferische Tat in schriftloser Urzeit*, Saeculum, Vol. I, 1950. N. I. p. 120.

evidence now available we cannot definitely fix the first home of animal-breeding. It was not the Altai-Sajan region, because the much earlier excavations of Anau, Sialk, (Iran), Merimde, Tasa (Egypt), prove animal-breeding, and here sheep and cattle are found.

Myths are a spiritual culture element, cattle-breeding a material one. Animal breeding as an economic system is younger than hunting. If hunters who possess old creation myths introduce animal breeding or agriculture—this often happened even in later periods—they retain their old myths with the new economic system, the antiquity of the myth does not prove the antiquity of the economic system. The argument of Schmidt is this: the creation myths of the earth of the Turks are very old, therefore their economic system of horse-breeding is the oldest. For the reindeer and horse-breeders in question we have evidence to prove that they changed from hunting to animal breeding in a most recent period. Chinese sources report that the northern tribes of the Dung hu, She wei, and Hiung nu were hunters. The southern tribes were horse breeders who temporarily were settled and had agriculture. In time the northern hunting tribes changed more and more to horse-breeding.[98] If this happened with the early Turk tribes then the conclusion is possible that the same thing happened with the Turk tribes in the previous period. These tribes could not be the first horse-breeders.

With the Samoyeds as the oldest reindeer breeders we find the same situations; the Forest-Juraks are "upto nowadays mostly hunters and very occasionally breeders. The other Samoyeds are breeders and occasionally hunters."[99] The oldest economic system is hunting which is an occupation of a part of the people upto the present, and which shows the first beginning of animal breeders. Most of the population changed to animal breeding and is occupied only slightly with hunting. These tribes are neighbours, thus the change of economic system could not have taken place at a very early time. Above all it could not have happened in Upper Paleolithic or Mesolithic times. Not even in the Neolithic period, because otherwise we cannot see why the whole population did not change from hunting to animal breeding. Schmidt came to the conclusion that "as the ethnological age of the Samoyeds reaches so far back that reindeer breeding is *equally old* (italics mine), no other branch of animal breeding can compete with reindeer breeding in antiquity."[100] The oldest economic system is hunting; cattle-breeding is a later development whose age cannot possibly be compared with the "ethnological age of the Samoyeds." It can be proved that the Samoyeds and Turk peoples changed from hunters to breeders during the historical period and for the Forest-Juraks the change is still going on today.

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98 W. Eberhard, *Kulturen and Siedlungen der Randvölker Chinas*, Leiden. 1947, pp. 44ff, 54ff.

99 W. Schmidt, *op. cit.*, 8.

100 *Op. cit.*, p. 8.

Other difficulties with the antiquity of the above mentioned people come from physical anthropology. The oldest reindeer breeders are the Samoyeds, especially the Sojots[101] according to Schmidt, and the oldest horse-breeders are the Altai and Abakan Tatars with whom the Jakuts were joined in earlier times.[102] If the Jakuts originally belonged to these tribes and even after their emigration "in the first time, had a high standard of animal-breeding of their original home"[103] then they "were in their old strata" primary horse-breeders and they cannot be considered "as a later group of horse-breeders"[104] because they were influenced later on. The above mentioned peoples have typical mongoloid characteristics and belong racially to the Mongoloids without doubt. The Samoyeds (Sojots), the Altai Abakan Tatars and the Yakuts have a pale yellow skin colour, black, coarse straight hair ; they are thickest and have long bodies with short legs, round skulls, flat faces with small noses and the mongoloid fold. The Turkish tribes who settled further west are a very mixed population with European influence. "In attempting to classify the Turks into one of the racial breeders either a Mongoloid or a Europoid race of the first order, Irakho comes to the conclusion that the racial heterogeneity of the Turks has been entirely proved. If one disregards the more recent admixture of the Russian elements some of the Altai's peoples of Siberia and the Yakuts may be considered to be relatively pure Mongoloid.

The concentration of the Mongoloid influence decreases gradually towards the West. The western Turks are characterised by feebly expressed Mongoloid traits and by practically pure European characteristics."[105] Not only modern anthropology proves that the Turks are a great racial mixture. The proximity of Europoid and Mongoloid races and the first appearance of Mongoloids can be observed in the later strata of the Karasuk culture (1200-700 B.C.). "Karasuk must be looked upon as a mixed culture practised by a population which is likewise mixed."[106] The first intrusion of Mongoloids as far as Minusinsk seems to be a first, isolated attempt. "The west is Europoid and remains Europoid. Nor can any Mongoloid of that kind be found in the period in question in the near south and south east e.g. in Tuva."[107] In the same centre in which Schmidt treated reindeer and horse-breeding there are no mongoloids. Even in the Minusinsk region the Mongoloids could not stay very long and disappeared later. "In the Tagar time (700-100 B.C.) these racial boundaries no longer existed. The Minusinsk Basin again became part

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101 *Op. cit.*, p. 10.

102 *Op. cit.*, p. 20.

103 *Op. cit.*, p. 20.

104 *Op. cit.*, p. 20.

105 H. Field. *Contributions to the Anthropology of the Soviet Union*, Washington, 1948, p. 209.

106 K. Jettmar, *The Karasuk culture and its south-eastern affinities*, B. F. E. A. N. 22, Stockholm, 1950, p. 113.

107 K. Jettmar, *op. cit.*, p. 114 *note* 4.

of the vast region of Europoid races, though the cultured structure was not subjected to any repeated change."[108]

According to Chinese history, about 200 B.C. the Hiung nu came to power in Chinese Turkestan. At that time a racial change took place which was remarkable during the Skythian epoch. "In spite of this apparent uniformity of the Skythian world immense changes are effected. Naturally, these cannot be recognised in the metal inventory, but only in burial-sites and in anthropological material. By this time the zones between Transbeikalia, Northern Mongolia and Tuva have become united to form a culture province which is characterised by stone tombs. In this cultured province are found broad-faced Siberian Mongoloids. The Mongoloid elements which probably belong to the Turks and Mongols, as we now know, go well together with the idea of 'Knighthood'...These invaders became more and more powerful in the Altai, occupying the whole region, between Minusinsk and Ordos. We may well suppose that they have sealed the fate of the Sinides in Mongolia and in the North Chinese borderland. The Huns coming from still further North put the finishing touches to this Turkization."[109]

These proofs from physical anthropology support our finds from ethnology for the fact that Samoyeds and Turks are a later development. In their economic system the change from hunters to cattle breeders; in physical anthropology the mongoloid type evolved. The Turks themselves remain for the most part Europoid. (Cf. G. F. Debez, IV. Moskau-Leningrad 1948.) All these facts contradict the antiquity of the typical reindeer and horse-breeders stated by Schmidt. All the Mongoloids are a very special development and a strong specialisation which happens "in relatively late times branching from the middle line."[110] To avoid misunderstanding I again emphasise that the Mongoloid specialisation of the peoples in question and their animal breeding is a later development. These facts cannot be ignored because of the old creation myths. The first reindeer and horse-breeders are not only found among Mongoloid people but also among other races. This statement of course has nothing to do with the question whether reindeer and horse or cattle and sheep were the first domesticated animals. But the proofs put forward by Schmidt are challenged by it because he reasons that as the Samoyeds and Altai and Abakan Tatars have the old creation myths, they are an old race and reindeer and horse breeding are also equally old.

To prove that cattle and sheep are the oldest domesticated animals, we use in the first instance the pre-historical evidence, which we summarise as follows : From the above mentioned pre-historical facts from South Siberia we

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108 *Op. cit.*, p. 122.
109 *Op. cit.*, p. 122.
110 M. Weninger. *Aus der Frühzeit der Menschheit*, Wien, 1948 p. 72.

can see that cattle were known everywhere, but reindeer and horse only in certain districts. The Neolithic cultures (Afanasjevo, Lena) are not so old; by these we cannot prove the antiquity of cattle, reindeer or horse domestication. But in the Taiga Neolithic period in Isakovo and Serovo cattle breeding is absent ; this proves that these regions could not be the first centre of domestication. On the southern border of the great Indo-Asiatic basin are the Neolithic sites of Lo han tang (Tsing hai) and Tsi dja ping (Kan su, China) where there is evidence of cattle and sheep breeding; the horse is not found. These sites are contemporaneous with the above mentioned sites in Siberia, c. 2500 B. C. The same evidence is found in the sites of Dji gou dsha in Ho nan (China). Before and during the Yang shau culture of China the horse is not found though cattle and sheep are evident. From the first Chinese Dynasty (Hia) we have no pre-historic excavations. From the excavations of the second Dynasty (Shang) and from Tsheng dse ya cattle, sheep and horse are authenticated. These are the facts in East Asia. The Indian evidence is dealt with above. In India again the horse is domesticated late. But it is from Rana Ghundai I that Schmidt attempts to prove the antiquity of horse-breeding in the Altai mountains.[111] As we mentioned above, the animal bones excavated at Rana Gundai I are : eleven bones of humped cattle (Bos indicus), five bones and six teeth of sheep (Ovis vig.), one bone fragment and one premolar of ass (Equus asinus), and four teeth of horse (Equus caballus). From this evidence Schmidt comes to the conclusion : The horse breeders of Baluchistan must have derived from the Altai-horse breeders who on their migratory ways towards the West adopted donkey-breeding and came via Hissar (Iran) to Baluchistan. There they started to breed cattle. That is the way how the horse-breeders came to the West and to India. Now the way back. Rana Ghundai I is about 3500 B. C., "but should be ante-dated some centuries;"[112] but then "the horse-breeders of Hissar must have left the oldest centre of horse-breeding at the Altai in the first half of the 5th millennium that means, it is affirmed, again that at least in the beginning of the 5th millennium B.C. horses were bred at the mountain meadows of the Altai and in the steppes along the foot of the Altai."[113] The hypothesis is clear; but the proofs are missing that the Altai-Hissar-and Baluchistan-horse breeders are intrinsically connected and that the Altai breeders have the priority of age. It is only a mere supposition of Schmidt. Hissar I has painted pottery with animal figures and animal figurines of baked clay, sheep, goat, cattle.[114] At Rana Ghundai I on the contrary is unpainted pottery which had not been turned on the wheel. Newcomers in Rana Ghundai II brought painted pottery. In this and the later strata, cattle-breeding was

111 W. Schmidt, Supplement to "Zu den Anfängen der Tierzucht", Zeitschrift für Ethnologie, Bd. 76. H. 2, Braunschweig, 1951, p. 201ff.

112 W. Schmidt, *op. cit.*, p. 202.

113 *Op cit.*, p. 203.

114 E. F. Schmidt, *Excavations at Tepe Hissar Damghan, Philadelphia*, 1937.

practiced but horse-breeding was unknown. Between Hissar I and Rana Ghundai I is no connection. Above all, between Hissar I and the Altai is no connection at all.

Farther West in Shah Tepé III, Susa I. Sialk I-III cattle and sheep are found. This means that in Iran about 4000 B.C., these animals are present. The first appearance of the horse is in Shah Tepé II. Much later, in Anau (West Turkestan) in the strata Ia cattle, sheep and an equid are found. The bones of the equides are the bones of a wild Onager, as most scholars believe. The same happens at Tell Asmar and Balih Valley. In Tell Halaf, El Obeid, cattle, sheep and equids which is recognised as Onager at Uruk are evident. In Mesopotamia an early onager-breeding is proved about c. 3400 B.C., but no horse-breeding. In the oldest Neolithic settlements of Egypt at Nerinde, Tasa (c. 4000 B.C.) cattle, sheep, goat and pig are known, but no horse. In the Caucasus district and the Dnjepr-Volga basin cattle and sheep are known early. The horse appears relatively late.[115] A new excavation in the Ghor, on the banks of the Yarmuk River at Palestine shows that the Yarmuk people were primitive agriculturists and cattle breeders. Bones of cattle, sheep, goats and dogs prove that they had practiced pastoralism. This Yarmukian period is dated about 7000 B.C. [116]

Of pre-historic Europe we have the following picture: "The existence of animal-breeding is proved in the late Mesolithic period ; the dog appears in the Maglemose culture and also in Natufian in Palestine. Domestication of reindeer cannot be definitely proved in nordic regions but can be presumed. By the finds of bones it can be proved that in all the Neolithic cultures of Europe dog, pig, cattle, sheep and goats were domesticated. There is no definite proof for horse domestication, but the possibility exists, that at the 'Dolmon' period in the Nordic districts the horse was domesticated. In the Danube culture reliable evidence from bones is missing but by a bit made of bone the domestication of the horse in Central Europe can be presumed."[117] In the European countries the domestication of cattle and sheep can be proved from the beginning of the Neolithic period but definite proof for reindeer and horse-breeding is missing. The first possibility of horse-breeding at the Dolmon period (c. 2500 B.C.) and the bone bit from a dwelling pit near Halberstadt are uncertain proofs and in any case too late to prove the priority of reindeer and horse breeding. Schmidt admits the priority of cattle breeding in Europe.[118] If he used the same critical method towards Asia as he does in regard to Europe, he would no doubt agree that cattle and sheep are the oldest domesticated animals and not reindeer and horse, and that the first centre of domestication could not be in Southern Siberia.

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115 F. Hancar, *Ross und Reiter im urgeschichtlichen Kaukasus, Ipek*, Berlin, Leipzig, 1925, p. 56f.

116 Anthropos, Vol. 47, No. 1-2, 1952, p. 295f.

117 R. Pittioni *Die Urgeschichtlichen Grundlagen der europäischen Kultur*, Wien, 1949, pp. 108f.

118 W. Schmidt, *Rassen und Völker*, B. II. Luzern, 1946, p. 123ff.

SOME OBSCURE CULTS

By

B. G. Gokhale

The Pāli commentaries, though mainly devoted to the exposition of the Canonical texts, contain a good deal of information which is of great interest in the understanding of the religio-philosophical *milieu* from which Buddhism arose. Suttas like the *Brahmajāla* and *Sāmaññaphala*[1] are deservedly well-know for their valuable information on the religious ideas of the times. Much of this information has already been collected and its significance pointed out. There are, however, numerous cults mentioned in the Pāli texts, a study of which would furnish interesting results. An attempt has been made in the following lines to study some of these cults.

The *Niddesa*, a commentary on the *Sutta Nipāta* and a part of the Pāli Canon, has a curious list of obscure cults. This list purports to point out how some people are devoted to strange religious practices in the hope of realising salvation. The passage says : "*Santeke samaṇabrāhmaṇā vatasuddhikā. Te hatthivatikā honti . . assa . . go . . kukkura . . kāka . . Vāsudeva . . Baladeva . . Puṇṇabhadda . . Maṇibhadda . . aggi . . nāga . . supaṇṇa . . yakkha . . asura . . gandhabba . . Mahārāja . . candima . . suriya . . Inda . . Brahmā . . deva . . disā vat ikā honti.*" (There are some ascetics and Brahmins who are in pursuit of purity through vows. They practise the elephant . . horse . . cow . . dog . . crow . . vāsudeva . . Baladeva . . Puṇṇabhadda . . Maṇibhadda . . fire . . serpent . . supaṇṇa . . yakśa . . asura . . gandharva . . Mahārāja . . moon . . sun . . Indra . . Brahma . . god . . quarters . . vows).[2] The *Milinda Pañha* has a list of *gaṇas* some of which are clearly religious in their institutional implications. This list runs as follows: "Mallā, aṭoṇā, pabbatā, *dhammagiriyā, brahmagiriyā naṭakā naccakā, laṇghakā, pisācā, Maṇibhaddā, Puṇṇabhaddā, candimasuriyā, kālidevatā, sivā, vasudevā, ghanikā, asipāsā* and *bhaddiputtā*."[3] This passage has been translated by Rhys Davids as: "And again, O King, just as there are several classes of people, known as distinct in the world—such as wrestlers, tumblers, jugglers, actors, ballet-dancers and followers of the mystic cult of the sun and moon, of the goddess of fortune and other gods . . "[4] In the note on the passage under reference Rhys Davids observes, "There are twenty

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1 *Dīgha Nikāya*, I, Suttas Nos : 1 & 2.

2 *Niddesa*, I, p. 80 ; also see p. 310 where the same list is repeated.

3 *Milinda Pañha*, p. 191.

4 "The Questions of King Milinda", *Sacred Book of the East*, XXXV, p. 266.

classes of these people mentioned in the text, and the meaning of most of the names is obscure. The Siṁhalese simply repeats them all, adding only the word *bhaktiyo*, 'believers in' to the names of the various divinities. The classing together of jugglers, ballet-dancers and followers of the numerous mystic cults, so numerous in India, is thoroughly Buddhistic, and quite in the nature of Gotama himself as, for instance, in the *Mahāsīla*..."[5] The late Sir R. G. Bhandarkar made a similar observation in his reference to the *Niddesa* list : "Here a Buddhist, who cannot but be expected to show scant courtesy to religious systems other than his own, places the worshippers of Vāsudeav and Baladeva on the same level with those of fire, moon, sun and Brahmā, and even elephants, crows, dogs etc."[6] But this juxtaposition seems to be due more to the commentator's idea of pointing out institutional similarities than to subject any sect to special ridicule. The *Niddesa* calls all these as *vatas* (vow) and though ultimately the point made is specifically favourable to Buddhism, it is emphasized that these *vatas* are observed for the purpose of achieving *suddhi* (purity). Nāgasena in the *Milinda* stresses that these cults are esoteric in their nature, the votaries scrupulously guarding their secret from the uninitiated and the outsider (*tesaṃ tesaṃ rahassaṃ tesu tesu gaṇesu yeva carati, avasesānaṃ pihitaṃ*). The secret so referred to may be a trade secret in the case of the occupational groups but in the case of others like the Puṇṇabhaddās, who are clearly sectarian groups, the secret must have been of a religious nature. A Brāhmaṇical text has a somewhat similar list mentioning a number of supernatural beings among whom Yakśa, Jambhaka, Virūpākśa, Lohitākśa, Vaiśravaṇa, Mahāsena, Mahādeva and Mahārāja are included.[7]

An examination of these lists of obscure cults reveals something of their peculiar nature. This large medley of names can be easily classified into five well-defined cult-groups : a) animal and mountain cults (*hatthi, assa, go, kukkura, kāka, pabbata, Dhamagiri, Brahmagiri*), b) Demonic cults (*nāga, gandhabba asura, pisāca, Yakkha, Maṇibhadda* and *Puṇṇabhadda*), c) the anthropomorphic cults (*candima, suriya, Mahārāja, disā, Brahmā*), d) the Vaiśṇavite cult (*Vāsudeva, Baladeva*), and e) the Śaivite cult (Sivā, Kālidevatā and perhaps *asipāsā*). Of these the last three need little elaboration as they are familiar to us and of the demonic cult we need notice only Maṇibhadda and Puṇṇabhadda. The first group deserves examination in some detail.

The cult animals mentioned in the lists are elephant, horse, cow, dog and crow. Of these we are practically in the dark concerning the precise nature of the horse and crow cults. We are better placed with regard to the

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5 *Ibid.*

6 "Vaiśṇavism and Śaivism", *Collect Works*, IV, p. 4.

7 *Mānava Grihya Sūtra*, ii, 14.

cow and the dog cults for they form the subject of the *Kukkuravatika sutta* of the *Majjhima Nikāya*.[8] This sutta preserves for us the conversation between Puṇṇa Koḷiyaputta and Seniya Acela and the Buddha. Puṇṇa is described as a *govatika* while Seniya is a *kukkuravatika* and both of them end in becoming followers of the Buddha. Explaining the terms *govata* and *kukkuravata* Buddhaghosa in his commentary says: "*Govatikko ti samādinnagovato, sīse siṅgānaṃ ṭhapetvā naṅguṭṭhaṃ bandhitvā gāvīhi saddhiṃ tiṇāni khadanto viya carati*" and "*Kukkuravatiko ti samādinnakukkura vato sabbaṃ sunakhakiriyaṃ karoti.*"[9] In the sutta itself Seniya is described as curling on the ground like a dog and eating off the ground like a dog also. It is pointed out in this account that a man observing such a vow actually behaves like the animal even to the point of effecting a physical resemblance by using obvious aids like a pair of horns and a tail and crawling on all fours. The avowed object of such behaviour is attributed to the devotee's desire to be reborn as a god (*devo vā bhavissāmi devaññataro vā*).[10]

The elephant is one of the most celebrated animals in the literature of ancient India. His strength, majesty and wisdom and also his terrible madness are of common reference in literary texts. In these references the elephant symbolises the benevolent as well as malevolent aspects of his activity. A *mantra* in a Vedic text (*Taittīriya Āraṇyaka*, X, 1.5) is quoted to relate the worship of an elephant-faced god to great antiquity. This god was, it is argued by Getty, "worshipped exclusively by the lower classes" and for considerable time had not acquired the dignity of being a member of the Vedic pantheon.[11] This is borne out by Manu when he says "Śiva is the god of the Brāhamaṇas while *Gaṇeśa* is the god of the *Śūdras*."[12] A Pāli *Jātaka* (No. 455) refers to an elephant festival where a stone image of the elephant was worshipped. The Pāli texts, unfortunately do not enlighten us about the nature of the *hatthivata* but if the descriptions of the *govata* and the *kukkuravata* may be taken as an indication we may surmise that its nature was not dissimilar. That these *vatas* included the worship of the animal in its iconic form is clearly shown by the *Jātaka* reference.

It is clear from our Pāli references that the Buddhist texts are claiming to describe the cults as were practised then, although the possibility of some element of exaggeration or distortion in details cannot be ignored. The Buddha was opposed to these *vatas* and the Buddhist descriptions may be taken as characterised by contempt for practices contrary to the Noble Eightfold Path. In this category we may include the description of a *govatika* or

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8 *M. N.*, No. 51.
9 *Papañcasūdanī*, III, p. 100.
10 *M. N.*, I, p. 388.
11 Quoted in *Gaṇeśa*, pp. 1-2.
12 See Hopkins, *Epic Mythology*, pp. 16-18.

a *kukkuravatika* as actually behaving like the animal of his devotion *all the time.* But such exaggeration, if such be there, inspired by contempt, does not necessarily contradict the existence of animal cults like the cult of the cow, dog, elephant or horse. The animal cults were a wide-spread religious phenomenon in primitive societies and are associated with certain aspects of totemism. The cults of the horse, cow and the dog may have arisen in pastoral and agricultural communities in which the economic and functional importance of the animals must have led to the development of the cult of worshipping these animals.

Our *sutta* tell us that these vows were practised in the hope of going to heaven or being reborn among the gods. (Rev. Fr. S. Fuchs informs me that similar practices are prevalent among the Gonds and the Baigas also.) This may be related to another equally wide-spread and primitive idea in which the duty of convoying souls of the dead to the other world is often assigned to some animals. The Indian literary evidence is not very helpful on this point but it is tempting to refer to the two dogs of Yama guiding the wandering souls. The cow plays a great part in Brāhmaṇic religion and the association of the elephants with the quarters is well-known in Indian mythology. The worship of sacred mountains, likewise, is of frequent occurance in many parts of the world.[13]

Among the demonic cults mentioned in our lists the cult of Maṇibhadra and Pūrṇabhadra deserves some notice. They figure as Yakśa leaders. The term Yakkha (Yakśa) is explained as a being who carries the oblation (*balim upaharati*) and is described as worthy of worship (*pūjanīya*).[14] The most prominent Yakkhas are Vajirapāṇi, Kharaloma, Sūciloma, Kharadāṭhika and Silesaloma.[15] The Yakkhas are servants of Yama[16] who generally haunt the lonely and remote parts of the forests and the females among them are shown to be more dreadful and cruel than their male counterparts.[17] The Yakkhinis take possession of human beings, in which case the typical symptoms are of a twisting of the neck, falling to the ground, rolling eyes and a foaming mouth.[18]

Besides being servants or messengers (*dūtā*) of Yama, the Yakkhas are also in the retinue of Sakka (Śakra). Yamakoḷi, Uppala, Vajira, Vajirabāhu, Kesakanda, Kaṭattha and Disāpamukha were the seven guardians at the seven gates of the palace built by Sakka for Jotika.[19] The Jain texts inform

13 *Encyclopaedia of Religion and Ethics,* (Ed. by Hastings), VIII, pp. 866-867.
14 *Vim. Vattnu. A.*, 244, 233.
15 *D. N.* I, p. 95, *S. N.*, p. 48, *Jāt.*, I, p. 31 etc.
16 *D. N.*, III, p. 195.
17 See *Jāt.*, IV, p. 549, *D. N.*, II, p. 346 etc.
18 See Commentary on the *Dhammapada* (verse 326), Burlingame, *Buddhist Legends,* III, p. 321.
19 *Ibid.*, p. 321.

us that Yakśas gifted with virtue live in the heavenly regions, situated one above the other, shining forth like great luminaries and hoping never to descend thence. They are intent on enjoying divine pleasures and change their form at will.[20] Festivals in honour of the Yakśas are also referred to and monks and nuns are forbidden from accepting food at such festivals.[21]

The late Dr. Ananda Coomaraswamy saw similar characteristics in Yakśa worship and the *Bhakti* cult and concluded that the cult could only be properly understood within the larger context of the rise of the *Bhakti* cult in the "centuries immediately preceding the beginning of the Christian era".[22] The Yakśa and Yakśiṇi figures are well-known in early Indian sculpture and worship of the Yakśas in iconic forms also seems to have been widely practised. Like the elephant the Yakśa also has benevolent and malevolent aspects. The cult is associated with fertility, prosperity and wealth and prevention or cure of disease. Kubera is the lord of Yakśas and the god of wealth while Hāriti is a goddess who is supposed to ward off diseases of children.

About Maṇibhadra and Pūrṇabhadra we get some interesting information in the Buddhist and Jain texts. The Yakkha Maṇibhadda had his palace near the Maṇimālaka cetiya in Magadha where he met the Buddha and the stanzas recited by him form a part of a *vagga*.[23] The *Uvāsaga dasāo* describes Puṇṇabhadda and Maṇibhadda as very powerful *devas* who appear together to those who practise certain austerities.[24] They are described as brothers, obedient to Vessavaṇa. The *Mahābhārata* mentions Pūrṇabhadra as the father of Harikeśa and also as a prominent *nāga*[25] and that thousands of Yakśas wielding diverse weapons waited upon their chief Maṇibhadra in the Mandāra mountain region in Śvetagiri.[26] Maṇibhadra is described as a brother of Kubera who was married to Madanamañjarī, the daughter of Dundubhī, the king of the Yakśas.[27] A shrine of Maṇibhadra is described as being established for people to come and pray and offer various gifts in order to obtain blessings. A curious custom of imprisoning a man suspected of adultery in the inner chamber of this Yakśa temple and handed over to the King's court the next morning is also alluded to in the *Kathāsaritsāgara*.[28] The two Yakśas figure as occupants of two petals on the lotus throne of Jāmbhala.[29]

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20 *Uttarādhyāyana Sūtra*, III, 14 to 15.
21 *Acārānga Sūtra*, II, 1, 2, 3, *S.B.E.*, XXII, pp.92-93.
22 *Yakśas*, (Smithsonian Mis. Collections), pp. 27-28.
23 *Sam N.*, I, P. 208.
24 See Coomaraswamy, *op. cit.*, pp. 1011.
25 *Mbh.*, I, XXXV, 5-16.
26 *Ibid.*, XXXIX, 6-7.
27 *Kathāsaritsāgara*, XXI, Twaney, *Ocean of Story*, IX, p. 12.
28 *Ibid.*, I, P. 162.
29 Bhattacharya, *Buddhist Iconography*, p. 114.

Incidentally, Maṇimekhala who appears to be the tutelary deity of travellers and merchants has many similarities with Maṇibhadra who also acts in similar capacity. According to a *Jātaka* story (IV, P. 11) Maṇimekhalā is associated with the sea and protects men who suffer from ship-wreck when commanded to do so by the four lords of the world, Vessavaṇa, Dhataraṭṭha, Virupakkha and Viruḷha. Maṇibhadra is the brother of Kubera-Vessavaṇa and very probably Maṇimekhalā may be but another form of the same deity.

That these cults were very old and widely practised is evident from the persistance of their appearance in later Brahmanical and Buddhist religious practices. The cow cult is a part and parcel of Brāhmaṇism, the elephant cult reappears in the form of Gaṇeśa and the Yakśa cult becomes manifest in Tantric practices and beliefs. A late Tāntric text[30] contains a prayer-formula in respect of Maṇibhadra which if repeated many times results in good fortune accruing to the devotee. This is also true in the case of Pūrṇabhadra.[31] Such references indicate that these cults were more than of passing interest in the history of religious beliefs and practices in India.

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30 *Tantramahārṇava*, 638, 2.

31 It is interesting in this context to refer to an inscription on a Pawaya sculpture referring to the image of *Bhagavān* Maṇibhadra established by the guild of worshippers of that deity (*Gauṣṭhyā Maṇibhadrabhaktā*), see Banerjea, *The Development of Hindu Iconography*, p. 107. The *Mahāmāyūri* mentions that Maṇibhadra was a special object of worship in a place called Brahmavati, *Journal Asiatique*, (1915), p. 38.

ANCIENT KOSALA AND MAGADHA

By

D. D. Kosambi

The coins of The Paila Hoard (which are grouped in chronological order in another paper) belong in all probability to ancient Kosala, and to a period ending in the 5th century B. C. The ultimate problem is to identify the groups with kings whose names survive in the scanty and conflicting literary records, for the marks on the coins are heraldic, not epigraphs. No manual of heraldry is known that covers these, nor have any inscriptions been discovered for the locality and period. Most of the archaeological work has concentrated upon the Buddhist construction that covers the best-known sites, without troubling to discover what lies below. There exists no connected document which could be glorified with the title of a chronicle, annals, or history. For all these reasons, it is not only necessary to set down our hypotheses, but to outline the historical background. This sketch will be found to differ from those of books most commonly accepted as authoritative.[1] The relative chronology of our coin-groups remains independent of the historical reconstruction.

The essential features have usually been missed altogether, in the traditional manner of foreign historians when faced with the comparatively meagre, unreliable, "historical" data that can be gleaned from Indian documents. The principal characteristic of the times is a great social ferment which ended with the stabilization of a new society. The underlying historical processes

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[1] Whenever no direct reference is given (to save space), the ultimate source will be found quoted and discussed in G.P. Malalasekara's *Dictionary of Pali Names* (2 vol., London 1938); *CAI*=Cambridge Ancient History of India, vol. I, *Ancient India*, ed. E. J. Rapson, Cambridge 1922. I have generally neglected Jain sources, of which a review can be found in J.C. Jain's thesis *Life in Ancient India* (Bombay 1947). Though *CAI* gives a clear, charming and sympathetic but at the same time superficial picture of Indian society, it brings Buddha's death down to 483 B.C. whereas tradition puts it 60 years earlier and this tradition is accepted by Vincent Smith in the *Oxford History of India* (2nd. ed. S.M. Edwards, Oxford 1922). For primary sources, I have used the Pali Text Society's editions for *DN*=Dīgha-Nikāya, *MN*=Majjhima- Nikāya, *Jat*=Jātaka, *DhA*=Dhammapada Aṭṭhakathā. Citations are by sutta and story number. Jātaka translations by J. Dutoit (in German) and *DhA* by Burlingame (Harvard Oriental Series 28-30) were most useful in finding references quickly. But for analysis of Buddhist sources, I can only acknowledge my great debt to my father, who first pointed out the economic basis of *ahiṃsā* before 1912; his *Bhagavān Buddha* (in Marāṭhi, Nagpur 1940) still contains some of the best published critique of the sources, and the second chapter of the first volume gives the best discussion I know of the 16 traditional kingdoms of the Aṅguttara-Nikāya, showing that most of them had ceased to have any independent existence or political importance by the time of the Buddha. For brahmin sources, the most used is F. E. Pargiter's *DKA*="The purāṇa text of the dynasties of the Kali age"; the same author's name is used in citing his rather optimistic rationalization of very late, dubious, and not yet critically edited sources: "Ancient Indian Historical Tradition".

A refers to the Arthaśāstra, for which I usually follow T. Ganapati Śāstri's text and commentary. Asoka's edicts in Hultzsch's edition (Ep. Ind.I.) are referred to as R. for the rock-cut and P. for the pillar texts, by number.

manifest themselves in two different aspects, religious and imperial. The first led to the spread of Buddhism over the entire sub-continent ; the second also culminated with Asoka, in the Magadhan conquest of India.

1. Free Aryan Tribes.

These two aspects of the superstructure cannot be treated as curious accidents unconnected except by the chance conversion of Asoka to Buddhism. The canon compares the Buddha again and again to a *cakravartin*. The two great non-violent religions, with their basic idea of ahiṃsā, arise in UP at the same time as the beginning of Magadhan expansion. The Buddha and Mahāvīra are not only contemporaries but close in geographical situation. Their religions differ by very little—in spite of bitter theological controversies and polemics—in philosophy or in the organization of their monastic orders. Both these teachers made their own contributions as the culmination of various systems proposed by a long line of ascetic predecessors. Finally, both are *kṣatriyas* of one particular type, namely men belonging to clans that are proud of their Aryan[2] descent without following the highly brahminized vedic ritual. The clans are free oligarchies where the power vests in the general assembly of all members. This has left its mark upon the Buddhist monastic order, which is called by the same name as that for such a tribe, *saṃgha*. The initiate becomes a "son of the Sakyans", and must behave nobly. The tribe of the Licchavis, in which Mahāvīra was born, undoubtedly preserved this assembly, the *sabhā*. The constitution of the Buddhist Saṃgha clearly preserves the old tribal constitution as adapted to monastic purposes. We know that the voting was by sense of the meeting, not a counted majority ; the decisions were carried out by the elders of the various families ; the king was one of these senior oligarchs, usually elected in rotation[3] but without any of the absolute power that characterizes, in theory, the later Indian monarch. There is a great difference between the tribal oligarch *rājan* and the absolute *mahārāja*. Buddha shows his high admiration for the Licchavis again and again ; they differed from his own tribe, the Sakyans, only in their greater military strength, acknowledging no overlord, and having greater power over the surrounding population ; the Sakyans still put their hands to the plough (*Jat*, Nidāna).

The tribes could and did produce such great ascetic leaders for two main reasons. First, that they had not been penetrated by Brahminism though of

[2] I take Aryan as denoting at this period some special tribal organizations and their derivatives, linked together by affinities of language, ritual, a common aggressive mode of patriarchal life ; there is no question of racial purity, though original racial differences as well as later pride in purity of lineage must be admitted. In Pāli *ayyo* is used as synonymous for free man as against a dāsa, acquiring gradually the same value as 'mister'. J.J. Meyer in translating *A* 3·13 does not know this meaning of *Ārya-prāṇa*, "living as a free man".

[3] This would be proved by the story of Bhaddiya, Vinaya Piṭaka, Cullavagga 7.

ancient "Aryan" lineage, and secondly that the free democratic tribes were themselves breaking up. The first point is a natural consequence of the fact that the ancient vedic religion and ritual placed enormous importance upon the sacrifice which had become progressively so complicated as to require the services of professional priests, and was of use only to powerful and aggressive kings. The tribal householders performed their own simpler ritual. Brahmins as such received no respect from the Sakyans (*DN* 3). The Buddhist saṃgha is firmly against all ritual (*saṃkhārā*). The point is also proved by the low positions that later brahminical works assign to such tribesmen, namely that of mixed castes. For example, the Manusmṛti 10·22 derives the Mallas and the Licchavis[4] from mixed *kṣatriya* and *vrātya* descent, the vrātya being defined two stanzas earlier (and in 2·39) as he who had not gone through the brahminical initiation ceremony to which he was entitled—which meant that he belonged by birth to the Aryans. We know independently that the Licchavis, also called Vajjis (=*vrajins*, nomads) can be equated to these vrātyas. The Atharvaveda xv makes a desperate but unsuccessful attempt to capture the vrātya ceremonial. Finally, the Licchavis were certainly not of low birth, for a marriage alliance with them was sought by powerful kings of dubious lineage as a method of ennobling themselves. The best known case is that of the Gupta kings ; the termination—*gupta* is to be used only by vaiśyas according to orthodox rules. But the founder Candragupta I married the Licchavi princess Kumāradevī, struck coins in their joint names and with their joint images, though the Bhagavad-gītā shudders at the idea of miscegenation. The son and successor Samudragupta carefully proclaims himself son of a daughter of the Licchavis. Yet the actual royalty cannot be derived from the Licchavis, who ceased to be of any political or military importance about eight hundred years earlier. The alliance is clearly patent of nobility, for the Purāṇas in mentioning the first Guptas as local rulers in the Gangetic basin (*DKA* 53, 73) call them, along with others, 'niggards in graciousness, untruthful, very irascible, and unrighteous', though we get an entirely different picture from the great Sanskrit literature of the Gupta period at its best. This ascent however, began long before the Guptas, and at a time when the Licchavis could be dangerous enemies. Bimbisāra, king of Magadha and special friend of the Buddha, had a Licchavi girl named Cellaṇā[5] among his queens.

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[4] The reading is *nicchivi* or *nicchavi*, a known variant for Licchavi as seen from Malalasekara *sub*-Licchavi.

[5] She is taken as mother of his son, murderer, and successor Ajātaśatru, who is called Vedehīputto (*DN* 2), son of Vedehī or of the Videha princess. But Videha is not the home of the Licchavis, who were based upon Vaiśālī, the modern Basārh and Raja Bisal Kā Garh near Muzaffarpur. The Śatapatha Brāhmaṇa i. 4. 1. 17 makes both Videhas and Kosalas descendants of Videgha Māthava. Bimbisāra's chief queen is called Kosaladevī. The aṭṭhakathās explain *vedehiputta* as "son of a learned woman" which, though unconvincing, shows that the accepted Buddhist tradition makes Ajātaśatru's mother a Kosalan. Cellaṇā, whether she bore Ajātaśatru or not, would still count as his mother, along with all the other wives of king Bimbisāra, according to the older rule.

That the Malla Bandhula and his nephew Kārāyaṇa were in Pasenadi's service (*DhA.* 4. 3) though the Mallians did not acknowledge any suzerain, indicates, as surely as the fact of many such tribesmen becoming monks, that the tribal life and system no longer gave satisfaction to its ablest members. Later feudal developments are foreshadowed by the absolute monarch granting whole villages to his priests or officials. Pāyāsī, called a *rājanya* (*DN* 23) holds a village by grant of Pasenadi, not by force of his own arms nor conquest by his tribe ; of course there is no question of the consent of the villagers.

The "Aryanization" of some aboriginals like the Mātaṅgas while others of the same tribe remained as they were and sank to the status of a very low caste is demonstrable. The Mahābhārata grudgingly recognizes such wild tribes as kṣatriyas, degraded by the wrath of brahmins (Mbh. 13·35 Vulgate). In particular Mbh. 12·297 (Vulgate) mentions "The kṣatriyas called Atirathas. . . Śvapākas, Pukkasas, Niṣādas . . . Caṇḍālas" as sprung from the original four castes by intermixture. These are clearly aborigines whose survivors in developed localities retain their primitive ways and rites, hence are abhorred. For example, the Caṇḍālas, whose inclusion in the above list of fallen kṣatriyas is notable, lived in their own special villages apart from all others,[6] had their own language ; (*Jat.* 498) though brahmin girls washed out their eyes when defiled by sight of a Caṇḍāla, some of the cleverer ones could manage to secure the necessary education at a distant center like Taxila, and ultimately pass themselves off as members of a higher caste, even brahmins ! Perhaps the best case is that of the Koliyas, against whom their neighbouring Sakyans fight by methods forbidden in traditional Aryan warfare, e.g. poisoning the water, reminiscent of some American tactics against the Apaches. Yet the Koliyans claimed and received a share of the Buddha's ashes ; verses at the end of *DN* 16 identify them as the *Nāgas* of Rāmapura, clearly pre-Aryans[7] on the frontier of the developed region. Later, the Mahāvastu (355) assigns them respectable ancestors, the sage Koḷa of Benares and Sakyan mothers. Then we find Nāga kings in the south (*DKA* 49, 53) while aboriginal Nāgas still exist in the forests of Assam. This is what is meant by progressive Aryanization. It is one of several processes going on simultaneously, along with decay of the older Aryan tribes, rise of autocracies, of new religions, and greater volume of trade.

The process continues in the same marginal regions, to the present day in a different guise, namely a primitive aspect of the class struggle. The

[6] The Caṇḍalās and heretical ascetics are to dwell beyond the cemetery and burning grounds, outside a city, according to *A* 2·4. The low status of Caṇḍāla and the often synonymous *śvapāka* seems to derive from their eating dogs, which to the Iranian branch of the Aryans at least would make them as unclean as cannibals.

[7] Mahāvagga 1·63 shows that Nāgas could not join the order, and this exclusion has left its mark on the Buddhist initiation ceremony in the form of a question, "are you a human being ?", meaning thereby that the novice should not be a *nāga*.

Census Of India, 1921, vol. V, pt. 1 p. 347-8 gives lists of castes that were then trying to advance themselves groupwise in the social scale, while those already so advanced denied their claims. Many of the 'castes' in the list are occupational, developed from tribes ; remnants of tribal assemblies appear now as caste *sabhās* (p. 346). But registration as a higher caste by the census has an *economic basis* which does not appear there, being more clearly seen in the standard method : the hiring of brahmin priests by the 'caste' or by a section thereof as soon as a certain amount of money has been acquired. This generally means revision of ritual, often rewriting of the tradition by assimilation to some legend in the purāṇas or Mahābhārata, and changes in dress. The Census volume (chap. xi) has discussed (without realizing the implications !) Europeans, Anglo-Indians, Christians also under caste (p. 368), showing a parallel process : individuals of the latter two trying to upgrade themselves by one stage, just as in the USA individuals having a negro ancestor try very often to conceal the fact if physiognomy permits. This is clearly a *class* phenomenon, for social and ultimately economic advantage, not one of what is strictly speaking immutable caste. Hence it is obvious that the origins of caste also lie, at a more primitive level, in the means and relations of production; that the institution survives only as long as it is not incompatible with the form of property. There is no question but that the 'higher' castes were and are, on the whole, economically better off ; where they are not, or have not greater opportunity, we find an absence of caste tension while no attempts are made at 'passing over'. Similarly for the 'Aryanization' in the early period, which was obviously due to the superiority of 'Aryans' in war and in the struggle against nature ; this meant that not only their tools and weapons, but also their forms of property, ritual, social institutions, and (more slowly) the language (cf *Census* p. 296) were adopted ; it seems clear that the brahmin caste played a very similar role in this older process also.

2. Absolute Monarchs.

The most powerful king of Buddha's day was Pasenadi, king of Kosala whose capital at Sāvatthi (skt. *śrāvastī*) is now represented by the ruins of the double village Saheth-Maheth on the frontier of Bahraich and Gonda districts. This king also desired a marriage alliance with a tribe, the Sakyans. The reason given is his veneration for the most famous Sakyan, the Buddha. But actually, the respect the Sakyans enjoyed apart from their connection with the Buddha was the main cause. The demand for a maiden who would be Pasenadi's chief queen was, surprisingly enough at first sight, highly embarrassing to the Sakyans. Two different views are reported of them on this occasion : "We live under the suzerainty of the king of Kosala. If we do not give him one of our daughters, great enmity will arise thereby ; but if we do give him one, the traditions of our clan will be destroyed thereby. What is to be done?" (*Jat* 465). "The king is an enemy of ours. Therefore, if we refuse

to give him what he demands, he will destroy us. Moreover, he is not of equal birth with ourselves. What is to be done?" (*DHA*. 4·3).

Both of these are substantially correct. Pasenadi's suzerainty over the Sakyans is elsewhere attested (*DN* 27). The low birth of Pasenadi is confirmed by his marrying Mallikā, flower vendor and daughter of a flower-gardener. (*Jat* 415) who became his chief queen. The Lalita Vistara 3, in reviewing objections to all the royal families in which the Buddha could have taken birth reports *kauśalakulaṃ mātaṅgacyuty-upapannaṃ, na mātṛ-pitṛ-śuddhaṃ hīnādhimuktikaṃ na kuloditam* . . . The interesting phrase is mātaṅga-cyuty-upapannam, descended from the Mātaṅgas. The word, according to Chinese and Tibetan translators, means a low and savage tribe, apparently our present Māṅga ; mātaṅga can also mean an elephant, (like *nāga*, which again means cobra, noble, and demon), presumably a totem. But that Pasenadi was low-born is clear. The Sakyan solution of the problem itself proves this. They cheat him by offering the beautiful Vāsabha-Khattiyā, daughter of Mahānāma Śākya, by a slave woman Nāgamuṇḍā ; the mother's name combines the names of two well-known savage tribes. Pasenadi is deceived successfully about the girl's birth, and makes her his chief queen for a while. The insult is later discovered but forgiven by Pasenadi on the Buddha's intercession. The son of the union, however, succeeds in wiping out the Sakyans as a measure of revenge.

The royal houses of Kosala and Magadha had intermarried. Bimbisāra and Pasenadi had each taken the other's sister in marriage ; after a certain amount of fighting with his own nephew, Pasenadi cemented the truce by giving his daughter Vajirā to Ajātaśatru. Incidentally, this extremely close relationship would not be admissible under current brahminical rules. It follows that both royal houses were on the same low level of descent. The purāṇas call these Magadhan kings *kṣatrabandhavaḥ* (*DKA* 22) ; the malevolence and spite of the termination *-bandhu* is brought out by the Chāndogya Upaniṣad 5. 3. 5, where a discomfited brahmin calls the more learned kṣatriya *rājanyabandhu*. For that matter, Magadhan brahmins who took part in vrātya rituals and were otherwise lax are called *brahmabandhu*. Now Prasenajit is assigned high lineage by just one source, among the Ikṣvākus in the Purāṇas (*DKA* 11) ; this can only be by confusion with another Prasenajit of Kosala before the Kali age (Pargiter 145, 150). The purāṇa list is obviously garbled in its attempts to report all Ikṣvākus, whence just before Prasenajit we find Śākya, Śuddhodana, Siddhārtha, Rāhula. The reason is that the Sakyans claimed descent from Ikṣvāku as did the older and perhaps mythical Prasenajit. The purāṇic list ends with Sumitra, the last of the Ikṣvākus according to an ancient traditional śloka (*DKA* 12)—in spite of the much later southern Ikṣvākus (*DKA* 49). But this Sumitra, in the more accurate Buddhist records, was the last king of Videha, with capital at Mithilā (Lalita Vistara 3), and

had no successor, the line having ended with him. Pasenadi never claims to be an Ikṣvāku like the Buddha, but only a kṣatriya and a Kosalan like him as well as of the same age (*MN* 89).

The point is of considerable importance, for the genealogy shows that the kings were of a type foreign to the previous traditional ruler, the elective or hereditary tribal king who was accompanied in battle by all the able-bodied men of the tribe. There the king had to be a member of the tribe, whether by birth or adoption, and his powers were limited by the assembly. His army was the armed tribe as a whole. But such are not the kings of Magadha or Kosala as we see them. The Kosalans no longer function as a tribe, if indeed a Kosala tribe still existed at the time. The king rules over subjects, the vast majority of whom do not belong to his tribe, nor perhaps to any tribe at all. The Magadhans were also a tribe, but the same is true of the Magadhan kings from Bimbisāra ; Magadhan later means trader (Manusmṛti 10·47), so that either the first traders in the region where the Manusmṛti was written came from Magadha, or the remnants of the tribe had developed into a guild ; the two are not mutually exclusive. The Arthaśāstra Magadhan appears both as bard (*A* 3·6, 7; 5·7; 10·3) and a mixed caste. Malla survives only in the meaning of wrestler, like Pehlawān in Persian. One main reason for this collapse of old institutions was the development of private as against tribal property, following conquest over aboriginal populations and the development of the tribe into an oligarchy. The process was not confined to the Kosala and Magadha tribes. Thus we find the Sakyans and certainly the Licchavis in the oligarchic stage, living by the labour of others. The Licchavis are not only individually rich, but collect tolls, have spread into Videha and Kosala where, with the Mallas, they made a confederacy of 18 clans which was the strongest power to oppose the kingdom of Magadha. Their expansion is not pioneering[8] in a virgin wilderness but conquest of settled territory which had its own rulers before them. Keeping the Licchavi tribe pure and exclusive meant conquest and exploitation, the development of a tribal democracy into a tribal oligarchy. It therefore meant slackening of tribal bonds. Both would naturally lead the more sensitive members like the Buddha and Mahāvīra to turn to the contemplative life. It was by completing this decline and dissolution of the tribal constitution through his intriguing minister Vassakāra that Ajātaśatru succeeded in conquering the Licchavis. The intrigue is supposed to have taken only three years, but the decay must have begun much earlier, to be accelerated by the gain in personal wealth among the Licchavis. Viewed on a larger scale, this was the inevitable consummation of Aryan conquest, of the development of helotage as the śūdra caste, exploited

[8] The word *nigama*, sometimes translated as 'suburb', seems rather to mean tribal settlement in a new territory, an act of pioneering perhaps in the ancient Greek or Roman sense of 'colony'. The Sakyan *nigama* where Pasenadi is supposed to have had his last meeting with the Buddha was at a distance of three *yojanas* from the nearest city, so that the meaning of suburb cannot apply here.

by an armed body of warriors which had become the kṣatriya caste and begun to exploit other Aryans too, starting with the vaiśyas.

There are two concomitants of this new monarchical system. The internal is characterized by a standing army and permanent officials without tribal bonds, owing allegiance to the king alone ; and of course the kings being of uncertain birth, neither supported nor controlled by tribal custom, show a remarkable tendency to usurpation. The external development is conquest, in particular the great efforts made to suppress what was left of the free tribes.

The king has now a special office, that of army commander *senāpati*. Bimbisāra is called *seṇiya*[9] in Jain records and offers command of his army to the Buddha. Pasenadi has the Malla Bandhula as minister and perhaps army commander. Pasenadi's son Viḍūḍabha had the title *senāpati* in his father's lifetime. Pasenadi had Bandhula killed by treachery, suspecting him of ambition beyond his station. The fear was not unjustified because later Viḍūḍabha usurped the throne, being invested with the regalia by Bandhula's nephew, the minister Dīgha-kārāyaṇa ('long' Kārāyaṇa; possibly the Dīrgha Cārāyaṇa of *A* 5·4), when Pasenadi had gone on a final visit to the Buddha (*MN* 89 *aṭṭh*, *DhA* 4·3, *Jat.* 465). Pasenadi himself had been crowned just after completing his studies by his own father (*DhA* 4·3) king Mahākosala. Bimbisāra was placed upon the throne at the age of fifteen by his father (*Mahāvamso* 2. 28). But abdication did not save Bimbisāra, who was imprisoned and finally murdered by his son Ajātaśatru. The pattern is thus well-established. The state as a mechanism of violence unconnected with and therefore hostile to tribal power has come into being, and its control could be acquired by violence. Purity of descent or legitimacy are of minor importance. One of Bimbisāra's queens was the beautiful courtezan Padumāvati miraculously brought from Avanti to be the *nagarasobhinī* of Rājagṛha. Mahāpadma Nanda, the last great king before the Mauryans, is reported to have been the son of king Nandin by a śūdra woman (*DKA* 25).

3. Conflict with the samghas.

One remarkable external consequence of this new state is the extermination of free *saṃgha* organizations. The purāṇas are impressed by Mahāpadma's complete annihilation of all kṣatriyas, like a second Paraśurāma (*DKA* 25); but the context makes it quite clear that he destroyed only those kṣatriyas who lived in tribal units. The names are given : Ikṣvākus, Pañcālas, Kāśeyas, Haihayas, Kaliṅgas, Aśmakas, Kuravas, Mithilas, Śūrasenas, Vītihotras. Of these, the royal Ikṣvākus were already extinct, as also the kings

[9] The *śreṇi* in *A* 7·11 and elsewhere seems to mean an association of settlers, who also bore arms; and could be dangerous if provoked beyond endurance, Thus *seniya* may mean leader of a śreṇi; other seniyas are known, such as the naked ascetic of *MN* 57, who lived like a dog.

of Mithilā. A Kuru king is mentioned in the Raṭṭhapāla sutta (*MN* 82; Kuru territory in *DhA* 2.1.4-5), but again the context shows that we have to do with a petty tribal king. The tradition seems to connect an extermination of *tribal* kṣatriyas with the ending of certain ancient tribal king-lists. Mahāpadma's action is founded upon good precedent, and the whole process emphatically set out for Indian kings by the *Arthaśāstra*, book XI, (sections 160-161), which is dedicated to handling *saṃghas*. "The acquisition of a *saṃgha* is better than that of an army (*daṇḍa*) or an ally. Saṃghas are invincible by others because of their unity (or organization *saṃhatatvāt*.) Those favourably disposed should be conciliated by gifts; those opposed, destroyed by sowing dissension. In Kamboja, Surāṣṭra the kṣatriya groups live by husbandry and weapons. The Licchavis, Vrajikas, Mallakas, Kukuras, Kurus, Pañcālas and the like live only by title of kings." The book goes on to give details of the political technique whereby the *saṃgha* organization may be weakened. The importance of this section seems to have been missed by our historians. It shows first of all the existence—whether actual or traditional at the time of writing does not matter—of certain saṃghas, whose names we have met elsewhere. It also states explicitly (I follow the text and commentary of T. Gaṇapati Śāstri, not R. Shamasastry's translation) that such saṃghas were generally too strong to be destroyed by military action. This is fairly well confirmed by Alexander's campaign in the Punjab, where the stiffest opposition came from such tribal organizations; the Pūrus still existed, for king Pōros had a nephew also called Pōros, whence both should be Pauravas in the old tradition whereby the king is called by the tribal name. We also hear of the Malloi, identified with the later Mālava though the lack of the extra syllable should make them a branch of the Mallas; and the Oxydrakai, presumably *kṣudrakas*. The Arthaśāstra does not overestimate the formidable power of such *saṃghas* in resisting direct assault. So a technique of promoting internal discord is carefully set out, being exactly the same as that practised by Ajātaśatru and his minister Vassakāra[10] against the Licchavis. Ajātaśatru completed his conquest by force of arms. The Licchavis survived for nearly a thousand years thereafter, down to the Gupta period but *not as a saṃgha* with independent military power, obeying none but their own assembly. Again this is not an isolated example. Viḍūḍabha attacks the Sakyans, without first sowing discord, supposedly to wipe out the insult of his own birth. But though the action is represented as a revengeful massacre, Sakyans did survive (*DhA* 4.3); kings from places as distant as Ceylon are said to have married Sakyan brides (*CAI* 607). Clearly, they did not survive as a self-governing tribe; the Kosalan king, though their nominal overlord, must have feared their tribal existence and semi-independence. The parallel here is a bit too close, for the Jain sources have Ajātaśatru's grandfather, the Lic-

[10] I have shown in the *ABORI* 37, 1952, pp. 53-60 that the Sanskritization of the name as Varṣakāra cannot be correct. One should take it as *vaśyakāra*, he who wins over, a nickname after his great feat.

chavi (Haihaya) Ceḍaga, drowning himself as does Viḍūḍabha's grandfather Mahānāma. Thus the kings ruined by direct attack those tribes whose institutions still retained a dangerous measure of democracy combined with military power. This put the finishing touches upon the process of decay and dissolution which we have already pointed out as affecting all tribes of the sort in U.P. at least.

4. Conflict between kingdoms.

Aggression did not stop with destruction of the tribes, but extended also to other kingdoms. Aṅgā had already been absorbed by its western neighbour Magadha, apparently at the time of Bimbisāra. Kāśī fell to Kosala some generations before the Buddha, for the name is joint, Kāsī-Kosala, as is Aṅgā-Magadhā. There are many scattered references to fighting between Kāsī and Kosala long before Pasenadi (*Jat* 51, 100, 156, 336, 355, 428, 371, 532). The really interesting conflict, however, is the struggle between Kosala and Magadha, which was inevitable, granted the tendency of the times to powerful, central, absolute monarchies. Kosala is by far the greater kingdom, extending from the lower Nepal to the Ganges. But, as we shall see, Magadha is in many ways strategically better placed. During Pasenadi's lifetime, the conflict is inconclusive (*Jat* 239, 283, 492; *DhA* 15.3), victories being reported on both sides, with a marriage alliance at the end. The cause is a village near Kāsī, part of Ajātaśatru's mother's dowry, which Pasenadi wished to rescind. The fact that Magadha conquered ultimately is uncontested, for before the time of the Mauryans, Kosala is already part of the Magadhan empire. For the Paila hoard of punch—marked coins, it is of the utmost importance to determine just when Kosala faded out as an independent kingdom. This could not have been later than Mahāpadma Nanda, and I suggest that it was far earlier, either at the time of Ajātaśatru or immediately after. In the first place, we hear of no ruler of Kosala after Viḍūḍabha. The centre of gravity shifted to Magadha, where the first council after the Buddha's death is held at Rājagṛha; but Kosala was more important during the Buddha's lifetime. The Buddha himself spent at Sāvatthi, no less than 25 "rains" during the period of his ministry, far more than those spent in all other residences put together; 871 suttas of the four Nikāyas are supposed to be pronounced at Sāvatthi. There were many converts at Sāvatthi; the most famous lay follower being the trader Anāthapiṇḍika (Sudatta), whose gift of the Jetavana (purchased at a fantastically high price : a very rare case of land being bought outright for cash) is one of the great themes of Buddhist art. King Pasenadi was also a patron, though preoccupied. Viḍūḍabha's massacre of the Sakyans did not mean persecution of the *saṃgha*, any more than Ajātaśatru's killing Bimbisāra and smashing the Licchavis prevent the Jains claiming him as one of themselves. Thus the shift to Magadha was part of a general trend, not confined to Buddhism. Finally, Ajātaśatru had a claim upon the Kosalan throne which

could not have been pressed long after him: he was nephew as well as son-in-law of Pasenadi. It was to him that the aged Pasenadi, abandoned by all except a servant woman, fled for help against Viḍūḍabha, only to die outside the walls of Rājagṛha; Ajātaśatru performed the obsequies. His ministers are supposed to have dissuaded him from attacking Viḍūḍabha, but the principal reason for abstinence is undoubtedly the Licchavi-Malla campaign. Without a secure rear, an attack against Kosala was unthinkable. On the other hand, Viḍūḍabha was engaged at the same time in crushing the Sakyans, so that he could not have attacked Magadha; soon after the Sakyan massacre, he was swept away with a great portion of his army, by a sudden freshet (*DhA* 4.3), the camp having been pitched in the dry bed of the river Rāptī (Aciravatī). Thus towards the end of Ajātaśatru's reign Kosala had neither king nor much of an army; that we hear of no successor to Viḍūḍabha is therefore peculiarly significant. In view of the 'legal' title, there would be no opposition to any Magadhan attempt upon the throne of Kosala.

The purāṇas (*DKA* 21) state that Śiśunāga, supposed founder of the dynasty to which Bimbisāra and Ajātaśatru belonged, defeated the Pradyotas, ruled in Girivraja (older Rājagṛha), establishing his son as ruler in Kāśī. This is impossible without a conquest of Kosala, which certainly could not have taken place four generations before Ajātaśatru. As a matter of fact the Pradyotas rule Avanti, supposedly with capital at Ujjain. This is much too far for any real fighting with Magadha at so early a priod. We have two stories of conflict with the Pradyotas, the first being with the Vatsa or Vaṃsa prince Udena (skt. *Udayana*), king of Kosambī (skt. *Kauśāmbī*). This ends with an elopement of Udena with the Pradyota King's daughter Vāsuladattā (*DhA* 2. 1. 4), after the Pradyota had taken him prisoner. But that queen then drops out of the stories which concern an Udena who was contemporary of the Buddha, being husband of the beautiful and proud brahmin girl Māgandiyā (*DhA* 2.1.5) first offered by her father to, and rejected by, the Buddha. This story has a historical appearance, for the gotra is found in brahmin lists as Magaṇḍa or Māgaṇḍa (but not the Mākandika of the *Divyāvadāna*); the queen did her best to avenge the insult offered by the great Sakyan. Therefore, the other Udena romance must (if historical) be of some king not the contemporary of the Buddha. My work on the Taxila hoard shows the possibility of some Buddhist records being correct; they mention a Susunāga (Mahāvaṃso 4.5-6), fifth after Ajātaśatru, who was placed upon the throne by the people. This would be the proper time for an invasion by and repulse of the Pradyotas, and the line of Magadhan kings would *end* as Śaiśunāgas. The Upaniṣads (Bṛ. Up. 2.1; Kauṣ. Up. 4.1) mention an Ajātaśatru, king of Kāśī, and it is quite possible that towards the end of his reign our Ajātaśatru did acquire Kāśī, perhaps the whole of Kosala, just as he had retained his claim to the village in the Kāśī territory by fighting with Pasenadi. Ajāta-

śatru cannot be contemporary of Janaka; *CAI* 122 misunderstands the king's wish to emulate the already legendary Janaka.

The Mallas were not under Pasenadi. They exercised, as did the Licchavis, powers of life and death over all in their territory, though otherwise such powers were the prerogative of a *mahārājā*, not of lesser oligarchs like the Sakyans. A Malla-Licchavi confederacy, as reported by Jain sources (*Jain* 382) is highly plausible (though the Licchavis having an absolute chief at Vesālī who was a Haihaya, is not). But many of the 18 confederate clans belong to Kāsī-Kosalan territory, which means the absence of any real monarchy in Kosala. In destroying the federated tribes, Ajātaśatru must also have invaded what had been Kosalan territory or at least sphere of influence.

We hear of Ajātaśatru fortifying Rājagṛha a few years after the Buddha's death (*MN* 108) against an expected invasion by the Pradyota king, though such an attack would have been quite difficult; we hear nothing more about the actual fighting, if any took place. The fortifications however exist, being in all probability the cyclopean walls of Rājgīr. There is nothing against Ajātaśatru having turned his attention westwards after settling the Licchavi problem; this would make it still more likely that Kosala was annexed to Magadha either by him or by his immediate successor.

5. Economic Basis of Contemporary Religion and State.

What was the mainspring of this expansion ? What is the change in society that brings to the surface two great and similar religions, not to speak of similar parallel sects, such as the Ājīvakas ? The answer seems to be fairly simple : the increase of population and of trade. The very style of Pāli texts is vastly different from those of the brahmins. The unmistakable character of brahmin writing is not its insipidity but its rustic stamp, though brahminism is characterized by its extreme, facile adaptability in practice combined with rigid and apparently immutable theory, which leads to a blinking of the facts, to a neglect of reality paralleled only by other priest-ridden societies and literatures. The real brahmin of the Gṛhya-sutras is firmly based upon the village, despising and avoiding the town (*CAI* 237); the theory goes with him unchanged even when he has moved over to the town and forgotten the very appearance of the tutorial grove or forest; when he has learned to indulge in and profit by almost any trade. But in the early Buddhist literature the prominent class of lay followers is that of the traders and 'treasurers', people who bought and sold; also of those who followed the professions for a living. In addition, people of any caste could change their means of livelihood at will (*CAI* 203-4), in strong contrast to the smṛtis. Buddhism and Jainism preach *ahiṃsā* successfully because it was an *economic* necessity. The killing of animals in *yajña* sacrifice had become an intolerable

burden upon the subjects whose cattle were taken away without compensation; the fruits of the *yajña* were success in battle, and the constant warfare implied thereby meant heavy losses to the traders, and general distress. The whole basis had to be denied, and non-killing, which is what *ahiṃsā* means literally, cuts at the roots of both sacrifice and war.

Primitive religion differs from civilized religion in one main respect, no matter how much of the ritual is carried over. The earlier type concentrates upon the cult and its ritual alone; the correct performance of certain rites bring certain fruit. In the commoner cases, this yield is to be seen in the present world, in the way of better crops, avoidance of disease and of the deadly spirits that might cause it; perhaps success in ventures. But a very important portion deals with the problem of continuity, of what happens to a person after death. Something of the individual is supposed to survive, though it might be in changed form and of impalpable substance as in the dream world. Here comes the essential difference between the two types of religion: the later substitutes, to a considerable extent, good deeds and the good life for correct ritual. The change is due to the existence of a form of society far more heterogeneous than the original simple tribe-community. It is a discovery of the first magnitude that religion can be used to ease the difficulties of early society, to make the common life of diverse elements of society easier.

The Buddhist sermons make clear the duties of a householder ; its prime virtues such as truthfulness are social virtues. There is no Buddhist ritual whatever. The basic theory of transmigration may have been totemic in origin, the dead man reverting to the original totem animal that had first been the food of the tribe, hence its very substance ; and ultimately become taboo (another basis for *ahiṃsā*) except in ritual feasts by one of those dialectic inversions that mark crucial changes in society. But observe that a man's action, *karma* weighs his soul, and automatically fits him for the body he will occupy in his next birth. Buddhism claims to point the way to the negation of this otherwise unending cycle of rebirth, but the action of Karma is a trade, barter, or wage-payment transaction. It differs as greatly as possible from the earlier ritualistic conception of an after-life, and from the later developments which substitute a short cut by means of *bhakti*, faith in a personal god. Ritual is a matter of individual choice for the layman, and often there are polemics against ritual as well as against brahminical pretensions (*Jat* 545). Finally, the new proponent of the religion bases himself upon the goodwill of society, living only by its alms ; he does not support the king in sacrifice nor does he receive whole villages in fee as does the brahmin priest. In its initial stages, therefore, Buddhism succeeds because the *karma* doctrine, the social rules deduced from it, and the much cheaper mode of life of the almsman all appeal, economically as well as philosophically,

to *the society in which trade had gained a new importance*, and which consists of many diverse types of tribal or local units in close contact.

Exactly the same needs demand an absolute universal monarchy, the tyranny of one rather than the tyranny of many ; along with this, freedom from robbers that infested the great forest which still covered much of the land between settlements, freedom from irregular and excessive tolls charged by petty rulers or tribal oligarchs, and the opening of new trade routes. This can be proved very easily ; at the same time it will be seen that Magadha had to be the center of the new kingdom, whether it conquered the others or was conquered by one of the others.

The first land clearing in this region ran along the Himālayan foothills, as beginning of the transition from pastoralism to agriculture. The course of development is quite clear. The Gangetic plain is alluvial, and in its original state, must have been densely forested, swampy in many places, and certainly devoid of heavy settlement till the age of metals, specifically the age of iron, had set in. This is one of the reasons for dismissing Pargiter's theory of ancient Indian historical development, outward from the Gangetic plain. The Nile, the Mesopotamian rivers, and the Indus permitted the first urban civilizations to develop because of the surrounding desert. Heavy land clearing was unnecessary. Along the Danube, the loess corridor allowed neolithic man and his successors to farm without fighting heavy forest. The rainfall and warm climate of the Gangetic valley would make riparian settlements impossible for neolithic man. Even at the time of the Buddha all movement ceased during the rains, which shows that the roads were mere cart tracks, rivers crossed by ferry or ford, and the land mostly jungle dotted with settlements. Under present conditions, the summer with its heat and dusty winds would be a far worse season for the wandering almsman in U. P. than the monsoon. When Pasenadi began a campaign during the rains (*Jat.* 176, 226) he not only lost to the borderland rebels, but also scandalized the Buddha by this infraction of what had become a scriptural rule. Alexander's success against Pōros seems in part due to this sacrilege.[11] The first river settlements, presumably at Allahabad (*prayāga*), perhaps also Benares (*kāśī*) and the like must almost certainly have been founded by refugees from the Punjab, driven eastwards by the Aryan invaders ; undoubtedly, their enemies must have followed in their wake. When Hāstinapura was destroyed by flood, Nicakṣu shifted his capital to Kosambī (*DKA* 4-5). But the major early settlements all lie along the northern foothills. The process of development is set forth in the Śatapatha Brāhmaṇa i. 4. 1. 14 ff; the land was burned over, swampy places dried up, and cultivation could then

[11] However, *A* 9·1 seems to imply the possibility of a campaign in the rains, so that the old rules, were abandoned in practice, by the time of the Mauryans, perhaps following the Greek example, or because the increasingly great distances made it necessary.

begin. The extreme limit of this went as far as Vidiśa. The trade route then swung down to Patna, and across the river to Rājgir. This is the route from Sāvatthi to Rājagṛha followed by traders like Anāthapiṇḍika, and which the Buddha had begun to traverse in the opposite direction from Rājagṛha when death overtook him near the Malla settlement at Kusinārā. The road would not be difficult to trace, as it passed through Vesālī, Setavyā, Kapilavastu, Kusinārā, Pāvā, Bhoganagara. Another went from Sāvatthi south to Sāketa and Kosambī, thence presumably to the Avanti kingdom. Both of these are good targets for systematic archaeology. The unit distance is the yojana, approximately nine miles (though the Arthaśāstra yojana was about 5 miles), the distance after which carts were outspanned. On special roads, there seem to have been royal stages for horse-chariots, the *rathavinīta* from which *MN* 24 derives its name, and which must have been about the same as the yojana, for six yojanas separated Sāvatthī from Sāketa, while king Pasenadi completed his journey between those two capitals in the seventh stage. The stages and outspanning places should be traceable even now. The western route from Sāvatthī led to Takkasilā 147 yojanas away, and presumably allowed trade with the Delhi-Mathurā region on the way. Taxila was a great center of learning, as is seen from the tradition that Pasenadi, the Malla Bandhula who was later his minister, and the Licchavi Mahāli who afterwards took service with Bimbisāra had studied there together in their youth (*Dhp.* 4·3). The much earlier Kosalan prince Chatta fled to Taxilā after Brahmadatta of Benares stormed Sāvatthī and took his father captive ; he studied the three vedas there, and returned to find buried treasure by aid of which he recovered his kingdom (*Jat.* 336). Brahmin tradition supports this, for eastern brahmins travel regularly to the distant northwest to learn their main business, the fire-sacrifice (Bṛ. Up. 3. 4. 1, 3.7.1). The punch-marked coins found in great profusion at Taxilā belong to Magadhan kings for the greater part, even before the Mauryans.

Rājagṛha is an exception to this, being on the opposite bank of the river, though still in the foothills, this time of the Vindhyas. I suggest that its original importance derived from the minerals ; in particular iron, which is found as easily smelted surface deposits in Dharwar outcrops, of which the hills about Rājgir consist. More would be available by trade from Choṭā Nāgpūr, where there still exist iron-working aboriginal tribes. From the Nepal hills, copper would be the likelier metal, but even this is more easily available in Bihar. No metal is to be found naturally in the immensely fertile alluvial portion of the Gangetic plain, the portion which is the most densely settled today and which had to be cleared with the greatest labour—labour which would have been impossible without iron. But given iron tools, the rapid opening up of U.P. proper was inevitable. According to J. A. Dunn, Memoirs of the Geological Survey of India, LXIX, part 1,1937 (reference by courtesy of Prof. K. V. Kelkar), Singhbhum district has very

ancient workings of copper mines (p. 54-5), though the date is uncertain; the working technique was most efficient. At the time under discussion, the great demand and logical outlet for metals would be towards the fertile but heavily forested plain of the Ganges, with its great and increasing population. Of course, India's greatest deposits of iron as well as of copper occur in Singhbhum and Dhalbhum. *The location of Rajgir is due also to its straddling this trade-route for metals*, north-west to the U.P. The distance from the richest sources of ore is less than two hundred miles; Gaya is nearer, but would be more difficult to settle without cheap metal tools, whereas the hills about Rajgir make for less dense forest. The later port for this region was Tamluk, and place names beginning with *tāma* mark ancient though later forgotten sites of copper deposits. The absence of pumps seems to have stopped mining at water level, and may have been one of the causes of later Magadhan decline.

With heavier trade which would follow the rapidly increasing population near the river, the Ganges becomes the easiest major route for mass transport, as compared to the old, slow, expensive, and unsafe, land routes. Thus Kosalan expansion towards Kāsī is the natural search for a port, an outlet. Rājagṛha was similarly attracted towards Patna, which inevitably became the major trade center, the greatest port, and so the capital. The last step, of shifting the capital, was taken by king Udāyi (*DKA* 22), son according to Buddhist (*DN* 2) and grandson by purāṇic sources of king Ajātaśatru. But we are very fortunately placed in being able to discover the first steps also. These were taken during Ajātaśatru's reign by the ubiquitous mahāmātya Vassakāra, in building a fortress at Patna. The place was already a depot where parcels of merchandise were opened for barter (*puṭabhedanam*). But the Licchavis and Ajātaśatru both levied toll upon the traders, who were ruined thereby; the Licchavi tolls seem to have been more irregular, and less justified, or at least with less protection attached thereto. So in the last year of the Buddha's life, we hear (*DN* 16 and *aṭṭhakathās*) that the stockade built by the traders was being magnified, and the city properly founded as a base of operations against the Licchavis. The most profitable trade then was that down the Himalayan watershed, and consisted to a great extent of perfumes and cosmetics, which are of the utmost importance in a hot climate where bathing is a necessity, refrigerants a discovery for the future. Of course, it is clear that a strongly fortified city at Patna would reduce the importance of Benares as a great port, and would at the same time enable a blockade of the great river to be set up. That is undoubtedly the reason why Ajātaśatru refused to give up his foothold in the Kāsī territory, though as usual only personal motives are alleged for such economically necessary actions.

Trade is primarily by caravans sent by the leading merchant of one center to that of another distant center, and the caravans bring back local

goods in exchange (*Jat.* 90). Nevertheless, the new society needs and uses coinage, which cannot be older in India than the 7th century B.C.; that is about the period at which it appears elsewhere in the world. In Buddhist works, in any case, the *kahāpaṇa* (skt. *kārṣāpaṇa*), meaning thereby the silver coin at the earlier stages and probably a bronze coin by the time of the commentators, is standard measure of value. Commodity production as a whole is still at a very low level, but certain luxuries (such as fine cloth from Benares) and certain necessities like salt meant trade over a long range. Had metals been more plentiful, and commodity production at a higher level, chattel slavery would have been far more general. But we find the chattel slave rare, usually some sort of an accomplished servant, and all slaves are treated better than the paid servants (*DhA* 5.1 gloss). The Arthaśāstra forbids the sale even of a śūdra living as a free man (*āryaprāṇa*), and the śūdra was the great source of expropriable labour. Even brahminical works insist upon avoidance of the bride-price (Manusmṛti 3.51), for it might seem purchase of the woman, thus degrading her to the status of a slave. I suggest that the absence of slavery and the ultimate victory of brahminism are both connected with the low density of commodity production, which made trade in human beings unnecessary, and country life as easy as that in the cities.

6. Chronological Possibilities

While the outline seems simple enough, its details are not, and it is necessary to point out the virtual impossibility of constructing a detailed chronology from conflicting sources. As far as kings are concerned, there is no need to prove the statement, which will be found true by anyone who takes the trouble of comparing our records. But even for uncontested Buddhist sources, the dates are not only doubtful but the time sequence is often impossible. Look, for example, at the story of Pasenadi, Viḍūḍabha and Ajātaśatru. The last is supposed to have become king eight years before the death of the Buddha. Pasenadi, being of the same age as the Teacher, must then have been in his 72nd year. After that he fights several battles with Ajātaśatru; during flights from one of which he sees the sixteen year old Mallikā and makes her his chief queen forthwith. But she seems to have alternated with Vāsabha-khattiyā as chief queen, and survived Pasenadi according to the Aṅguttara-nikāya. Viḍūḍabha visits the Sakyans during his father's lifetime, being himself then sixteen years old, overhears a servant woman talk of him as "that slave-girl's son", learns of the deceit, and vows to wash his throne with Sakyan blood. This vow he fulfills at the very earliest opportunity. But the usurpation takes place in Pasenadi's (and the Buddha's) 80th year. After that, Viḍūḍabha makes three attempts (which I should take as three separate annual campaigns) upon the Sakyans, turning away each time because of the Buddha's quiet intercession. The fourth time, the Buddha recalls that the evil *karma* of the Sakyans in poisoning

the river against their Koliyan neighbours has come to fruition like a maturing debt, and must be paid, so does not intervene. But the Buddha himself died in his eightieth year, while travelling slowly on foot from Rājagṛha on the great trade route. He did not get as far north as Kapilavastu, dying at Kusinārā on the way. Moreover, he passed the rains near the Licchavi headquarters, which would give no time for a meeting with Pasenadi, and makes the triple saving of the Sakyans a pure miracle. Even the commentators are not clear about Buddha's meeting with Sāriputta in the Mahāparinibbāṇa-sutta, for Sāriputta was supposed to have died before this period. Some of these details may undoubtedly be clarified by discarding the miraculous and fabulous element—not always simple with Buddhist or any other ancient Indian works—but it seems to me that the precise chronology we need cannot be worked out by these methods.

7. Megasthenese and the Arthasastra

The account of[12] Megasthenes, properly evaluated, enables us to date the highest development of one particular and hitherto unrecognized form of production in India.

Seven distinct classes (*meros*, Diodorus and Strabo; *genea*, Arrian) of people are reported which amount to castes, seeing that custom and law forbid intermarriage, change of profession, or transition between groups. That Megasthenes actually said this is not to be doubted, from the accord among the quotations (Diodorus 2.40-41 = *M* 38-41; Strabo 15.1.39-48 = *M* 83-86; Arrian 10-12 = *M* 214-8). The confusion arises from modern scholars' attempt to reconcile the seven classes with the traditional four Indian castes. The classes are: 1) brahmins and ascetics; 2) husbandmen; 3) herdsmen-hunters; 4) artizans and retail merchants; 5) fighting men; 6) overseers who report to the king or the magistrates of free cities, 7) the great councillors who determine policy, officer the armed forces, and regulate all affairs of state. It is denied by modern scholars that these seven major castes could have existed, because the śūdra is absent, the husbandman and merchant should both be members of the vaiśya caste, and there could not possibly have been enough overseers nor councillors to form two separate castes by themselves. Of course, the Arthaśāstra sticks to the theoretical four castes in its preamble, and is simultaneously condemned as a later document, making no mention of Pāṭaliputra, or Candragupta, or any other king, city, or empire; nor showing acquaintance with imperial affairs such as must have concerned the ministers of Candragupta Maurya.

[12] Text fragments collected by E.A. Schwanbeck, Bonn 1846; for Diodorus Siculus and Arrian text and Latin translation by Carl Müller, Paris (Firmin Didot) 1878. The English translation by J. W. McCrindle, Calcutta 1926 (reprinted from the *Indian Antiquary* 1876-77) is cited as *M* with page number. The two *Kauṭalīya—Studien* of E. Breloer (Bonn 192-6, 1928) are useless.

There is no doubt about the first class, that of brahmins and śramaṇas who have been included in one category. This does not detract from the value of Megasthenes's testimony, for the two are grouped together in that order, by one compound word, in Asoka's edicts. They clearly enjoyed equally high position as holy men, the classification into a single caste being permissible because the śramaṇas were celibate in any case. We are also told that becoming a 'philosopher' was the only change of caste allowed to any of the others (*M* 86, 218). Caste 5 of warriors, second greatest in numerical strength, is clearly the kṣatriyas. They pass the time of peace in idleness and sport, so well are they paid by the king; all their equipment comes from the royal arsenal, the elephants and horses from the king's stables, the care of these in war or peace being the task of others. The implication of this has been missed, for it means that *with negligible exceptions, all able-bodied male kṣatriyas had been organized into the king's paid standing army.* For support, we find in the Arthaśāstra that the hereditary army, entirely of highly trained kṣatriyas, is the best (*A* 6.1); the author himself says in emphatic contradiction of preceding theorists, that a compact standing army is better than disbanded forces (*A* 7.9); in 9.2 we find auxiliaries mentioned, but the order of importance is always the hereditary standing army *maula*, temporarily hired *bhṛtaka* recruits (both noted together by Megasthenes as the 5th caste), guild-soldiers *śreṇī* (perhaps remnants of tribal or city fyrds), troops of an ally, and wild tribes. Megasthenes's third caste, herdsmen, settle neither in towns nor cities, but live as pastoral nomads and hunters in tents (cf. *A* 2.29); this is interesting as a survival of the traditional ancient mode of Aryan life, inevitably degraded in the presence of civilization.

The main difficulty arises from equating the second caste, husbandmen, to the vaiśyas. It is true that the Greek *geōrgos,* Latin *agricola* does mean husbandman, exactly as did the original, traditional vaiśya: 'settler'. But what are the characteristics of this class of cultivators according to the Greek envoy? First, that they form by far the greater part of the population, producing the surplus upon which society rests; for none of the other six classes produce any food at all, except the herdsman in some trifling measure. They don't own the land, for a 25% tribute (*M* 84) *plus rent* (*M* 39-40) is to be paid to the king or the free cities. They never enter the cities for any purpose (*M* 84), but live all the time in the villages with their families (*M* 39). They are not furnished with arms (*M* 216) and are 'exempted' from military duties (*M* 39, 83, 216), so that they may be seen ploughing calmly within sight of contending armies, which never harm them (*M* 84, 216) nor devastate the land (*M* 39). This idyllic life, however, meant that the cultivators were totally disarmed; for even the wild beasts and birds that damage their crops have to be killed by the *third* caste, (*M* 40, 84 "who alone are allowed to hunt, and to keep cattle"), not by the second. Moreover, they have no property at all, for the land does not belong to them nor have they any cattle (which

belong to the "herdsmen"), and they cannot follow any other profession; they *can not* enter the cities for any purpose, whereas the vaiśya could and did, being a leading citizen in the free city. So we have in reality *a description of the śūdra.* Once again this is confirmed by the Arthaśāstra (*A*2.1) : The king should establish new settlements or repopulate deserted ones by inviting foreign immigrants or deporting settlers from his own overpopulated centers. Each village is to be made up of between a hundred and five hundred families of *śūdra cultivators* (śudra-karṣaka). Administrative centers are to be set up for groups of 10, 200, 400, 800 villages. A few priests actually serving in the locality are to be granted tax-free lands. Superintendents, functionaries, accountants, doctors, veterinaries, messengers and such officials may be endowed with land which the individual holds for life, cannot alienate by sale or mortgage ; however, officials in general have a regular stipend, as do the watchmen and specially hired labourers (*A*2.24). If the holder failed to cultivate it properly, the land would be reassigned by the state to someone else except perhaps when the holder had just brought waste land or wilderness under the plough. No ascetic other than one who has adopted a forest retreat for his own individual salvation is to be admitted to the villages; this means that no one proselyting for a monastic order could gain entrance. No place of communal entertainment, nor resting place may be built in the village; professional actors, dancers, singers, musicians, raconteurs, bards are also completely excluded. "For from the helplessness of the villages and exclusive preoccupation of the men with land comes wealth" of all sorts. This wealth is not for the cultivator, who can hardly use it, but for the state treasury. We are very far here from the idyllic life depicted by so many who wrote of Indian villages from modern observations made at a safe distance and from the property-owner's point of view. The 'idiocy of village life' was deliberately intensified as a method of exploitation.

There are two reasons for misinterpretation of the śūdrakarṣaka-geōrgos as a vaiśya. One is the projection of a supposedly immutable village system from 18th and 19th century India into antiquity. The other is that the Greeks were deeply impressed by the fabulous nature of a country which produced incredible beasts like the elephant, plants like cotton and sugarcane, sweet tasting rock crystals (sugar !), deciduous trees that never shed their leaves, tremendous rivers, and an extraordinary soil yielding two bumper harvests every year. On the same level (from the Greek point of view) as the fantastic, mythical, gold-digging ants was the attested truthful and law-abiding nature of the Indian in the absence of written law-codes or written contracts. Arrian 12 (*M* 217) says explicitly, "but indeed no Indian is accused of lying." This could never be said of the *Graeculus esuriens.* Most striking of all was the fact that the Indian economy flourished, so incomprehensibly to the Greek mind, without chattel slavery. "Of several remarkable customs existing among the Indians there is one prescribed by their ancient philosophers which one may

regard as truly admirable. For the law ordains that no one among them shall, under any circumstances, be a slave, but that, enjoying freedom, they shall respect the equal right to it which all possess; for those (they thought) who have learned neither to domineer over nor to cringe to others will attain the life best adapted for all vicissitudes of lot. For it is but *fair and reasonable* to institute laws which bind all equally, but allow *property* to be unevenly distributed" (Diodorus Siculus ii. 39 end, *M* 38; my italics). The trouble here is not with Megasthenes, but with the sentimental and idealizing embroidery of Diodorus, proved by the utopian island which he reports as visited by one Iamboulos (ii. 55-60), at the end of the very same book; which may be a traveller's tale based upon the name of the island of Socotra, derived from *sukha-dhārā*, the land of bliss. There is no such concept of equality in what survives of Megasthenes nor in any Indian source. The case is made much worse by misleading translation, which I have italicized. The last sentence in C. Müller's Latin conveys exactly the opposite sense, namely that it would be the act of a simpleton to promulgate equal laws for all with unequal status and opportunity (between slave and free). The Greek *euēthes* and *exousias anomalous* are surely better represented by 'stultum' and 'inaequalitatem facultatum', than by the English phrases above.

The Greeks could not recognize slavery in India. "All the Indians are free, and not one of them a slave. The Lakedemonians and Indians here so far agree. The Lakedemonians, however, held the Helots as slaves and these Helots do servile labour; but the Indians do not even use aliens as slaves, and much less a countryman of their own" (Arrian, M 210-213). This is not to be doubted. The Greek *doulos* originally meant a slave by birth, to be distinguished from *andrapodon*[13] the captive (taken in war or kidnapped) sold into slavery. Such war-prisoners were a legitimate and most valuable part of the booty in Greek and Roman campaigns. If the Indians had any such type of slavery, Megasthenes would certainly have known of it; he was the ambassador of Seleukos, who had just lost a war against Candragupta. We have already examined the tradition in India as regards slavery. The Arthaśāstra forbids the sale of any one, even a śūdra, who lives as a free man and does not belong to some (obviously unimportant) recognized category of slaves. Inasmuch as the Greeks saw a parallel between Sparta and India, we have only to consider what Lakedemonian helotage had been originally, before approximating to slavery in a powerful slave-holding and slave-trading environment. "The Lakedemonians held the Helots as state-slaves in a way, having assigned to them certain settlements to live in and special services to perform" (Strabo, 8. 5.4; trans. Loeb Classics, H. L. Jones, 4.135). The

[13] The Arthaśāstra has a corresponding word, *dvipada*=biped, grouped with the *catuṣpada* (Greek *tetrapodon*) as two-legged and four-legged animals for sale (*A* 3·15). There is no doubt that *some* human beings were sold, as the context shows this to refer to humans, not poultry. But the main consideration is that they were unimportant as a source of labour, and *A* 3·13 shows mainly contract labourers whose rights are carefully protected, though they are *dāsas*.

Mauryan śūdra is a helot, as had been his predecessor and equivalent, the dāsa in vedic tribal economy; dāsa is indiscriminately equated to śūdra, servant, and slave. The śūdra caste made slavery unnecessary, and yet enabled the forested Gangetic plain to be brought under cultivation.

Thus Megasthenes and the Arthaśāstra corroborate and supplement[14] each other in a remarkable, unexpected way. The latter work has no feature to give it *scale*; it can, on a first superficial reading, easily be mistaken for a manual of administration for some princeling who rules no more than a county (*janapada*). The extraordinary situation revealed to us by the Arthaśāstra and Megasthenes is that *crown property is overwhelmingly the main basis of production, and its profitable administration the chief preoccupation of the state*, which replaces private enterprise to an extent never seen before or after in India. Even prostitution, like mining, and wines, is directly under the exchequer with a special ministry (*A* 2.27). There are no feudal landlords worth notice, nor any *nagaraśreṣṭhī* like Anāthapiṇḍika who is richer than the princes whose lands are crossed by his caravans. If Roman and Greek historical writers deal primarily with events of national and international importance, it is only because the exploitation of occupied territory was the natural prerogative of certain classes, not taken over directly by their instrument, the state. With Kauṭalya[15] everything is state-regulated to the last detail : cities and markets; road construction and transport; rivers, canals, irrigation ; care and convoying of foreigners; land measurement, division, taxation; registration of births and deaths (even now unsatisfactory in India!); levy of sales taxes and tolls of every sort; public supervised sales of manufactured articles, as well as supervision of artizans. (Strabo 15.1.50-52, *M* 86-88). Both sources agree here, the Indian giving detail, the Greek the immense scale upon which the operations were conducted. Given the caste structure of Indian society, there is absolutely no reason to doubt that the multitude of lower state functionaries would develop into a separate caste, as also the higher ministers, *at that period*. This is what Megasthenes reports, though the śāstras don't trouble to recognize the transient phenomenon, which disappeared with the over-centralized, government-entrepreneur empire, just as the Arthaśāstra was forgotten except

[14] Dionysus, in Megasthenes, does not indicate the Indian Śiva as so many have assumed without consideration, but obviously the conqueror Indra of the Ṛgveda, who is so often invited to fill himself with Soma. The three-peaked mountain (*M* 162) seems to be a development of Trikakud in the Triśiras Tvāṣṭra saga. Spatembas would be, in the most reasonable Sanskrit equivalence, Aśvatthāman, one of the 7 immortals in later legend though his role in the Māhābhārata is not of first rank. The Greek envoy, therefore, gives a better report of Indian tradition than his translators.

[15] Gaṇapati Śāstri, in his learned preface, insists that the *gotra* is Kauṭalya. from Kuṭala, the change to Kauṭilya being indicative of the reputation for Machiavellian crookedness ascribed to the author. However, the gotra Kuṭala, Kauṭalya, Caṇaka or Cāṇakya is not found in any surviving list (unless one sees some connection with the Caṇakarāja-nīti in the Tibetan Canon), whereas Kauṭilya survives in several such lists, and families actually belonging to that gotra exist, as for example among the Mādhyandina brahmins of Mahārāṣṭra. Nevertheless Kauṭalya is the uniform reading of the 12th century Pāṭan MSS in Muni Jinavijayaji's printed but unpublished edition.

by name. The existence of free cities mentioned by Megasthenes appears to be supported by some Mauryan punch-marked coins that bear the emperor's personal mark, with homo-signs or some group-mark in place of the usual symbols of sovereignty. It must be remembered that such cities would have a tribal origin, and a guild structure. The other fact to be kept in mind is that both the Arthaśāstra and what remains of Megasthenes are concerned with the major features, not with every single minor form of production ; India is a country of long formal survivals even after substance and basis are obselete. The essential is that the city, free or not, is an administrative center, no longer a center of tribal assembly and warfare. There is no class structure between the primary producer and the coercive mechanism (the State); the mechanism of violence is controlled by the center, namely the king and his bureaucracy.

This system must have reached full bloom with the Nandas (about 400 B.C.), whose proverbial wealth and prosperity are attested by the great variety and accurate minting of their silver punch-marked coins. Its main effect was upon the Gangetic and Indus valleys, and the regions about a few cities elsewhere, the rest Asoka's empire being undeveloped, with great variety of survivals. The inevitable expansion carried with it the seeds of decay. In the absence of slavery, with the śūdra deported from the cities, and tight control of manufactured goods and its prices from raw material to the finished article, civic production would certainly not suffice for the whole countryside from Afghanistan to Bengal and the Himalayas to Mysore. Nevertheless, more land is steadily being brought under cultivation by means of the tools made in the cities. The immense distances and poor transport would also make central administration most cumbrous, accounting progressively more complicated, official peculations increasingly harder (*A* 2.7-9) to check. Certainly, the Mauryan silver coinage as a whole, particularly after Candragupta, shows far greater proportion of copper with much rougher weight adjustment than before—symptoms of tremendously increased demand for currency, logical corollary of the opening up of the whole peninsula for the first time. The minute reverse marks of the pre-Mauryan coinage also disappear, to be replaced by a single issue-mark, presumably at the mint, which again confirms rigid state control, to the exclusion of former important merchant guilds. A natural step would be that the artizan, or at least his technique, first moved to the countryside, thus bringing about the full development of self-sufficient rural units. The state machinery would have to be dispersed in consequence. Increasing the number of stipendiary superintendents would be impossible, which means the necessity of creating new classes of owners, new intermediate relations of production between state and producer. That is, the kṣatriya has also to move to the countryside with small forces scattered over village territory. The brahmin is as important in making the people submissive; he has already a foothold as priest and medicine-man, with tax-

free lands; the rusticity of the Gṛhya-sūtras is now turned to good account, becoming incurable, if indeed it does not first come into existence at this stage. That my argument is not purely *a priori* may be seen by comparison of the king's duties in the forgotten (because the productive forms were obsolete) Arthaśāstra with the later but much more pretentious and sanctified Manusmṛti (Ms. 7.111-143; 7.195-196; *et. al.*). Taxes have fallen below the Arthaśāstra level because they are mainly levied upon property owners; the śūdra though free still has no property, nor can release by any master free him from servitude (Ms. 8.414) to the three Aryan castes. The main revenue of the Arthaśāstra was the tribute on grain from state lands *sītā*, which has disappeared altogether; the minor taxable forms called *rāṣṭra* by the Arthaśāstra are now synonymous with 'country'. This means that state production no longer exists. Nothing is said about transport, irrigation, or supervision. The villages are grouped in much smaller units, with a chief over every village and unit whose compensation is ownership of a certain amount of land. Local garrisons appear (Ms. 7.114-15) whereas the Arthaśāstra wanted only frontiers to be strongly held. The artizan and the śūdra labourer of the Manusmṛti give the state one day's free labour per month, *the corvée in lieu of taxes* (Ms. 7.138). Worst of all, the immunity of land and villager that struck Megasthenes has disappeared. The peasant is no longer allowed to witness the ruin of empires while concentrating upon some miserable patch of land, for the royal invader is enjoined to ravage the countryside thoroughly whenever the enemy cannot be directly attacked (Ms. 7. 195-6). At this stage, the Mauryan central administration is unnecessary. The Gupta capital Ujjain was never the world's greatest city, as Patna had been in its prime, though the center of as large and even more prosperous an empire. Patna itself dwindled to a village before the time of Hiuen Tsang. While total production increased, *commodity* production went down in density if not volume. This was the difference between the land seen by the Greeks and the apparently changeless countryside visited by later foreign travellers. The victory of Manusmṛti brahminism means also the absence of common law, each caste, guild, profession and locality being entitled to its own customary legal traditions (Ms. 8.41). The Arthaśāstra recognized the need for a legal structure which transcended these barriers, though caste-privilege was, to a certain extent, allowed in its *jus gentium*, being a primitive form of class privilage.

There are two important points of contrast. The Manusmṛti administrator is appointed by-the king but not paid a salary; he lives off the country. The village chief has as his perquisites the food, drink, firewood which would be supplied to the king (if in residence). The head of ten villages enjoys the income of a family holding (*kulaṃ*, Ms. 7.119); the chief of twenty gets five times as much, that of a hundred the revenues of an entire village, and of a thousand the revenues of a whole town. This is clearly the beginning of feudalism, and it may be worth noting that G. Bühler in his translation of the

smṛti (Sacred Books of The East, xxv, preface, pp. cvi *ff.*) believed the work to have been completed between the 2nd century B.C. and the 2nd century A.D. Secondly, the merchant is to be taxed (Ms. 7.127) with due regard to the prices of purchase and sale, depreciation and expenses of the trip, length of the road to the market and expenses for protection against thieves etc. on the way. This shows a consideration entirely foreign to the Arthaśāstra, where the merchant was in fact a competitor of the royal monopolies, and treated as a natural criminal of sorts. Cash transactions are so low that royal menials are paid only 1 to 6 copper paṇas a day, a droṇa of grain monthly, and clothes every six months (Ms. 7.126). According to *A* 2.24, the *sītādhyakṣa* (of a janapada) is to cultivate all the best (most-ploughed) land under his own direct supervision, with free (*karmakara*) labour or forced labour including the royal dāsas and the prisoners who work out their fine. What is left over, however, allows private enterprise to enter; the half share cultivators (*ardhasītikas*) may be allowed to work such surplus land, or the quarter or fifth sharers, the difference between the two being that the latter have nothing except their own bodily effort to put into the land. It follows that even in the *sītā* those who owned oxen and implements of their own had a certain interest. The essential is that this did not develop into permanent tenure or private property during the time of the Arthaśāstra; when it did by the period of the Manusmṛti, the sītā would cease to exist, becoming indistinguishable from the rāṣṭra.

8. Termination Of The Arthasastra System

The foregoing section expresses a definite opinion, that the essential features of the Arthaśāstra do characterize the government described by Megasthenes ; while it does not follow that the whole of the document must be authentic, the work is not entirely theoretical, it has a sound basis in reality, and the bulk thereof must belong to the time of Candragupta Maurya, though reporting upon older theory and tradition.

That the book may contain later additions or revision is not denied; still less, that the author was a brahmin pedant. But the book is unusually consistent as compared to the Mahābhārata or the Manusmṛti. The brahmin and kṣatriya are allowed legitimate heirs (*savarṇa*) from women of one caste lower each. Differences between the four-caste theory (*A* 1·3) and practice appear with the *vaidehaka*, synonymous with trader throughout the book, but in *A* 3·7 the offspring of a kṣatriya woman by a vaiśya father; in *A* 1·6, a Vaideha king Karāla is held up as bad example. This corresponds to the historical development of a tribe into a guild and then a caste. The mixture of castes is frowned upon, as in all brahminical works, but it is really the fault of the king, who won't go to heaven if he tolerates it. For other transgressions, the Arthaśāstra relies upon a complete system of standardized cash fines, the separate items filling nine columns in the index to Shamasastry's translation.

The Arthaśāstra is not to be compared to Bismarck's memoirs, where a chancellor tells what actually happened, while trying to justify his own policy. We have no support here for the Mudrārākṣasa Grey Eminence tradition, except possibly in the final colophon—probably a later insertion. The book is not meant like that of Castiglione for a gentleman-courtier's training in superficials. Machiavelli's *Principe* draws different conclusions (in comparably rugged prose) from the career of princes like Cesare Borgia, presumably in the hope that one such would some day arise to unite Italy. If the 14th section of the Arthaśāstra is genuine, with its extraordinarily futile magic formulae, the treatise cannot possibly be meant for the vulgar gaze. The select few who would read would necessarily be other ministers like Cāṇakya, who are here made acquainted with traditional principles and theories, (not history), brought up to date and fitted to the reality as the author saw it, with considerable instruction as to the working of administrative departments. Though the principles and methods apply to states of any size, the declared purpose is aggrandizement, and the system could not long remain static, for growth or collapse are the only two effective alternatives it could admit as proved by history.

The *janapada*, which most of us mistake for the whole country at a first reading of the Arthaśāstra, is really the natural unit of administration. Originally, it means the territory of a tribe, with some city or group of small towns as headquarters, hence the *paurajanapada* of 2·1 contrasted to the new settlements. The Gangetic *janapadas* were widely separated by dense forests, which yielded to the highly profitable *sītā* cultivation of the Arthaśāstra king, as distinct from the *rāṣṭra* that had been settled by tribal or private enterprise. The first kings naturally develop from the tribal chiefs of a janapada ; preservation of the janapada unit would enable local custom to be allowed for, as in *A* 3·7, end. This would also account for the 'free cities' of the Greek observer, as the paurajanapadas, the newer settlements being ruthlessly taxed and controlled. The imperial superstructure covers, without destroying or standardization, an immense variety including the wild tribes (*āṭavikas*) which had not yet been Aryanized ; on the other hand, though the correct definition of *sītā* and *rāṣṭra* appear in *A* 2·15, the differences tended to be obscured, as seen in *A* 2·6, presumably by the royal power encroaching upon the prerogatives of older settlements, as well as penetration of state settlements or wilderness by individual pioneers. Nevertheless it is only an indigent king (*A* 2·1) who eats up the old settlers ! No grasp of the Arthaśāstra is possible without understanding the fundamental difference between the few older free cities and the tremendous royal settlements peopled mostly by unprivileged śūdras.

The pragmatic note is heavily stressed throughout. Practical considerations are ever the prime ones : *artha eva pradhānaḥ* says Kauṭalya in his own

name in *A* 1·3 ; spiritual and sensual considerations follow from the practical. Similarly, in *A* 8·1 he again contradicts his preceptors : the army has its roots in the treasury ; without a treasury, the army goes over to another, or kills its own master ; *sarvābhiyogakaraś ca kośo dharma-kāma-heluḥ*, the treasury is the first cause of religion and enjoyment. The writer has also grasped what few Indians after him realized : that real wealth depends upon command of production, particularly of raw materials, cereals, and heavy industry ; the first is stated explicitly in *A* 1·4. The last is made still clearer in *A* 2·12 : *ākara-prabhavaḥ kośaḥ*, the treasury depends upon mining, the army on the treasury, and he who has both wins the rich earth. The mine is the womb of war materials : *khaniḥ saṅgrāmopakaraṇānāṃ yoniḥ*. No brahmin, however well-read, could merely dream all this up for himself, for the true brahmin mind runs smoothly in quite different grooves, as for example the ritual exorcisms of *A* 4·3 against national calamities.

The absolute control of metals would be easy for pre-Mauryan Magadha, which covered the natural outlets for India's richest deposits of iron, copper, and other metals in Bihar. By the mining industry, the author does not mean only precious metals and gems, but emphatically all sorts of tool-making metals and alloys, *loha=kālāyasa, tāmra, vṛtta, kāṃsya, sīsa, trapu, vaikṛntaka, ārakūṭa* (*A* 2·17). In *A* 2·12, minute directions are given for the state director to mine and smelt these ores, and to regulate their trade. In *A* 2·21, the common metals and grain are among forbidden commodities, as are arms, military gear of all sorts, gems, and other royal monopolies. It then seems a contradiction to read in *A* 2·22 the toll rates upon grain and metals, but this is explained by the line *jātibhūmiṣu ca paṇyānām avikrayaḥ*. No goods is to be sold by the private trader where it originates. In other words, the merchant had to add value to the commodity by transport to the ultimate market, incidentally paying tolls on the way. At the end, he would find not only his profit regulated, but also his wares sold by a state-organized sale such as Strabo reports from Megasthenes (*M* 87). This has been laughed off as ridiculous and impossible, but the Arthaśāstra does confirm it once again. Not only are sales of local goods state monopoly (*A* 2·16) but *A* 4·2 directs the chief of the city market to separate new from second-hand wares (of which the ownership must be proved before sale) and when there is a glut, to gather all the merchandise in one place for a regulated sale, during which time no other goods may be sold. Transport, particularly land transport, was difficult, and only here was private enterprise encouraged in any way.

Could all this administrative routine have been the fantasy of some idle theorist ? What of technical terms like *akṣapaṭala* for exchequer ? Each state granary and storehouse must have a standard raingauge (*A* 2·5) for land is classified and its yield estimated according to rainfall (*A* 2·24). This is the only instance I know of so practical a step being mentioned in any Indian

text ; Plato's Republic could do nicely with religious or philosophical axioms, but such technical details imply working methods in actual use. When the treasury is in great difficulties (*A* 5·2) and a capital levy has to be made, the merchants in precious articles should pay as much as 50 per cent, cloth and lower metals 40 per cent, grain traders and wagon-train organizers 30 per cent. and so on. In later Indian history, this would simply be done by force, as often as it pleased the absolute monarch. But Kauṭalya warns that this levy is not to be made twice, and that it should be on a voluntary basis as it were, by the chief collector of revenues begging from the people. He suggests seeding the populace with pseudo-volunteers who come forward enthusiastically to contribute apparently large amounts. Yet there is no question of civil rights, fair play, or from each according to his means—let the goldsmiths have all their property confiscated, the richest travelling merchants be quietly murdered as if by a robber or enemy, and the loot piled into the state treasury. It would be inconceivable for a brahmin theorist to recommend as does the Arthaśāstra, confiscation of temple treasures (by the corresponding *adhyakṣa*, naturally !), setting up of new cults, faking of sudden miracles, all to collect money from the credulous for the king, not for the brahmin. Here we have support from Patañjali who reports : *Mauryair hiraṇyārthibhir arcāḥ prakalpitāḥ* (on Pāṇ. 5. 3. 99), that the Mauryans had established cults for the sake of money. That the Mauryan treasury had actually been in difficulties again and again is shown by progressive debasement of the coinage, which in the later Taxila hoard (dated to about the reign of Asoka by a mint-condition coin of Diodotos) contains from 60 to 75 per cent copper, as against the 25 per cent recommended by the Arthaśāstra (*A* 2·12). Even when Kauṭalya speaks against Bharadvāja (*A* 5·6) to the effect that the minister shouldn't make himself king if the ruler dies suddenly and a good chance offers, he is being practical on moral grounds. Bharadvāja's advice was followed when the Śuṅga army commander Puṣyamitra ended the Mauryan dynasty ; again, when the Kāṇvāyana brahmin minister Vāsudeva succeeded the last Śuṅga. It may be a mere coincidence that Śuṅga and Kāṇvāyana are both Bharadvāja gotras.

After all, what is the main purpose of this treatise on political economy ? The conquest and guarding of the whole earth[16] by one king. The work begins with those words, *pṛthivyāṃ lābhe pālane ca.* From the seventh book onwards, this purpose becomes the main aim, and the thirteenth deals with the most difficult task of straightforward aggression, the reduction of fortified places and cities. But even though no treachery down to murder and poisoning is too foul to get rid of the opposing king, the countryside is to be preserved from all damage, as Megasthenes noted to the astonishment and joy of writers

[16] The world outside India doesn't count for imperial purposes : *deśaḥ pṛthivī, tasyāṃ himavat samudrāntaram udīcīnaṃ yojana-sahasra-parimāṇaṃ tiryak cakravarti-kṣetram* (*A* 9·1).

like Diodorus ; cutting off forage and perhaps damaging some crops is a desperate measure for the most extreme cases (*A* 13·4). It is towards building up the resources for conquest that the whole cumbrous mechanism of the state is directed unscrupulously. An accurate permanent census, Domesday Book account, and register is to be kept at all times of everything and everyone as was noted by Megasthenes : boundaries, wealth taxed and untaxed ; males, females, children, servants in each household and their work, if any ; the purpose and duration of each voyage undertaken by anyone (*A* 2·35,36) both in city and countryside. To this end, there are not only registrars (*gopa*) for every ten to forty houses in the city, five to ten villages in the country, but a system of passes at city gates and a whole army of spies in disguise. These last are distinct from the informers (*sūcaka*) who discover embezzlement (*A* 2·8). Spying is the only check upon officials, says Kauṭalya (*A* 2·9). Apart from embezzlement, the official who neglects any chance of making revenue for the king, by inattention to the reports of underlings and spies, is to be fined, though collecting more than the amount due is frowned upon. Whoever diminishes the revenue eats up the king's wealth (*A* 2·9), which he must make good, with a fine if his intentions were evil ; whoever doubles (or more) the king's revenue eats up the land, but is let off with a warning if the whole amount be deposited into the treasury. There is no question of refund, in spite of book-keeping and regular receipts. Similarly for all the special taxes on merchants based on the theory that every one of them cheats on all possible occasions in spite of regulations, checking of balances and measures, and other state control including spies with every caravan (*A* 2·21) ; but the taxes go to the king. Even in selling a plot of land, or a holding—which may be bought by relatives, neighbours, creditors in that order, and only in their absence by anyone else (*A* 3·9), forty other people are invited to be present and to bid up the price ; the excess over the predetermined price goes to the treasury along with the sales tax !

This system would become intolerably oppressive except when in a state of expansion, and even then expansion into paying territory. A complete scale of payment for every conceivable state servant is set down in *A* 5·3. The highest is 48,000 paṇas (per year) for the great ministers, royal priest, dowager queen-mother, chief queen, and crown-prince. It descends to 60 for the lowest categories, of stablemen, camp-servants, and drudges for heavy unskilled labour, *viṣṭi*.[17]

[17] There is the usual ambiguity, caused here by the ending of the long compound :—*viṣṭibandhaka* Shamasastry takes this as one unit, the mean the press-gang foreman, but then the pay of 60 paṇas a year would be disproportionately low, in comparison to the rest. Gaṇapati Śāstri's interpretation of viṣṭi and bandhaka as two separate categories is proved by two definitions of viṣṭi : *A* 10·4 gives the camp-viṣṭi, whose work is to clear the camp, roads, wells, fords, etc., carry fodder, take the offensive and defensive weapons to and from the battlefield, and carry away the wounded—work which would be difficult to entrust to unpaid forced labour, which is Shamasastry's idea of viṣṭi. In *A* 2·15, we have the viṣṭi for the great royal storehouses, consisting of porters, the weighismen, and so on. Here the category ends—*dāsa-karmakaravargaś ca viṣṭiḥ*, which is generally taken to include both slaves (bondsmen) and ordinary labourers. It follows that even slaves were paid for such heavy labour ; *presumably*, the money would count, as in *A* 3·13, towards their ransom and eventual freedom.

Dunn (*loc. cit.* p. 3, p. 54) writing in 1936 when wages in Singhbhum had fallen to a miserable 7 annas a day still felt that the obvious and very thorough working of the same mineral deposits in very ancient times could only have been by "an inexhaustible supply of cheap labour—slave labour." Unfortunately for this piece of imperial British yearning, the *śaila-khanaka* was paid from 500 to 1000 paṇas ; the scarcity of metals, great demand, state monopoly, possible payment to the head of a whole family of workers, might be the explanation ; but the Arthaśāstra miner was free. As for the level of prices, Megasthenes reported that the soldiers and their families lived very well ; the Arthaśāstra pay for a soldier is only 500 paṇas, though more for veterans, with graded cash bounties on the field of battle (*A* 10·3). The spy in disguise gets 1000, the ordinary spy 500, intermediary 250 ; spying must have been very well worth the while. There is even a system of pensions for the dependents of those who die in service, and of gratuities. It is incredible that this scheme of cash payments, unparalleled in a country where feudal tenure is not yet forgotten, should be purely imaginary or designed for a mere *janapada* king. A characteristic suggestion at the end of *A* 5·3 is that spies disguised as merchants and sutlers should sell to the soldiers in camp at double rates, thus clearing off the king's goods as well as recovering the money paid out in salaries. The best proof of reality is the advice that *villages should not be given away*, that only a poor king should give land, raw materials, or cattle rather than cash. Contrast Pasenadi's giving whole villages[18] to his priests ; the Arthaśāstra gift is merely the trifling *brahmadeya* lands (*A* 3·10) and groves (*A* 2·1 ; *M* 99) though the author is himself a brahmin. The ruler is to spend only a quarter of his revenues for all such cash payments ; when we recall the statement of Megasthenes that a single camp of Candragupta held 400,000 men (*M* 68), the total revenue in cash must have been enormous though the budget is nowhere given.

Yet the Mauryans changed none of the pre-existing local forms, as in the *rāṣṭra* ; a conquered king (and therefore his officials) are to be retained in office (*A* 7·16). Thus the chief benefit of conquest would come not from direct tribute but rather from promotion of trade, and settling of new lands ; the latter is given as one of the main objects of policy in *A* 7·11-12, with the advice, strange when coming from a brahmin, that the land predominantly settled by men of the lowest caste is best. That the southern trade routes were richer than the Himalayan in all goods except wool, hides, and horses, is explicitly noted (*A* 7·12), against the older tradition.

But how far could this go when the territory of a thousand *yojanas* from the Himalayas to the seas, the *cakravarti-kṣetram* (*A* 9·1) had actually been

[18] This may tally with the comparatively poor Kosalan coinage, and with the Lalita Vistara's otherwise incomprehensible remark that the Kosala royal family was *na cāparimita-ratna-nidhi-samutthitam*. In any case the Magadhans rapidly became by far the richer state, by holding the metals, the trade routes, and the river.

brought under a single ruler? The new lands did not compare in fertility to the alluvial plains of the U. P. and the Punjab ; and settling them would not only be difficult, but far less paying in proportion to the expenses of administration. The strong rule of one man, which had seemed so desirable with the ancient warring principalities and tribal areas of three centuries earlier would now be oppressive beyond measure to the merchant, who is treated as a super-criminal in the Arthaśāstra, with virtually no civil rights ; yet the merchant would naturally tend to gather in a progressively greater share of the currency.

The Arthaśāstra is remarkably deficient in one respect, namely detailed knowledge of ascetic sects—though spies are very frequently disguised as holy men, a custom observed down to the Gosains of the Peshwas. The solitary mention of Buddhists is in *A* 3·20 : Śākya, Ājīvakas, and such other monks as recruit from the lowest castes may not be fed at a feast to the gods or the manes, on pain of a 100—paṇa fine. The passage is taken by J. J. Meyer and others as a commentary on the Yājñavalkya smṛti 2·235-7, (*śūdra-pravrajitānāṃ ca daive pitrye ca bhojakaḥ. . . śataḍaṇḍabhāk*) which gives no details of sects ; nevertheless, the smṛti as we now have it is later than the Arthaśāstra, for the paṇa there (1·365) is of copper, as against the silver paṇa of Kauṭilya, which dates it to a much later period of debasement. Now the term *śākya* for Buddhists is early, for even the Harivaṃśa qualifies it: *śākya-buddhopajīvinaḥ*. Ājīvaka denotes a follower of Makkhali Gosāla, who resembled the Jains in their nakedness, and the Buddhists in many of their opinions, being hated by both; they were a firmly rooted Magadhan sect, though they too spread to the far south and survived very late.[19] I suggest that this passage dates the Arthaśāstra (in essence) to the later years of Candragupta's reign. A pre-Mauryan date is highly unlikely, because of the reference to Saurāṣṭra, debased coins, cults established for gathering money, etc. Asoka's conversion to Buddhism, respect for all sects, gift of three caves in the Barābar hills to the Ājīvakas (followed by three more by Daśaratha in the Nāgārjunī hills) exclude the possibility of so late a date.[20] In the Arthaśāstra the Jains are not mentioned

[19] In this connection, see A.L. Basham's authoritative and comprehensive work : "History and doctrines of the Ajivikas", London (Luzac) 1951.

[20] The Arthaśāstra is supposed to be dated to the end of the 3rd century BC or later by its reference to Chinese silk : *A* 2·11, *cinapaṭṭa, cinabhūmija*. The name China extends to the whole country from the principality of Ts'in after the final victory of Ts'in over Chu and the coronation of Shih Huang Ti as first emperor about 223 BC. This argument, however, is completely irrelevant for *cina* in *A* 2·11 denotes the source from which India actually derived the silk at that time ; nothing is said about 'the whole of China'. Any modern history of China (*cf.* W. Eberhard *A History of China*, trans. E. W. Dickes, London 1950 ; chap. iii-v) will show the great importance of Ts'in from the 8th century onwards. Not only did it straddle the trade route to the west and India, but its rise to supreme power is due to its having ended feudalism before the rest of China, which in turn is due precisely to the local development of a strong merchant class. A merchant became chief minister under the first emperor, scandalising the feudal nobility. For us, the point is proved by *A* 2·11 itself, where occurs the only other mention of China in the whole book : *cīnasī*, a fur imported from Balkh ; this shows both the trade route and the paramount importance of Ts'in in trade.

(though they occur as Niganṭhas in *R* 13) simply because their shift to the south must have taken place before this, (presumably in the face of local Magadhan competition) not later than the great migration under Bhadrabāhu; incidentally, this implies that the south had been penetrated by Magadhan traders before the armies marched there, so that the classical routine of imperialism : traders, missionaries, armies, is well established even in so long a past. Then there is the Jain tradition of Candragupta himself (*Tiloyapaṇṇatti* 71) having been converted, to die in the faith. So, this passage is impossible for the later Mauryans, say after Bindusāra; we may recall that the Asokan district officer *rajjuka* is not mentioned in the Arthaśāstra, which has, however, a *rajju* tax. It is even further out of place for the Kuṣāṇas, the Sātavāhanas, and the Guptas, all of whom preserved and increased the great Buddhist foundations. Even the Śuṅgas, supposedly hostile to the religion, dedicated structures at Sāñcī. On the other hand, for a real persecutor like Śaśāṅka, such a ban would be much too mild, for the advice would then be to exterminate the heretics. Kauṭalya knows nothing of monasteries like Nālandā, saying merely that (*A* 3·16) ascetics should live together without mutual contact, in places set apart ; earlier comers are to make room for the later, on pain of ejection. Any ascetic is punished in full for serious crimes, fined for lesser offences ; if unpropertied he may pay the fine by specially painful prayers or fasts for the king, which implies merely that he was not to work them off as a prisoner or slave.

Asoka's conversion is not only a cause but even more a symptom of decline of the Arthaśāstra[21] system, which was *inadequate to maintain a stable empire.* After conversion of the emperor, it would no longer be possible to keep the monks out of the villages, and indeed Asoka found a far greater use for the monks than spying: they were an integral part of his new system of administration, by conversion of the people to gentler ways, by new relations between king and subject which must correspond quite well to new relations of production. The final move towards feudalism of a priest-ridden type is obvious only from the Manusmṛti, but an immediate change is also to be discerned in Asoka's edicts. Though Asoka had suppressed two revolts at Taxila as viceroy (*Divyāvadāna* 19), the bloody Kaliṅga campaign was the final turning point (R. 13). Thereafter the army was obsolete; he is proud of using it for spectacles and religious processions only, not for war (R. 4). There should be no further killing of animals (R. 1), though criminals are still to be executed —with a special grace of three days after the sentence (P. 4). The king makes a new departure in administrative routine by travelling constantly, and visit-

[21] Asoka suppressed the *samīja* by edict (R. 1). This appears in *A* 1·21 as some sort of saturnalia ; in *A* 2·21, it meant freedom to drink for three days. In *A* 5·2, it provides occasion for some royal spy in disguise as a merchant to allow himself to be 'robbed', so as to swell the treasury with a real merchant's goods ; at the end of *A* 10·1 the *samīja* is forbidden altogether in the army. This is one of the few direct contacts between the Arthaśāstra and Asoka. The taxes remitted in the Rummindei edict occur in the rāṣṭra list.

ing all classes of his people, particularly the brahmins and ascetics; by making gifts directly to the aged and needy, instructing and examining his subjects in morality (R. 8). He honours all sects (R. 12), but means thereby that the essential principles of all should be followed. This is more than a fashion with him, for new officials, the Dhaṃma-mahāmātas now appear (R. 5), who are occupied with the morality of the whole population, the welfare of all prisoners, adjustment of schisms and controversies—all matters that didn't concern the Arthaśāstra. The church, therefore, is an adjunct of the state, a method of reducing the expensive mechanism of violence. Moreover, all royal officials are to take their own 5-year tours of inspection (R. 3), which again implies lesser number of spies. The king does worry about administration, for he expressly says that he will hear reports at all hours however late, and in all places, no matter how private (R. 6); that he should thus "discharge his debt to all living creatures," is a new and inspiring ideal of kingship. Whether he changed the former attitude to the traders is not explicitly stated; he recommends minimum expenditure, and collection of as little goods as possible (R. 3 : *apavyayatā apabhāṃḍatā sādhu*). Nevertheless, it is clear that the trader finds his relations with the state entirely changed. Though Ujjain and Taxila have their own viceroys (Dhauli 1), the greatest monuments of his and succeeding reigns are not there, but on trade route junctions such as at Sāñcī, or Kārlī in the Deccan. The trader comes forward to contribute his share voluntarily, alongside that of the king, to the Saṃgha ; the caves at Kārlī, at Kaṇherī, and elsewhere are often cooperative enterprises in which each contributes what he can of his own free will. This would not be possible unless the trader had benefited, and in addition found some reason to like the state—as the Arthaśāstra state could not be liked. Certainly, the king's opening up new territory by *dhammavijaya*, planting useful and medicinal trees, building rest-houses, digging wells, and repairing roads far beyond his own frontiers was effective in spreading his influence where his arms had not reached. This would be of double benefit to the trader, and we have noted that Buddhism, Jainism, and such Magadhan religion are specially attractive to the traders; even though the king still reveres the brahmins, as does the trader, they now have a far better meeting ground in religion which was absent in brahmin ritual with its exaggeration of caste differences. Asoka's conversion served as a measure of democracy, bringing the king nearer to the people, making him accessible to public opinion without the expensive, dubious intermediacy of spies. In the earlier stages, the religion of ascetic celibate almsmen was more economic than brahminism with its costly antisocial multiplicity of sacrifices and endless fees for everything. Thus, except among the Yonas, where indeed men were not attached to any (Indian) sect or religion (R. 13), the Asokan policy had immense success. Even then invaders like Menander and the Kuṣāṇas found it expedient to be converts, so that the success was really greater than Asoka claimed. His empire fell apart because it was no longer economic nor even necessary. The country

had been united, and settled in a new path of development for which a strong centralized mechanism of violence was not essential. It is a reasonable guess that the end of the empire was caused, or marked, by local officials turning into feudal landholders, in what had been the *sītā*. On the other hand, Buddhism spread to other lands as an adjunct to unity and auxiliary of the state mechanism in Ceylon, Burma, China ; in Tibet, and much later Mongolia, it replaces the state mechanism altogether. This is not the original Buddhism of 5th century Magadha, but its continuity of function in new forms adapted to new types of society is striking. Conquest to the natural frontier, poor transport, vast distances made it inevitable that the absolute central administration should be replaced by a dispersed feudal structure, both in India and China. In India, however, Buddhism staved off the feudal period till the change from the sītā to the rāṣṭra was completed ; in China the new religion was welcomed even by the warring feudal landowners, to promote internal peace. In both places, it performed the minor economic task of returning to circulation—in the construction of pious works—the wealth accumulated by prince, landlord, and merchant.

Espionage is necessarily directed against enemies of the state, whether they be foes from without or internal class-enemies that threaten the state which is itself the manifestation of some particular class. The universal espionage of the Arthaśāstra state proves that its essence, the king, had virtually no friends; it was not at that period the tool of any important class though warrior and trader profited during expansion; the old tribal basis for kingship had vanished. The Asokan change found such friends for the king and for his state. It also found new forms of expression in architecture and sculpture, for which the technique came from woodworking, the themes from popular legends, and the taste perhaps from Asoka's holiday spectacles. The court poet (or for that matter any professional secular poet) is not mentioned in the Arthaśāstra, nor apparently in Pāli literature; the change made it possible for him to come into existence. Just as the new Magadhan religions had been developed by members of a class in decay, kṣatriyas of the older free tribes, the new literature at its brightest (in the Gupta period) would develop from brahmin myths, in the brahmin language, by brahmin writers. This means that the older priesthood also had to undergo a change when there arose a new type of kingship, based upon private ownership rather than state enterprise and monopoly.

THE DEVIL IN INDIAN SCRIPTURES

By

Rev. H. Heras, S. J.

INTRODUCTION

A treatise on Angelology, much less one on Demonology, does not exist in ancient Indian scriptures. Information about angels and demons must be patiently culled from innumerable passages spread throughout the vast range of Indian *śruti* (revelation) and *smṛti* (tradition). Such has been the work of the present writer on this occasion. It is, as far as he knows, the first attempt at gathering all this information and piecing all these traditional fragments systematically in a scientific shape.

I. The Angels in Indian Scriptures

Since the demons are angels by nature, not different in their origin from the angels who people heaven, the first question that naturally arises is this : Are there real angels mentioned in Indian scriptures ?

To this question we emphatically reply in the affirmative : Angels are definitely mentioned in the ancient scriptures of India. They are called *devas*. This word is often being translated as "gods". But putting aside a few passages of the *Rgveda*, which may doubtfully be interpreted as polytheistic, later Indian scriptures are clearly monotheistic. Consequently the word *devas* cannot be interpreted as "gods" in a polytheistic sense.

The word *devas* etymologically means "bright being".[1] It comes from the same root as the Latin words *Deus*, *divus*, *dies*, which all bear the connotation of light and brightness, either spiritual or moral or material. In the case of the Latin word *Deus* it has finally come to signify not any "bright being", but "the Bright Being" par excellence, the Supreme Lord, the Creator God. But the fact that the *devas* in Sanskrit literature are very often mentioned in the plural, does not allow us to interpret this word thus. In point of fact there is a clear distinction established between the *devas* and God, when the latter is mentioned as "the Supreme *Deva* among all the *devas*."[2] "The word *deva*", says Berriedale Keith, "undoubtedly denotes a being connected with

[1] Cf. Griswold, *The Religion of the Rigveda*, pp. 106-107 ; Macdonell, *Vedic Mythology*, pp. 156-158.

[2] *Śvetāśvatara Upaniṣad*, VI. 7.

the heaven.... What is clear is that in the use of the *Ṛgveda* the word has essentially this sense : the *devas* stand out against the demons".[3]

Hence a number of authors have already translated the word *devas* as angels.[4] Among them there are a few Indian writers who, knowing the meaning of the word "angels" in the Bible and in Christian usage, do not hesitate to give this interpretation to the word *devas*: Dr. Ananda K. Coomaraswamy, for example, whose vast erudition in the field of Christian theology and asceticism is acknowledged by all,[5] and Swāmi Vivekānanda, who studied Christian asceticism and lived long among Christians.[6] We may also mention Prof. Harischandra Sircar, of the University of Calcutta, an author of repute on mystical subjects,[7] and finally the great Mahātma Gandhi, who made a deep study of the Gospels.[8] Among Christian writers one is Prof. Rawson,[9] while the late Prof. Rhys Davids had already accepted this translation, at least for some time.[10]

That this translation of the word *deva* is correct may also be proved by the meaning of its contradictory *adeva*, by which negative name the demon *Vṛtra* is called twice.[11] If *adeva* therefore means "a demon", *deva* cannot but mean "an angel".

Such a translation was contemplated as possible by that great eclectic spirit, Fr. Roberto de Nobili, S. J., in the beginning of the 17th century, when he wrote : "The noun *deva* may in a sense be used when speaking of the angels".[12] This interpretation is a visualisation of the problem in the same spirit as St. Augustin who also styles some so-called "gods" of the Platonists as "angels".[13]

The nature of these *devas* will confirm the correctness of our interpretation.

II. The Nature of the Angels

The first essential difference between God and the *devas*, is that the former is Self-subsisting, and the latter are created. It is acknowledged that God is

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[3] Keith, *The Religion and Philosophy of the Veda and Upaniṣhads*, I, p. 75.

[4] John Bunyan, when describing Beulah "upon the borders of heaven" calls the Angels "the Shining Ones". *The Pilgrims' Progress*, p. 153.

[5] Coomaraswamy, *A New Approach to the Vedas*, pp. 8, 11, 104, n. 116 ; Coomaraswamy, "The Growth of Indian Philosophy" in Radhakrishnan-Muirhead, *Indian Philosophy*, p. 132 and *passim* ; Coomaraswamy in *Isis* No. 55 (April, 1933).

[6] Vivekananda, *The Science and Philosophy of Religion*, pp. 124, 343.

[7] Sircar, *Mysticism in Bhagavat Gita*, p. 156.

[8] Gandhi, *Christian Missions*, p. 33.

[9] Rowson, *The Kaṭha Upaniṣad*, p. 188.

[10] Cf. (Mrs.) Rhys Davids, *Indian Religion and Survival*, p. 31.

[11] *Ṛgveda*, III, 32, 6 ; VI, 22, 11.

[12] de Nobili, *Catechism*, II Khaṇḍa, ch. II (*Nobiliana*, II, p. 178 : Archives of the Madura Vice-Province S.J., Shembaganur, S. India).

[13] St. Augustin, *De Civitate Dei*, X, 1 : Migne, P. L., XVI, col. 277.

the Creator of heaven and earth,[14] heaven being precisely understood not as the heavenly palace (which the Upaniṣads do not acknowledge as necessary), but "the heavenly ones" as the ascetic Manikkavasagar puts it.[15] In fact God speaks to Markaṇḍeya thus : "By my own *māyā* (omnipotence) I create the celestials, the men...and all the mobile and immobile things".[16] The *devas* in fact are often described as created[17] and indeed out of nothing (*asat*).[18]

This creation was only done by the mind of God,[19] who besides supports them.[20] A few *devas* in particular are mentioned as created, for instance Agni, Indra and Soma,[21] the first two being of the highest rank. To another *deva* the following words are being addressed : "Thou art a *deva* coming into existence... Thou art becoming".[22] Hence the first period of creation is styled "the first age of the *devas*", for during it they passed "from *asat* (non-existence) into *sat* (existence)".[23] In other works the *devas* are mentioned as the first-produced of the creation.[24] The *devas*, therefore, being created, received their names from the Creator Viśvakarman : "By whom alone their names were given to the *devas*".[25]

What is the nature of these *devas* ? In one of the texts referred to above Indra, Agni and Soma are equated with Parameṣṭhin Prājāpatya under the common denomination of *devas*.[26] Now Parameṣṭhin Prājāpatya is the first man created by Prajāpati, "the Lord of creatures".[27] Could this text mean that the three mentioned *devas*, and all the rest by mere association, were like men ? There is an older text which explains the former one in no doubtful way. It refers to the Ādityas, who, as we shall see later, are a kind of *devas*. It is there said that of the eight Ādityas "the eighth angelic being (the last Āditya) is in human guise (*manuṣvat daivyam aṣṭamām*)".[28] Now these Ādityas are called so, because they are sons of Aditi, the Absolute One,

14 *Śvetāśvatara Upaniṣad*, III, 3.

15 *Tiruvasagam*, III, v. 18 (Pope's ed., p. 10).

16 *Mahābhārata*, Vana Parva, CLXXXIX, v. 30.

17 *Taittirīya Saṁhitā*, 37 ; *Śatapatha Brāhmaṇa*, X, 4, 2, 2 ; XI, 2, 3, 1 ; *Jaiminīya Upaniṣad Brāhmaṇa*, 2, 4, 1; *Taittirīya Brahmaṇa*, II, 8, 8, 9 ; *Bṛhadāraṇyaka Upaniṣad*, I, 4, 11 ; *Aitareya Upaniṣad*, I, 2, 1.

18 *Atharvaveda*, X, 7, 25. Plato also speaks of "created gods" in the *Timaeus*. Cf. Caird, *The Evolution of Theology in the Greek Philosophers*, p. 191.

19 *Taittirīya Saṁhitā*, I, 2, 3.

20 *Śvetāśvatara Upaniṣad*, III, 4 ; IV, 12.

21 *Śatapatha Brāhmaṇa*, XI, 1, 6, 11. As regards Indra cf. *Ṛgveda*, IV, 18, 1-2.

22 *Jaiminīya Upaniṣad*, III, 20, 3.

23 *Ṛgveda*, X, 72, 2.

24 Cf. *Śatapatha Brāhmaṇa*. XI, 2, 3, 1. Yet in *Ṛgveda*, X, 129, 6 the *devas* are said to be "later than this world's production." This passage is wrongly understood by Dr. Betty Heimann, *Indian and Western Philosophy*, p. 43. This otherwise very erudite authoress here confuses "God" with "the gods"; they are in fact very different.

25 *Ṛgveda*, X, 82, 3.

26 *Śatapatha Brāhmaṇa*, XI, 1, 6, 14.

27 *Śatapatha Brāhmaṇa*, XI, 1, 6, 17. Cf. *Bṛhadāraṇyaka Upaniṣad*, II, 6, 3 ; IV, 6,3.

28 *Ṛgveda*, II, 5, 2.

in whose spiritual nature they must naturally participate. They are therefore spirits, and so is also the soul of man, but the latter remains on the earth "in human guise". Hence the spiritual nature of the *devas* is clearly suggested in these texts, in such a way as to call the soul of man *daivyam* "angelic", because it is spiritual. This must be the reason why the creation of the *devas* is called in Vedic literature "the super-creation",[29] in opposition to the material-creation which is called creation pure and simple.

After studying all the Vedic texts concerning the *devas* Dr. Ananda Coomaraswamy describes further this spiritual nature of the angels, emphasizing their intellectual leanings. "The Angels (he says) [are] conscious intellectual substances, partaking of eternity as to their immutable nature and understanding, but of time as regards their accidental awareness of before and after, the changeability of their affections (liability to fall from grace, etc.) and inasmuch as the angelic independence of local motion, whereby they can be anywhere".[30] The clearness of their understanding is also admitted by Prof. Dasgupta, while studying the *Viṣṇu Purāṇa*. He says that God "created the *devas* who are always happy and can know both their inner feelings and ideas and also external objects, and communicate with one another".[31] Moreover, it is the opinion of the prince of Indian philosophers, Śaṅkarācārya, that the angelic nature consists precisely in this that the daily food, as it were, of the *devas*, is the understanding of high metaphysical concepts. He says : "In that the angels are wonted to the use of (*grahaṇa-priyāḥ*) metaphysical notions (*parokṣa-namāni*), thereby it is that they are angels (*yasmād devāḥ*)"; that is to say, in that theirs is the habit of first principles.[32]

As regards their habitat it is understood that the angels dwell in God's palace above the sky. "The *devas* dwell above".[33] They are certainly subordinated to the Supreme Being, whether He be called Brahma, Varuṇa or simply Īśvara,[34] who, on the other hand, is described as "source and origin",[35] "Father"[36] or "Lord" of the *devas*.[37] Accordingly Varuṇa is said to be seated "among his people",[38] i.e. the *devas*. Another text introduces the *devas* in the presence of "Prajāpati (being his) dear sons".[39] At a

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29 *Bṛhadāraṇyaka Upaniṣad*, I, 4, 6.

30 Coomaraswamy, "The Growth of Indian Philosophy", *op. cit.*, pp. 126-127.

31 Dasgupta, *A History of Indian Philosophy*, III, p. 501.

32 Śaṅkara in his commentary on the *Aitareya Upaniṣad*, III, 14.

33 *Ṛgveda*, I, 25, 9.

34 Cf. Macdonell, *Vedic Mythology*, pp. 11-14.

35 *Śvetāśvatara Upaniṣad*, III, 4.

36 *Ṛgveda*, I, 69, 1.

37 *Atharvaveda*, IX, 10, 24 ; *Śvetāśvatara Upaniṣad*, IV. 7 and 13 ; *Bhagavad Gītā*, XI. 20.

38 *Ṛgveda*, I, 25, 10.

39 *Jaiminīya Upaniṣad Brāhmaṇa*, II, 4, 1.

later period God is styled "Lord of hosts",[40] or "Lord of Heaven's host".[41] Moreover God is mentioned as united with the *devas*,[42] which union, both parties being spiritual, cannot but be spiritual also, i.e. a union of intellects and wills.

Beside, the *devas* are mentioned together with men as "co-sharers of gracious gifts".[43] What were these gifts which are called 'gracious', i.e. graciously given, as a grace from God ? One seems to be immortality. So says a very ancient text : "After Aditi (the Absolute) were the blessed *devas* born, sharers of immortal life".[44] Besides they were endowed with brilliance, power and beauty.[45]

Some accidental differences among the *devas*, seem to be admitted, for certain groups of *devas* are mentioned as having different characteristics. These differences specially appear in the Upaniṣadic period, during which three hierarchies of angels are referred to, of whom the highest are simply called *devāḥ* or "angels"; next to them come the "angels with respect to works," *karma-devāḥ*, who are called *karmātmānah devāḥ* or "angels whose self is works", by Manu,[46] and finally *ajanajah devaḥ* or "begotten angels".[47] Another text puts two categories, the *Kṣatras* or "potestates", such as Indra, Varuṇa, Soma, Rudra, Parjanya, Yama, Mṛtyu and Īśāna; and the *Viśas* or common ones, i.e. the Vasus, the Rudras, the Ādityas, the Viśvedevas and the Maruts.[48] Other kinds of *devas* are the Gandharvas, the Apsarasas, the Sādhyas, the Mahārājukas, etc.[49]

III. The Function of the Angels

The first function which the *devas* seem to perform is that of helping God in the government of the world. In a text already referred to we read :

> Varuṇa, true to holy law, sits down among his people ;
> Most wise sits there to govern this all.[50]

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[40] *Śrimad Bhāgavatam*, II, 3 ; *Tiruvasagam*, XXI (Pope's ed.).

[41] *Tiruvasagam*, XXIX, v. 5, p. 255 ; XXXVII, v. 5, p. 292. Cf. *Ibid.*, II, 121 ; V, 117; XXVIII, 34 ; XLII, 1, etc.

[42] *Rgveda*, II, 1, 15. In the early Rgvedic period the name of the Supreme Being was not yet fixedly adopted. At times he is called Varuṇa, at times Agni, as in this case, but he is evidently the supreme, as He is said to surpass the *devas* in majesty.

[43] *Vājasaneyi Saṁhitā*, XXXIII, 94.

[44] *Rgveda*, X. 172, 5.

[45] Cf. Griswold, *op. cit.*, pp. 106-107.

[46] *Mānava Dharmaśāstra*, I, 22.

[47] *Taittirīya Upaniṣad*, II, 8.

[48] *Bṛhadāraṇyaka Upaniṣad*, I, 4, 11-12. Winternitz translates Viśvedevas as "five angels" *A History of Indian Literature*, I, p. 561.

[49] Cf. Griswold, *The Religion of the Rigveda*, p. 103.

[50] *Rgveda*, I, 25, 10.

Evidently in these verses the Ṛgvedic poet depicts God as in his council of state ; the *devas* cannot be called his counsellors but certainly those by whom God's decrees are immediately obeyed and put into practice for the government of the universe : "Whose commandment all the *devas* acknowledge".[51] In fact He is worshipped by them all.[52] After the study of the Ṛgvedic hymns Fr. Thomas Siqueira, S.J., acknowledges that the *devas* are "the guardians of the universal order (*ṛta*)",[53] and Prof. Lefever calls them "rulers and administrators".[54]

In order to fulfil God's decrees among men, the *devas* are God's messengers. "His messengers are seated around Him".[55] They come down to the earth by order of the Almighty. "His messengers hastily descend from heaven hither, surveying the whole world with their thousand eyes".[56] The *devas*, says a *ṛṣi* of the Ṛgvedic age, "have arrived hither by the sending of this One".[57] Their main aim in this function as messengers is to make God known to all men, so that through this knowledge He might abide in their souls. Thus Vāc, "the Word" of God, "first of those who deserve worship", says in a famous hymn : "Thus the *devas* have established me in many places with many homes to enter and abide in".[58]

As regards the material world the *devas* are supposed to preside over all the forces of the universe. Thus Varuṇa presides over the sky, Agni over the fire, Vāyu over the wind, Indra over the rain, Sūrya over the sun, etc.[59]

Modern Indian scholarship acknowledges this important function of the *devas*. Prof. Sircar, for instance, admits that the *devas* preside over the forces of nature.[60] The same is the opinion of the orthodox Hindus. "They (the *devas*)", says a sort of orthodox Hindu catechetical handbook, "are concerned with the material side of nature, and the guidance of its evolution; and all the constructive energies studied by science are the energies of the *devas*. On

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51 *Vājasaneyi Saṃhitā*, XXV, 13.

52 *Atharvaveda*, XI, 4, 11.

53 Siqueira, "Sin and Salvation in the Early Rig-Veda", *Anthropos*, 1932, p. 184.

54 Lefever, *The Vedic Idea of Sin*, p. 29. "Other gods and deities (viz. the *devas*) are under the control and guidance of the Supreme Lord" (according to Mādhvācārya). Sharma, *The Reign of Realism in Indian Philosophy*, p. 669.

55 *Ṛgveda*, I. 25, 13.

56 *Atharvaveda*, IV, 16, 4.

57 *Ṛgveda*, X, 120, 6.

58 *Ṛgveda*, X, 125, 3 (Griffith's trans., II, p. 571). A full discussion about the nature of Vāc would carry us too far. We shall perhaps do that on another occasion. He is high above the *devas* as He is generated before them. *Vājasaneyi Saṃhitā*, XXXI, 20. Cf. *Jaiminīya Upaniṣad*, III, 38, 1; and *Mahābhārata*, Vana Parva, 12602. Cf. Weber, "Vāk und logos", *Indischen Studien*, IX, pp. 473-480.

59 Cf. Macdonell, *Vedic Mythology*, pp. 17-18, 22-30. At times these *devas* are confused with the very natural forces over which they preside, but this was not the original idea. The same happened among other nations. Cf. Cohen, *The Teachings of Maimonides*, p. 70. Even David calls the elements angels. "Who makest thy angels winds; and thy ministers a burning fire", Ps. CIII, 5.

60 Sircar, *Mysticism in Bhagavat Gita*, pp. 146-157.

their work depend the fruits of all human activities concerned with production in all its branches".[61]

IV. Equality of Nature between Angels and Demons

The equality of nature between the angels and the demons is one of the clearest points in Indian angelology. The demons, at least from the period of the *Brāhmaṇas*, are generally called *asuras*.[62] "The asuras", says Keith, "also are more probably to be taken as the powers of darkness than as men".[63] Thus we read in one of the *Saṁhitās :* "Prajāpati created the *devas* and the *asuras*".[64] That this mention of both together meant equality of nature, and not only equality of origin, is explained by a *Brāhmaṇa* and indeed of another school : "At first the *devas* were all alike, all good".[65] The first two words of this text, "at first" clearly suggest that this equality among all the *devas* did not last long; and consequently that some of these *devas* who "were all alike", *afterwards* became *different*, i.e. were turned into *asuras*, as the full text clearly shows. Hence when the former text avers that the *devas* and the *asuras* were all created by Prajāpati, it means that all were created alike, having no difference among themselves, all endowed with the same high nature.

It is furthermore stated that both the *devas* and the *asuras* received from God a certain grace, which is not qualified : "The *devas* and the *asuras* both of them sprung from Prajāpati, entered upon their father Prajāpati's inheritance".[66] It is therefore evident that the *devas* and the *asuras*, both being equal by nature were likewise equally treated by God in the very beginning, without establishing any difference among themselves.

What was the cause of the difference that arose at a later period ?

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[61] *Sanātana Dharma*, pp. 74-75. Even the *Apocalypse* speaks of the angel "*qui habebat potestatem supra ignem*" (XIV, 18). That all the visible things have always an angel who presides over them is opinion of St. Augustin (*Liber quaestionum* LXVIII, 71, 1 : Migne, *P.L.*, XL, col. 00); Andreas Caesariensis (*In Apocalypsim*, c. 43); St. Thomas Aq., (*Summa Theologica*, I, q. 110, a. 1, in corp.); Eckhart (*Super Oratione Dominica*, in *Opera Latina*, I, p. 56); El Tostado, (*In Matheum*, XVIII, q. 57). About this opinion St. Thomas says : "This opinion is common not only among the saintly Doctors, but even among all authors who acknowledge the existence of incorporeal substances" (*Loc. cit.*) Cf. Aristotle, *Metaphysics*, XXII, 44.

[62] Keith, *op. cit.*, I, p. 75. Cf. Macdonell, *Vedic Mythology*, p. 156 ff.

[63] *Ibid.*, I, p. 131. The word *asura* has had several meanings in Sanskrit literature. In early *Ṛgveda* it meant "powerful", "strong". Thus Indra and other devas are called *asuras*. When it was adopted to mean the evil angels, the word had the general meaning of "enemy". Thus in some cases asura was synonimous for Dravidian when the Āryas were styled *devas*, as in the myth of the Kūrmāvatāra. In this later period the *devas* were also named *suras*, in opposition to *asuras*.

[64] *Taittiriya Saṁhitā*, III, 3, 7.

[65] *Śatapatha Brāhmaṇa*, IV, 5, 41. This Brāhmaṇa belongs to the White School of the *Yajurveda* while the *Taittirīya Saṁhitā*, quoted above, is of the Black School.

[66] *Ibid.*, IX, 5, 1, 16.

V. A Period of Trial for all the Angels

During the period that preceded the great upheaval about which we shall speak presently, the *devas* seem to have undergone a trial, the end of which was not the same for all. We read to this effect : "They say that the *devas* and the *asuras* (i.e. those who had to become *asuras*) strove together. Truly, the *devas* and the *asuras* did not thus strive together".[67] This striving is evidently the subjective effort to reach a success in the trial. The text says that they strove together, i.e. all strove at the same time, in the same trial, unitedly as it were; but suddenly the writer, as if checking himself, says : No, this is not correct; they did not strive together, for their efforts were different, they strove in opposite directions and consequently their success was not the same either. We have here clearly outlined the period of trial and the contradictory result at the end of that period.

More explicit still is a somewhat earlier text, in the midst of a protracted symbolism.

"The *devas* and the *asuras*, both of them sprung from Prajāpati, entered upon their father Prajāpati's inheritance, to wit, speech—truth and untruth, both truth and untruth : they, both of them, spake the truth, and they both spake untruth: and, indeed, speaking alike, they were alike. The *devas* relinquished untruth, and held fast to truth, and the *asuras* relinquished truth, and held fast to untruth. The truth which was in the *asuras* beheld this, and said, 'Verily, the *devas* have relinquished untruth, and held fast to truth: well, then, I will go thither'. 'Thus it went over to the *devas*. And the untruth which was in the *devas* beheld this, and said, 'Verily, the *asuras* have relinquished truth, and held fast to untruth: well, then I will go thither'. 'Thus it went over to the *asuras*. The *devas* spake nothing but truth, and the *asuras* nothing but untruth'.[68] In this text the period of trial is definitely marked in a symbolical manner. While it lasted, all *devas*, both those who were going to remain faithful (*devas*) and those who were going to fail (*asuras*) could speak truth or falsehood, i.e. adhere to virtue or commit a sin. Some of them did the former, others the latter. Here the text introduces truth and falsehood personified, following their respective votaries and remaining with them for good. The result of it was that the *devas* could not in future speak but truth, and the *asuras* but falsehood.[69] This final result evidently puts an end to the

[67] *Jaiminīya Upaniṣad Brāhmaṇa*, II, 4, 1 ; *Jaiminīya Upaniṣad*, II, 10, 1.

[68] *Śatapatha Brāhmaṇa*, IX, 5, 1, 12-16.

[69] According to ancient Indian Philosophy any sin is a lie in practice, for it places the sinner in a false plane of independence from God. In the same way Our Lord Jesus Christ describes the devil in almost the same lines as the above Indian text : "*Ille homicida erat ab initio et in veritate non stetit, quia non est veritas in eo; cum loquitur mendacium, ex propriis loquitur quia mendax est et pater ejus.*" *Joann.*, VIII, 44. Though he was created in the sphere of truth, as St. Isidore says : "(*Diabolus*) *in veritate conditus, sed non stando, confestim a veritate est lapsus*". *Sententiarum*, I, 10, 7. Porphyrius says of the demons : "*Mendacium ipsis proprium est. Cupiunt enim dei haberi : et quae praesidet ipsis potestas, videri deus esse maximus vult*". *De abstinentia*, II, 42, (ed. Didot).

period of trial, for in future the *devas*, always speaking truth, could not commit any sin.

The *Avesta* of Persia also seems to suggest the same period of trial. In Zoroastrian literature the word *daivas* or *devas* is applied to the demons. Now it is said of them, that they "chose" the wrong side "for infatuation came upon them as they took counsel together so that they chose the worst thoughts".[70] The verb "choosing" seems to suppose a time where they could choose that way or another. Rightly therefore says Moulton that this verb "suggests distinctly that they 'kept not their first state'."[71] Hence they had undergone a trial, in which they had not been successful.

VI. The Rebellion of the Angels.

The end of that period of trial, during which there was no difference between *devas* and *devas* is always marked by a wrong deed committed by some of them. The general enunciation that the *asuras* spoke only falsehood is realised concretely in other texts. One says : "Originally the devas were all alike all pure. Of them, being all alike, all pure, three of them desired : May we become superior".[72] We have here a generic sin of pride mentioned as the cause of their rebellion.[73] This is the only text that refers to three *devas* as committing this sin; other texts are more general.

In the following one the generic sin of pride is mentioned more specifically. "The devas (once upon a time) did not acknowledge that Indra had the right of primogeniture and leadership".[74] The sin of the *devas* as a whole apparently directed against the first-born of the Almighty; but this was not Indra, who was only one of the *devas*. Yet the fact that he took the leadership against the rebels, as we shall see presently, may have been the cause of this confusion.[75] Consequently the *devas* did not want to acknowledge the authority of the first-born of God. Who was this ? He is indifferently called Vāc, "the Word" and Hiraṇyagarbha, "the Golden Seed", generated "the first of all",[76] "who was engendered in the beginning",[77]

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70 *Gāthas*, Yasna XXX, 5.

71 Moulton, *Early Zoroastrianism*, p. 307.

72 *Śatapatha Brāhmaṇa*, IV, 5, 4, 1.

73 "*Ipse est rex super omnes filios superbiae*". *Job*, XLI, 25. "I will ascend above the height of the clouds ; I will be like the Most High". *Is.*, XIV, 14. "The proud angel who turned from God to himself, not wishing to be a subject, but to rejoice like a tyrant in having subjects of his own." St. Augustine, *De Civitate Dei*, XIV, 11, 1 "*Lucifer in via per superbiam peccavit*". Suarez, *De Angelis*, VII, c. VIII, p. 843 (Vives ed.). "*Angelus absque omni dubio peccavit appetendo esse ut Deus*". St. Thomas Aquinas, *Summa Theologica*, I, q. 63, a 3.

74 *Aitareya Brāhmaṇa*, IV, 4, 25.

75 The confusion concerning Indra is also found in other texts, which will be studied later.

76 *Śatapatha Brāhmaṇa*, VI, 1, 1, 8.

77 *Śvetāśvatara Upaniṣad*, V, 2.

"a second to Him",[78] "before the *devas*".[79] Accordingly the authority of Vāc seems to have been defied by the rebellious *devas*.

Some other texts speak symbolically of this rebellion, though mentioning an outstanding evil *deva* by name : "The *asura* Svarbhānu struck the Sun with darkness. The *devas* desired an atonement for him".[80] The fact that the *devas* wished an atonement for Svarbhānu shows that he had actually committed a sin. The effect of this sin is expressed by the symbol of striking the Sun with darkness, a most appropriate symbol, for any sin is a spreading of darkness in the universe, and a sin committed in heaven may be properly described as an attempt to darken the face of the Sun itself.

There is still a third series of texts which refer to another rivalry among the *devas*, a text which may reflect a new aspect of this great conflict. It is narrated that there existed among men three brothers named Ṛbhus who were excellent artisans. Impressed by their reputation and skill, the *devas* deputed Agni to order them to fashion out of the cup of the *devas*, four others like it. They immediately accomplished their work. The *devas* were so pleased that they searched for the Ṛbhus in the world of men, and having finally succeeded they introduced them to the company of the *devas* themselves, where they found the reward of their industry. But not all the *devas* were satisfied. There was one called Tvaṣtar who was deeply overcome by jealousy. Tvaṣtar was, undoubtedly, one of the highest *devas*, since he is called *Bhuvanasya sakṣaṇi* which means "Companion of the creation". But Tvaṣtar had also been the workman of the *devas* and the cup out of which the Ṛbhus made four cups had been his own masterpiece. He was therefore infuriated against them.[81] Moreover it is recorded that some *devas* abhorred the Ṛbhus "on account of their human smell".[82] We have here therefore the cause of a conflict between, on the one side, the *devas* who hated the Ṛbhus owing to their being men originally, all led by Tvaṣtar, (also moved by personal jealousy) ; and, on the other side, the *devas* who invited the Ṛbhus to their company, at whose head was Indra, who is described as their greatest friend.[83]

We have in this mythological story all the elements that produced the outbreak : a division of opinion between two bands of *devas* caused by the fact that some did not want the company of the men who had been received among

[78] *Pañcaviṁśa Brāhmaṇa*, XX, 14, 2.

[79] *Vājasaneyi Saṁhitā*, XXXI, 20.

[80] *Taittiriya Saṁhitā*, II, 1, 1.; *Pañcaviṁśa Brāhmaṇa*, IV, 5, 2; IV, 6, 13; VI, 6, 8; XIV, 11, 14. The name Svarbhānu means "the Bright Sun". There seems to exist a striking similarity between the meaning of this name and of the name of Lucifer.

[81] *Ṛgveda*, I. 110, 2-4; 161, 1-5 ; II, 31, 4 ; III, 60, 2 ; IV, 33, 5-6 ; 36, 4. Cf, Nève, *Essai sur le Mythe des Ribhavas*.

[82] *Aitareya Brāhmaṇa*, III, 3, 30.

[83] *Pañcaviṁśa Brāhmaṇa*, XIV, 2, 5.

them. The modern Hindu interpretation acknowledges the existence of the element "man" in the original story, though interpreted in a rationalistic way. "The devil," says a modern author, "was the highest of the gods ; he wanted to assert himself, to augment himself all at once, but God wanted him to wait and achieve his object through Time—Space—Causation. God ordered him to bow to Man=Time—Space—Causation. He would not ; he rebelled ; hence he was banished to the Nether Regions, from where he issues out in conflict."[84]

VII. The Fight between the Good and the Evil Angels.

The battle between the *devas* and the *asuras* is in a very ancient text briefly but unmistakably described. "The devas and the asuras were in conflict.... The *devas* having defeated (the *asuras*)....;"[85] or "The *devas* and the *asuras* were in conflict.....That was the highest victory that the *devas* won over the *asuras*."[86]

In the Brāhmaṇic period the description of the battle is enlarged and becomes, as it were, an intellectual battle, i.e. in a spiritual sphere : "The *devas* and the *asuras* contended. The *devas* sang the *udgītha* with the mind. The *asuras*, running against this (mind) of them mixed with evil.....The *devas* sang the *udgītha* with breath. Then the *asuras* ran against it thinking : We will treat it in the same manner. As a clod of earth colliding with a stone would break to pieces, even so the *asuras* broke to pieces."[87] In another *Brāhmaṇa* the battle is more spectacular : "The *devas* went to war with the *asuras* in order to defeat them.....Having taken the shape of three rows, (they) attacked the *asuras* in three battle lines in order to defeat them....They defeated them beyond expectation. Then the *devas* put down the *asuras*. The enemy, the incarnate sin (*pāpman*), the adversary of him who has such a knowledge, perishes by himself."[88]

In this text a new element has been introduced which is of great importance. One *asura* has been singled out, and is called "the enemy, the incarnate sin." He seems to be the leader of the *asuras*, perhaps he who was named Svarbhānu in a text quoted before. Another later text says of him : "The enemy, the evil one, who hates him (Brahman) is defeated."[89]

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[84] Singh, *Secrets of Spiritual Life*, p. 25.

[85] *Taittiriya Saṁhitā*, I, 5, 1. Fr. Fenicio, S.J., an old missionary of Malabar, saw the battle between the good and evil angels in the fight between the *devas* and *asuras*. *Livro da seita dos Indios, Orientais*, pp. 153-154. The same has in modern times been realised by Mgr. de Broglie, *Problèmes et Conclusions de l' Histoire des Religions*, p. 55.

[86] *Ibid.*, II, 42 or II, 4, 2.

[87] *Jaiminiya Brāhmaṇa*, I, 60, 1-7. In the Upaniṣadic period this description is much enlarged without adding any new element. Cf. *Bṛhadāraṇyaka Upaniṣad*, I, 3, 1-7; *Chāndogya Upaniṣad*, I, 2, 1-8.

[88] *Aitareya Brāhmaṇa*, III, 4, 30.

[89] *Aitareya Āraṇyaka*, II, 1, 7.

In the same way another leader of the *devas* appears in the opposite camp. He is Indra, "the Lord of hundreds,"[90] "mighty conqueror of hostile armaments,"[91] "who hates the high and haughty,"[92] "chief deva of lofty spirit by power and might became God's protector,"[93] often spoken of as "the favourite son of Prajāpati."[94] Even later non-Vedic works praise him above the skies : "The wise Deva, who immediately on his birth became foremost and who surpassed other *devas* in strength, at whose breath heaven and earth tremble on account of the greatness of his might."[95] "By earnestness did Maghavan (Indra) rise to the lordship of the *devas*."[96]

All these texts not only emphasize the great strength and power of Indra, but also the magnificent effort he made in favour of God's authority, with an evident allusion to his fight against the *asuras*. Thus Indra in the *Ṛgveda* has some characteristics similar to Varuṇa which is there the name of the Supreme Being. "These two personalities," says Barth, "coincide in many respects. There is however this difference between them, that Indra has, above all, appropriated the active and, so to speak, militant life of heaven, while Varuṇa represents rather its serene, immutable majesty."[97]

This Varuṇa of the *Ṛgveda* becomes Prajāpati at a later period. Indra on the contrary, is depicted as a humble, submissive subject of Prajāpati, by whose power, he defeats the enemy. "Indra had recourse to Prajāpati, to him he gave these victories ; he offered them ; then indeed were the *devas* victorious over the *asuras*."[98] "Prajāpati bestowed victories on Indra the strong, he who is dread in battle and contest."[99] This power given by Prajāpati to Indra has been symbolised twice in an individual weapon, in the *Ṛgveda*. On one occasion it is said that Tvaṣtar has wrought "a celestial thunderbolt for him."[100] When Indra realised the might of his enemy, the leader of the rebellious *asuras*, he is said to have feared him. "He ran up to Prajāpati (saying) 'A foe has sprung up for me.' He (Prajāpati) dipped his bolt and gave it to him (saying) : 'Slay with it.' He went against him with it."[101] In

90 *Ṛgveda*, VI, 47, 9.

91 *Ibid.*, VIII, 37, 2.

92 *Ibid.*, VI, 47, 16.

93 *Ibid.*, II, 12, 1. He is styled *śatakratu*, "of a hundred powers". Cf. Keith, *The Religion and Philosophy of the Veda and Upanishads*, I, p. 126.

94 *Nirukta*, X, 10. Cf. *Atharvaveda*, XX, 34, 1.

95 *Dhammapada*, II, 30.

96 *Śatapatha Brāhmaṇa*, II, 2, 10, 1; *Pañcaviṁśa Brāhmaṇa*, XVI, 4 ff. ; *Taittirīya Brāhmaṇa*, II, 2, 10, 1.

97 Barth, *The Religions of India*, p. 16.

98 *Taittirīya Saṁhitā*, III, 4, 4.

99 *Ibid.*

100 *Ṛgveda*, I, 32, 3.

101 *Taittirīya Saṁhitā*, II, 5, 2.

another text it is Vāc himself, the Word of God, who gives him a bow, "that his arrow may strike the hater of Brahma."[102]

The fight of Indra against the *asuras*[103] culminates in the slaying of their leader Vṛtra, which is Indra's most heroic deed, mentioned a thousand times in all Vedic works. Thus Vṛtra becomes the leader of the opposition, he who was called Svarbhānu in other texts. In this gigantic enterprise Indra, at one time, fights alone, at another, he is helped by the Maruts, Viṣṇu and other *devas*. Vṛtra, who is generally depicted as, and called, a serpent, Ahi, lies in the deep darkness of mountains keeping in with his coils the streams of waters. According to different versions Indra strikes Vṛtra on his back, or smites his face, or pierces his vital parts, by his hurling a thunderbolt at him. Vṛtra, who is also named Ahi and Suṣṇa, is surrounded by a crowd of other monsters. The final result is the slaying of the monster.[104] On account of this Indra is always honoured with the title of 'Slayer of Vṛtra'[105]

It may be objected that Lucifer was not actually slain by St. Michael, as the Angels are naturally immortal. But the slaying of Vṛtra is only symbolical: it refers to Vṛtra's spiritual death. In the same strain it is said in the Prophecy of Daniel with reference to Lucifer or Satan: "And I saw that the beast was slain, and the body thereof was destroyed, and given to the fire to be burnt."[106]

This successful end of the fight for the defenders of the cause of God is reflected in a statement of the *Ṛgveda*, concerning the security of Varuṇa's

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[102] *Ibid.*, X, 125, 6. In this text nevertheless instead of Indra, Rudra's name appears. This is the only time that Rudra is introduced in this story of the Fall of the Angels. I take it, nevertheless, that this is a mistake for Indra: First, because of the evidence of the passage itself: "the hater of Brahma" cannot but be the leader of the *asuras*, who must be struck by order of Vāc. Secondly, because of the natural confusion between Indra and Rudra, the former being in charge of rain and the latter of the storm. In the same way Vṛtra, who is in the Veda the leader of the *asuras*, the hater of Brahma, and who is defeated and slain by Indra, is in other places said to be slain by other *devas*, for instance Agni or Soma. Such phenomena of syncretism are not uncommon in the Veda. Cf. Keith, *op. cit.*, I, p. 127.

[103] "Indra est le plus terrible ennemi des démons. Il est en guerre perpétuelle avec eux. Sans répit il les chasse et les poursuit; sans pitié il les anéantit". Guérinot, *Recherches sur l'origine de l'Idé de Dieu*, p. 250.

[104] *Ṛgveda*, I, 32, 8, 10; 61, 8-10; II, 12, 3; 13, 5; III, 30, 5; 33, 6; VI, 30, 4; *Pañcaviṁśa Brāhmaṇa*, VIII, 8, 9; XIV, 4, 5; XVIII, 5, 2; 9, 6; 11, 1, etc.

[105] *Ṛgveda*, I, 16, 8; 32, 11; 84, 3; 100, 18; 186, 3; II, 1, 11; 3, 1; 13, 5; 19, 3; III, 20, 4; 30, 5; 52, 7; IV, 30, 1; VI, 16, 48; 30, 4; 45, 5; 47, 6; VIII, 67, 7; 82, 15-16; *Vājasaneyi Saṁhitā*, VIII, 33; *Pañcaviṁśa Brāhmaṇa*, IX, 10, 1; *Mahābhārata*, Vana Parva, 1511, etc. Cf. Bergaigne, *La Religion Védique*, II, pp. 196ff. Vṛtra seems to be the Verethraghna of the *Avesta*. This victory of Indra over Vṛtra is the cause of his being invoked by the Vedic *ṛṣis* to obtain his help in their battles against the Dāsas. All the theories deviced to explain the story of Indra and Vṛtra as a natural phenomenon have proved unsatisfactory. Cf. Keith, *op. cit.*, I, pp. 126-127. There cannot be any doubt about the nature of Vṛtra. In the epic he is styled "the excellent Deva". He was therefore a *deva* who had become an *asura*. Cf. *Mahābhārata*, Śānti Parva, CCLCXXXI—CCXXXI In the *Pañcaviṁśa Brāhmaṇa* the enemy of Indra is called Namuci, whose head he cut off "at dawn", i.e. in the beginning of time (XII, 6, 8). Fr. Fenicio calls him Chupaga or Chirpaga. *Livro da Seita dos Indios Orientais*, pp. 152-153.

[106] *Dan.*, VII, 11.

power and kingdom. He is styled "the god whom enemies threaten not."[107] That is the reason why Barton states that "in India the struggle between the God and the demon is and will always remain an unequal one,"[108] for God is triumphant *a priori*.

Some texts speak of the feelings of the other *devas* during Indra's combat with Vṛtra. It is first of all recorded that "the *devas* were afraid lest the Sun should fall down from the world of heaven."[109] This feeling of fear is especially recorded during the struggle when the snorting of Vṛtra especially frightened them and they ran away leaving Indra alone. "When with terror all the *devas* shrank from the Dragon's furious might, fear of the monster fell on them."[110] This is also said in the case of the fight against Tiamat in Babylon.[111] Yet in the case of India this is expressly denied in the *Ṛgveda* when it is said that "the *devas* stood firm (*atiṣṭha*), each enlinked with the other (*susaṁrabhda*), during that calamity, when the pungent dust (*tīvra reṇu*) arose as it were from the feet of dancers (*nṛtyatām*)."[112] In point of fact it is even said in early Vedic literature that all "the *devas* had slain Vṛtra."[113]

Yet in Indian *smṛti* (tradition) another parallel story of this fight appears, which in some way is linked with that of Vṛtra. It is narrated that when the rebellion of the *asuras* took place, let their leader be named Tāraka, Mahiṣāsura or any other name, Śiva (God)[114] was in need of a son to oppose the evil one. It was then that Kārtikeya was born.[115] When Indra heard that Śiva's son was born to defeat Tārakāsura "he was troubled thinking that his kingdom was taken away from him" ; but, he recovered his peace of mind when he heard Śiva saying to his son Kārtikeya : "Thou wast born in order that thou mightest slay Tāraka and protect the realm of Indra. Therefore, do your own duty." Skanda received from Agni a weapon of extraordinary efficiency in his combat with the *asuras*. It is called *śakti*. It possessed great lustre and seemed to blaze with light ; when during the conflict Skanda repeatedly hurled this blazing missile, meteors and thunderbolts dropped upon the earth

107 *Ṛgveda*, I, 25, 14.

108 Barton, *The Religions of India*, p. 13.

109 *Pañcaviṁśa Brāhmaṇa*, IV, 5,9.

110 *Ṛgveda*, VIII, 82, 14.

111 Cf. Sayce, *Lectures on the Origin and Growth of Religion*, pp. 102-103.

112 *Ṛgveda*, X, 72, 6.

113 *Taittirīya Saṁhitā*, II, 5,2.

114 In the philosophical works of India God is always named as Brahma, Iśa or Iśvara ; but in the *Mahābhārata* and the Purāṇas, when the philosophical religion of India is becoming mythological, God is generally styled Śiva, at times also Viṣṇu. In the former case, the Vāc of the Vedic period, also becomes Kumāra, Skanda, Śakra, Subramaṇya, Sanatkumāra or Kārtikeya, which are all different names of Siva's son.

115 Kālidāsa, the great Sanskrit poet of the 5th century A.D., composed one of his *mahākāvyas*, *the Kumārasambhava* based on this tradition.

and millions of darts came out of it. Thus Skanda reduced millions of *asuras* to ashes and finally killed Tārakāsura, their leader.[110]

There seems therefore to be some connection between the Son of God and the rebellion of the *asuras*. What this real connection was it is difficult to say. In preceding texts it is the Word of God who holds the weapon to Indra to destroy the *asuras*. Here it is the Son of God Himself who is deputed to fight the *asuras* and to uphold the kingdom of Indra. There is an evident confusion of terms from the original tradition.

This confusion grows round the person of Indra in other texts.

VIII. The Corruption of the Original Tradition

It is indeed strange that Indra, the great Deva who becomes the leader of those who defend the honour and sanctity of God, in later traditions takes on a doubtful character, one who looks after his own glory. That is finally the reason why he is depicted as jealous of the authority of the Son of God and is not satisfied till he hears from God Himself that the Son of God will make his realm safer and steadier. That text quoted above makes Dr. Ananda K. Coomaraswamy state that "Indra is an angel jealous of his throne",[117] without considering the earlier texts.

Proceeding further in this direction, in other texts he is described as fighting against the heavenly powers, and it is only by theft or bribery that he gets possession of the heavenly *soma* (ambrosia), which was originally Varuṇa's own property and was watched over by the Gandharva Viśvāvasu, otherwise named Kṛśānu.[118] In particular, he is shown fighting with Skanda himself, Śiva's son. He is said to have hurled a thunderbolt on the Son of God, with which he pierced his right side ; but out of the wound a golden youth named Viśaka issued. At the sight of this phenomenon Indra realizes the superiority of Skanda, garlands him and proclaims him generalissimo of the heavenly army for the destruction of the Dānavas or *asuras*.[119] This tradition, which evidently flowed through the wrong channel, comes back again to the original source confessing the unity of action between Indra and Skanda.

More distorted still is another myth according to which Indra, after having slain Vṛtra and won the victory in various battles, said to Prajāpati : "I

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[110] *Mahābhārata*, Vana Parva, 14311-15 ; 14402 ; 14308-86 ; 14423-28 ; 14520-14627 ; Śalya Parva, 2465-61 ; 2498 ; 2523 ; 690-94 ; Śānti Parva CCLXXXI—CCLXXXII ; Anuśāsana Parva, 4212-14; *Mātsya Purāṇa*, CLIII-CLX ; *Skanda Purāṇa*, XX-XXIX ; *Kathā Sarit Sāgara* (Tawney's trans.). I, p. 5 ; II, p. 102.

[117] Coomaraswamy, *A New Approach to the Vedas*, p. 107.

[118] *Rgveda*, IV, 27, 3 ; 30, 3-5.

[119] *Mahābhārata*, Vana Parva, CCXXVI, 15-16 ; CCXXVIII, 22-23.

will have thy rank, that of the supreme deity ; I will be great !" Prajāpati, consequently said : "Who am I".[120] Thus Indra is depicted as a second Svarbhānu, in open rebellion against God. Totally different from this, but for practical purposes as far as this from the original tradition, is the legend narrated in the same *Taittirīya Saṁhitā*, according to which Indra does not kill Vṛtra, but concludes a compact with him[121] co-operating as it were, with his evil intentions.

On the other hand some more ancient Vedic texts depict Indra as being sorry for having defeated the *asuras* and doing penance for that action, as if it were a sinful deed. It is related of Indra that, after having slain Vṛtra, "like a scared falcon, he fled to the depths of space across and beyond the nine and ninety rivers." The *devas* sought him to bring him back. Prajāpati told them : "He who first finds him will have the first share." The Pitṛs (ancient ancestors gone to heaven) actually found him. The *devas* met him saying : "Our treasure dwells at home today," "for Indra is supposed to be the treasure of the *devas*."[122]

It is not strange therefore that Coomaraswamy after the study of all these spurious and contradictory traditions, and without considering the original one recorded in so many ancient texts, would have written this final opinion of Indra : "He must be regarded as a personification of the *ego*-principle, *aham, abhimāna.* That *ego*-principle in Deity, set up as an independent person and usurping many of the divine functions, could have developed only as (1) the king of an inferior heaven, or (2) as a demon deliberately laying claim to the supreme throne. The latter development seems to have taken place in Christianity, in the case of Lucifer-Satan, and likewise in the *Avesta*, where Indra and *daeva* are demoniac powers".[123] All this only emphasises the importance of starting the study of these ancient traditions from the correct viewpoint.

IX. Final Punishment of the Asuras

We have already said that Vṛtra is also called Ahi in the Veda.[124] Ahi means "dragon" or "serpent." This is the first manifestation of a substantial change in Vṛtra. The leader of the *asuras* is named Svarbhānu, before his fall, which, as we said before, means "Bright as the Sun" meaning that on account of his spiritual nature's close similarity to that of God, he shone

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120 *Aitareya Bhāhmaṇa*, III, 2, 21.
121 *Taittirīya Saṁhitā*, II, 4, 12.
122 *Ṛgveda*, I, 32, 14 ; *Taittirīya Saṁhitā*, II, 5, 3 and 11. Cf. VI, 5, 5, 2.
123 Coomaraswamy, *op. cit.*, p. 74.
124 Cf. de la Vallée Poussin, *Le Védisme*, p. 92, note 2.

as the Sun itself. Now he has become a serpent or dragon. So is Apep depicted in Egypt. He also rebelled against God and is fastened to the earth by the "hidden hand."[125] Again the enemy of God who fights against him, among the Hittites, is named the serpent Illujanka.[126] Maximus Tyrius narrates a fearful conflict between Cronos and the dragon Ophioneus for the lordship of nature, in the beginning of creation. Only when Cronos wins and the dragon is cast into the sea can Zeus set about his creative task.[127] Tiamat who fights against God in the Babylonian cosmogony is again depicted as a dragon in the stone monuments.[128] Our Vṛtra must be similar to Tiamat, for in a Vèdic text he receives a similar name, "the black serpent, the Taimāta, the brown serpent, the poison that is not fluid."[129] In these epithets the quality of darkness is emphasized to establish the contrast with his primitive brightness.

Now this dragon that was Vṛtra is said to be "the Dragon of the Deep" *Ahi Budhnya*.[130] His dwelling therefore is not "above", with the *devas* ; he is not "a heavenly one" any more. His dwelling is in the deep, consequently the furthest spot from heaven. What the nature of this deep be may be gathered from the very text we mentioned just now concerning Taimāta. The latter is said to be "the daughter of Urugūlā, the evil one born with the black of all those who have run to their hiding-place".[131] The deep therefore is a hiding place where the *asuras* have run to cover their shame from the sight of the whole universe. In the Accadian language this place is called Urugala, which means "the great city" and denotes the great Nether World.[132] This is, so we understand, to be taken in a moral sense rather than in a physical one. It refers more to the worsening of their nature than to the place itself where they ordinarily live.

This idea of inferiority, of lowering their natural state, of degradation among all other creatures is also clearly implied in the Gospel phrase : "I saw Satan as a lightning fall from heaven;"[133] or when the author of the *Imitation of Christ* says : "The stars of heaven fell down."[134]

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[125] See paintings in the sarcophagus of Seti I. Cf. Wallis Budge, *The Teaching of Amen*, pp. 111-112.

[126] Delaporte, *Les Hittites*, p. 251.

[127] Maximus Tyrius, *Dissertationes*, XXIX, p. 304 (Davies ed.). Cf. Origen, *Contra Celsum*, VI, 42-43 : MG, XI, col. 1360-1, 1364. Philo of Byblos suggests that this story is borrowed from the Phoenicians. Cf. Eusebius Caesariensis, *Praeparatio Evangelica*, I, 10, 33.

[128] Cf. Jastrow, *Civilization of Babylonia and Assyria*, pl. XXX ; Barton, "*Tiamat*", *J. A. O. S.*, XV, p. 1. ff. This author identifies Tiamat with the Dragon of the *Apocalypse* XII, 13 ; XVII, 8, etc., which is finally said to be Satan. *Ibid.*, pp. 26-27.

[129] *Atharvaveda*, V, 13, 6. Taimāta was long ago identified with Tiamat by Lokamanya Tilak in *Bhandarkar Commemoration Volume*, pp. 34ff.

[130] *Rgveda*, X, 92, 12 ; *Taittiriya Saṁhitā*, I, 3, 3.

[131] *Atharavaveda*, *loc. cit.*

[132] Jensen, *Kosmologie der Babylonier*, pp. pp. 217-222.

[133] *Luke*, X. 18.

[134] *Imitation of Christ*, III, 14. "(The devil) being a most noble angel and prince of the first order and the most excellent of God's creatures, was notwithstanding presently cast down from heaven." St. Gregory the Great, *Moralium*, XXXIII, 24.

This lowering of the status of the *asuras* and in particular of their leader after their sin was well understood and vividly expressed by Fr. Nicholas Pimenta, a Jesuit Visitor of India towards the end of the 16th century, though he mistook the name and condition of the leader : "It was said," he writes, "that Hanumān was a god (*deva*), but owing to some sin committed by him, he was converted into a monkey with many other thousands of *devas*."[135]

X. The Reward of the Devas

The rebellion of the *asuras* occurred during the period of trial of all the *devas*. According to Indian tradition the triumph of the faithful *devas* over the *asuras* ended this period of trial, for after the asuric defeat the *devas* are spoken of as receiving their reward. "O Indra, thou hast filled mid-air's wide region, and given the *devas* by battle room and freedom."[136] The victory of Indra therefore won room in "mid-air's wide region" for the *devas*, that is heaven; and that for good, as they were already in heaven before, and they will not be disturbed by fear of losing it at any time, which is the meaning of that freedom. The victory therefore placed them in the possession of their eternal reward.

This immunity from change with assurance of ever being associated with God in life everlasting is recorded beyond doubt : "Verily that God having struck off the evil, (i.e.) death, of those *devas*, carried them beyond death."[137] Just as Vṛtra is said to have been slain, for the life of grace was lost to him for good, in the same way the *devas* were carried beyond death, for they could not lose that spiritual life any more.

This full attachment of the *devas* to God is explained in contrast with the godless life of the *asuras*. (In Sanskrit the word *satya* means both existence and truth, and is rightly applied to God himself who is *satyasya satyam*, "the truth of truths, the Supreme Truth," "the Reality of realities"). It is therefore said of the period of probation that both the *devas* and *asuras* spoke truth and falsehood, *satya* and *asatya*. "Speaking alike, they were alike. Then the *devas* abandoning falsehood, adopted truth ; while the *asuras* abandoning truth adopted falsehood. . . . The *devas* then spoke entirely truth and the *asuras* entirely falsehood."[138] On this account it is also said of the *devas* that "they keep one law, namely, *satya*;"[139] and even that "they are *satya*."[140] Elsewhere also the devas are styled "Lords of truth and *ṛta* knowing."[141] (*Ṛta* is the eternal uncreated Law, which in the *Ṛgveda* is identified with God himself).

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135 Letter of Fr. Nicholas Pimenta to Fr. Claude Aquaviva, Goa, 21 December 1599 ; *Lettres du P. Nicolas Pimente*, pp. 36-37, Hanumān, a well known figure in the story of the *Rāmāyaṇa*, has nothing to do with the sin of the angels.

136 *Ṛgveda*, VII, 98, 3.

137 *Bṛhadāraṇyaka Upaniṣad*, I, 3, 11.

138 *Śatapatha Brāhmaṇa*, IX, 5, 1, 12-13 and 16.

139 *Ibid.*, I, 1, 1, 5 ; III, 4, 2, 8.

140 *Ibid.*, III, 9, 4, 1.

141 *Atharvaveda*, XIX, 11, 5.

This knowledge of *ṛta*, that is, of God, was to be their eternal reward in heaven ; this is perhaps the reason why it is said that "the *devas* in going to the world of heaven were afraid of ignorance"[142] i.e., were afraid lest they should not understand fully the subject of their knowledge, i.e. God. In fact another text depicts the *devas* saying to one another : "Come ! Let us search out that Self (Ātman =God,) the Self by searching out whom one obtains all world and all desires ! ".[143] This knowledge did the *devas* fully obtain ; hence it is said : "Verily the *devas* who are in the Brahma world reverence the Ātman".[144]

Part of this reward of the *devas* is the exaltation of Indra as the Supreme Prince of the heavenly host. His *mahābhiṣeka* (anointing ceremony) is described at length with an extraordinary richness of details. It is as follows :

"The *devas*, headed by Prajāpati, said to one another (pointing with their hands to Indra): "This one is among the *devas* the most vigorous, most strong, most valiant, most perfect, who carries best out any work (to be done). Let us instal him (to the kingship over us)." They all consented to perform this ceremony (*mahābhiṣeka*) on Indra. They brought for him that throne-seat, which is called the Ṛg-formed.....They made Glory its covering, and Fortune its pillow, Savitar and Bṛhaspati were holding its two fore-legs, Vāyu and Pūṣan the two hind-legs, Mitra and Varuṇa the two top-boards, the Aśvins the two side-boards.

"Indra then ascended the throne-seat, addressing it thus : "May the Vasus ascend thee with the Gāyatrī metre, with the Trivrit Stoma, with the Rathantara Sāma. After them I then ascend for obtaining universal sovereignty. May the Rudras ascend thee with the Triṣṭubh metre, the fifteen-fold Stoma, and the Bṛhat Sāma. After them then I ascend for obtaining increase of enjoyment. May the Ādityas ascend thee with the Jagatī metre, the seventeen-fold Stoma, and the Vairūpa Sāma. After them I ascend for obtaining independent rule. May the Viśvedevāḥ ascend thee with the Anuṣṭubh metre, the twentyone-fold Stoma, and the Vairāja Sāma. After them I ascend for obtaining distinguished rule. May the divine Sādhyas and Aptyas ascend thee with the Paṅkti metre, the Triṇava (twentyseven-fold) Stoma, and the Śākvara Sāma. After them I ascend for obtaining royal power. May the divine Maruts and Aṅgiras ascend thee with the Atichandas metre, the thirtythree-fold Soma, and the Raivata Sāma. After them then I ascend for obtaining the fulfilment of the highest desires for becoming a great king, for supreme mastership, independence, and a long residence." By these words one should ascend the throne-seat.

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142 *Pañcaviṁśa Brāhmaṇa*, V, 7, 11.
143 *Chāndogya Upaniṣad*, VIII, 7, 2.
144 *Ibid.*, VIII, 12, 6.

"After Indra had seated himself on this throne-seat, the Viśvedevāḥ said to him : "Indra cannot achieve any feat if he is not everywhere publicly proclaimed (as hero) ; but if he be thus proclaimed, he can do so." They then consented to do so, and consequently turning towards Indra, cried aloud (calling him by all his titles).

"The *devas* bestowed on him (Indra), by proclaiming him as "universal ruler," universal rule ; by proclaiming him as "enjoyer (of pleasures)," they made him father (of pleasures) ; by proclaiming him as "independent ruler," they granted him independence of rule ; by proclaiming him as "distinguished king," they conferred on him royal distinction ; by proclaiming him "king," they made him father of kings ; by calling him "one who has attained the highest desires," they granted him fulfilment of the highest desires.

"The *devas* then continued proclaiming his heroic virtues in the following manner : "The Kṣattra is born ; the Kṣattriya is born ; the supreme master of the whole creation is born ; the devourer of the (hostile) tribes is born ; the destroyer of the hostile castles is born ; the slayer of the *asuras* is born ; the protector of the Brahma is born ; the protector of the religion is born."

"After his royal dignity was thus proclaimed, Prajāpati, when just about to perform the inauguration ceremony, recited over him (consecrated him with) the following *mantra* :

"Varuṇa, the faithful, sat down in his premises—for obtaining universal rule, enjoyment (of pleasures), independence, distinction as sovereign fulfilment of the highest desires—he, the wise, etc." (1,25,10). Prajāpati, standing in front of Indra who was sitting on the throne-seat, turned his face to the west, and after having put on his head a gold leaf, sprinkled him with the moist branch of an Udumbara, together with that of a Palāśa tree, reciting the three Ṛk verses, *imā āpaḥ śivatamā*, i.e. these most happy waters, etc. (*Ait. Br.*, 8, 7) ; and the Yajus verse, *devasya tvā* (*Vājasan. Saṁh.*, 1, 10, *Ait. Br.*, 8, 1) ; and the great words....

"Indra thus became by means of this great inauguration ceremony, possessed of the power of obtaining anything wished for, as had been only the prerogative of Prajāpati. He conquered in all the various ways of possible conquest and won all people. He obtained the leadership, precedence, and supremacy over all *devas*. After having conquered the position of a *samrāj* (universal ruler) etc., he became in this world self-existing (*svayambhūḥ*) an independent ruler, immortal, and in the heaven-world, after having attained all desired wishes for, he became immortal."[145]

[145] *Aitareya Brāhmaṇa*, VIII, 3. (Haug's translation, pp. 514-519).

As a result of this enthronement Indra is often described in the epic as surrounded with three hundred and thirty-three millions of *devas*.

XI. The Fight between the Devas and the Asuras in Myth and Iconography

The gigantic struggle described above between the *devas* and the *asuras* has found an echo in Epic and Purāṇic literature a thousand times,[146] and has consequently been represented plastically very often in the vast field of Hindu iconography. We shall study a few cases only just to show the effect produced by the tradition in the national folk-lore and in the field of sculpture.

Fights of the *asuras* against the *devas* are very often mentioned in later Sanskrit literature. The war of the demon Tāraka against the *devas*, is the cause why Kāmadeva wounds the widower Śiva with his arrows of love, to turn his mind towards Pārvatī, (a new form of his previous wife Satī) who could beget him a son who will defeat Tāraka.[147] Two more *asuras* Śumbha and Niśumbha are also mentioned as having waged war against all the assembly of the *devas*, who having sent Mahāmāyā (Durgā) against them obtained through her not an easy victory.[148] Another asura Jalandhara helped by an army of *asuras* who had heads of horses, elephants, camels, cats, tigers and lions, rebelled against the *devas* and for some time he succeeded expelling them from heaven. But the *devas* under the leadership of Śiva attacked the army of the *asuras* and after a number of episodes a single combat between Śiva and Jalaṇdhara ensued, at which the latter is slain, this being the end of the rebellion.[149]

Fights between *asuras* and Śiva, as in the last battle of the preceding rebellion, are very numerous. "He", as Sir William Jones noted long ago, "is represented in human form.....some times in the act of trampling on or destroying demons."[150] One of such representations is the well known image of Śiva as *Naṭarāja* ("the King of Dance"), whose left foot stamps a pigmy demon. Another is a statue very often found in South Indian temples called *Gajasaṁhāramūrti*. They say that a demon in the shape of an elephant once attacked Śiva who killed him, and having removed its skin he danced with it in his hands. Śiva in fact in these images is shown having one of his feet upon the head of the elephant whose skin is fully spread as the background of the image by his own hands.[150a]

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146 "In India the struggle between the gods (*devas*) and the demons..: will give rise to an infinite number of myths". Barton, *The Religions of India*, p. 13.

147 *Vāmana Purāṇa*.

148 *Markaṇḍeya Purāṇa*.

149 *Mahābhārata*.

150 *Indian Wisdom*, p. 325.

150a Kālidāsa, *Meghadūtam*, Pūrvamegha, stanza 36.

Another myth relates how from one of his own hairs Śiva produced a gigantic demon named Vīrabhadra, who had to punish Dakṣa, one of Śiva's enemies who had slain his wife Satī.[151] Vīrabhadra is often represented in iconography as a furious form of Śiva himself.[152] Perhaps on account of this and similar cases Śiva is given the title of Bhūteśvara or "Lord of Bhūtas," who are ugly malicious spirits not different from demons.[153]

Viṣṇu also is spoken of as fighting with demons on different occasions. Such was for instance the occasion of some of his *avatāras* or incarnations. Thus it is said that the strong demon Hayagṛva approached Brahma when he was sleeping at the close of the last *kalpa* (age of the world) and stole from him the Vedas which had flowed from his lips. This caused the flood of the world wherein the Vedas were going to perish. Viṣṇu took the form of a fish (*Mātsya avatāra*), slew the demon and thus recovered the sacred books.[154] In another flood, so it is said, the whole earth was in the bottom of that sea. Again Viṣṇu took the form of a boar (*Varāha avatāra*), plunged into the waters and soon after arose with the earth upon his tusk. But he was seen by the demon Hiraṇyākṣa, who claimed the earth as his property and defied Viṣṇu. They fought upon it and the demon was finally slain.[155]

There is still another incarnation of Viṣṇu engaged in exterminating demons, and that is Kṛṣṇa, the most popular *avatāra* of Viṣṇu in modern times. From his very boyhood he is described doing this task faithfully. A great demon named Kaṃsa successively sent against him three demons, two of them in the shape of a colossal crane and an immense snake. But the three were slain not without a fight by the young hero.[156] Iconography represents the young boy fighting and subduing another serpent named Kāliya, but this does not seem to be an *asura* in the spiritual sense of the term, but one of the ancient Nāga chiefs dwelling on the banks of the Yamuna.[157] Nevertheless Kṛṣṇa is very often represented in iconography killing Kāliya as a serpent, as if the latter were a demon : Kṛṣṇa as a little boy is shown dancing upon the serpent's head while he holds the tail of the serpent with his left hand.

On another occasion Kṛṣṇa is said to have been attacked by another demon called Keśin, who appeared in the shape of a horse. Kṛṣṇa also slew

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151 *Bhāgavata Purāṇa.*

152 For instance in one of the large panels of the Elephanta Caves, Bombay Bay.

153 This denomination nevertheless seems to be sectarian as it is found in sectarian passages, for instance the account of the sacrifice of Dakṣa where even Śiva himself is being cursed by Bhṛgu.

154 *Bhāgavata Purāṇa.*

155 Some authors mention Hiraṇyakaśipu, brother of *Hiraṇyākṣa* and connected with the *Narasiṁha avatāra* as another demon. Putting aside this relationship we sincerely believe that Hiraṇyakaśipu is not a demon. He is called by the Vaiṣṇavites an *asura* in the sense of being a Dravidian who defended the cult of Śiva against the intromissions of the cult of Viṣṇu. The same is to be said of the *asura* Śambara in relation with Pradyumna, and of another *asura* named Dhenuka who fought with Balarāma and was slain by the latter.

156 *Bhāgavata Purāṇa.*

157 *Viṣṇu Purāṇa.*

him, whence one of his titles is Keśava, "the slayer of Keśin."[158] Finally another demon called Ariṣṭa, in the shape of a fierce bull, met with the same fate at the hands of the courageous youth.[159]

Another of Viṣṇu's incarnations, Balarāma is also described as having squeezed another demon called Pralamba while the latter carried him away by deception and magic.[160]

Another story renews the original fight between the *devas* and the *asuras*, when a mighty demon named Durga waged war against heaven and succeeded in dethroning Indra ; but on this occasion Śiva deputed his wife Pārvatī to defeat the monster and his army. The battle is described at length. Durga even took the form first of an elephant and then of a buffalo, but at the end he reappeared as a great giant, his original form. After Pārvatī slew him, she took the feminine form of the demon's name, by which she is known as Durga.[161] Iconography very often reproduces this story in a statue styled "Mahiṣāsuramardhinī". Pārvatī is shown with her foot upon a buffalo. The buffalo's head is cut off and from the beast's neck the giant issues. Pārvatī is going to pierce him with her trident. In a famous stone relief panel at Mahābalipuram, there is another iconographical expression of the fight. The two opposing armies are very well represented. Pārvatī flies to encounter her enemy mounted on her usual vehicle, the lion. Durga appears as a colossal giant with the head of a buffalo. This is one of the greatest specimens of Indian sculpture dating from the 5th century A.D.

In another myth Indra himself is shown fighting successfully with a demon called Keśin.[162] But the most interesting demoniacal myth concerning Indra is the life long feud between him and Jalaṁdhara, because the myth is an echo of the wrong tradition of Indra's fight, which we have commemorated above. On a certain occasion Indra accompanied with the other *devas* betook themselves to Śiva's abode on Mount Kailāsa to entertain him with music and dance. Śiva delighted with their music, tells Indra to ask a boon. Indra in a defiant tone, asks that he might be in battle a warrior like Śiva himself. Accordingly Śiva granted the boon, but no sooner had the *devas* left than Śiva asks his attendants if they had not noticed Indra's haughty tone. As a result of this Jalaṁdhara was born to combat Indra ; but he, having finally succeeded in his enterprise and having expelled the *devas* from heaven, turns against Śiva himself by whom he is slain, as we have described above.[163]

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158 *Ibid.*

159 *Ibid.* The numerous adventures of Kṛṣṇa fighting with monsters of various shapes were the cause why some old writers identified Hercules with Kṛṣṇa. The identification was too candid. The real Indian prototype of Hercules is Bhīma.

160 *Viṣṇu Purāṇa*, V.

161 *Skanda Purāṇa* ; *Vāmana Purāṇa*.

162 *Mahābhārata*.

163 *Ibid.*

In any case the idea of the kingdom of Indra and his superiority over all the *devas* as the result of his victory over the *asuras* has deep roots throughout the vast field of Indian mythology. In one of the Jaina caves at Ellora there is a colossal statue of Indra crowned as a king seated on an elephant his ordinary vehicle. And since a king must also have his Queen, the latter, Indraṇī, is also represented in a similar way at the other side of the cave.

It may easily be noticed that it is a general practice to describe the demons in the shape of animals or as having animal heads at least. It is a practical admission that the attitude of the demon in creation, as the constant rebel, is unreasonable, or perhaps that by their suggestion and temptation man is led to yield to the lower animal passions and feelings which assimilate him with the animals.

XII. The Intervention of the Demon in the Original Fall of Man

Ancient Indian scriptures and tradition leave no doubt as regards this point : The devil invited man to break God's law. First of all they speak of the reason why the devil acted thus : "The *devas* saw that in man were divine things (*devatā*), which would enable him to succeed them in heaven after he had lived well on earth."[164] These *devas* had evidently been expelled from heaven, for they realized that man living well on earth would *succeed to them in heaven*. They were therefore *asuras*. These divine things they saw in man, by which he could obtain the possession of heaven, if they were really divine, cannot but be God's grace. The general tone of the text is of envy though this passion is not expressly mentioned. The *devas* were not pleased at seeing that men could succeed them in heaven by making good use of these *devatā* during their life-time. It is therefore implicitly understood that these *devas* would try their best to hinder this future happiness of man by tempting him to break God's laws.

This temptation is clearly described in the religious traditions of the Khasis of Assam. It is said that in the beginning, when man was happy, he "met a stranger, who was eating some food out of a net in his hand. The stranger, who was a demon in disguise, tempted man with the strange food." First man resisted the temptation, but finally he yielded to the invitation of the demon, and from that time, he and the entire human race had become subject to the power of the demon."[165] The temptation therefore came from outside man, and the devil was the mover. Owing to this sin, so says the tradition, the whole human race became subject to the devil.

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164 *Jaiminīya Brāhmaṇa*, I, 98.

165 Narayan, "Khasi Folk-Lore", *The New Review*, XVI, p. 454.

XIII. The Devil in Man's daily Life

The envy of the devil before the prospect of man's occupying the seat from which he was expelled from heaven (as revealed in the text of the *Jaiminīya Brāhmaṇa*), which caused him to tempt man to commit the original sin, is quite enough to urge him likewise to tempt men during their life time. Yet, in ancient Sanskrit ascetical books one does not come across any information about the temptations of the devil, perhaps because those books are concerned with the positive practice of ascetism, as acquisition of knowledge (*gñāna*) and attainment of renunciation (*sannyāsa*), rather than with the negative side of the same that is destroying evil and resisting temptations.

Nevertheless the idea that the devil was much interested in the evil doing of men and busy to make them fall from the path of virtue existed among the ancient Hindus, as Buddhist literature clearly shows.[106] The idea of the devil's temptations of a man is clearly disclosed while studying the life of the Buddha himself. The early writers who narrated the history of their master intertwined a number of temptations in the historical process of his meditation and ascetical life, not perhaps as they actually occurred, but as they themselves considered as likely to have occurred. This is still much more interesting for studying the psychological process of the temptations, according to the Hindu mind.

So, for instance, narrates Aśvaghoṣa Bodhisatva after having described Gautama doing his protracted meditation under the Budh-Gayā tree : "The spirits, Nāgas and the heavenly multitude all were filled with joy (when they saw the Buddha in that fervent attitude) ; but Māra Devarāja (such is the devil's name in Pāli literature), enemy of Religion, alone was grieved and rejoiced not ; lord of the five desires, skilled in all the arts of warfare, the foe of those who seek deliverance, therefore his name is rightly given Piśuna".[107]

This is only the introduction to explain the future intentions of man's enemy. These intentions are revealed in a speech the devil is supposed to have made to his daughters (*sic*). This speech is as follows : "His (Buddha's) object is to get the mastery in the world, to ruin and destroy my territory ; I am myself unequal to him, for all men will believe in him, and all find refuge in the way of his salvation ; then will my land be desert and unoccupied. But as when a man transgresses the laws of morality, his body is then empty, so now, the eye of wisdom not yet open in this man, whilst my empire still has peace,

[106] It is well known that the Buddha did not preach a new religion or ascetism, but followed the ancient path of the sages of other times. His aim was only to found a monastic order, the *saṅgha*.

[107] Aśvaghoṣa Bodhisatva, *Life of the Buddha*, Ch. III: Sacred Books of the East (New York), p. 369.

I will go and overturn his purpose, and break down and divide the ridge-pole of his house."[168]

Accordingly Māra addresses Gautama very diplomatically, not advising him to do anything wrong lest his advice should not be heard. He ever leads him to the practise of charity, his only wish is that he should give up the meditation he had begun. But if the Śākyamuni continues the same way, Māra threatens him with his poisonous darts. It is of interest to study the logic displayed in this made up speech of the devil. Here it is :

"Kṣatriya ! rise up quietly ! for you may well fear ! your death is at hand ; you may practise your own religious system, but let go this effort after the law of deliverance for others ; wage war in the field of charity as a cause of merit, appease the tumultuous world, and so in the end reach your reward in heaven. This is a way renowned and well established, in which former saints have walked, *ṛṣis* (sages) and kings and men of eminence ; but this system of penury and alms-begging is unworthy of you. Now, then, if you rise not, you had best consider with yourself, that if you give not up your vow, and tempt me to let fly an arrow, how that Aila, grandchild of Soma, by one of these arrows first touched, as by a fanning of the wind, lost his reason and became a madman. And how the *ṛṣi* Vimala, practising austerities, hearing the sound of one of these darts, his heart possessed by great fear, bewildered and darkened, he lost his true nature ; how much less can you—a late born one—hope to escape this dart of mine. Quickly arise then ! if hardly you may get away ! This arrow full of rankling poison, fearfully insidious when it strikes a foe ! See now ! with all my force, I point it ! and are you resting in the face of such calamity ! How is it that you fear not this dread arrow ? Say ! Why do you not tremble ?"

Māra finally discharged his arrow and at once the three daughters of Māra came in front of the Bodhisatva. Yet the latter did not look at the arrow nor regarded the women, but he with shut eyes, motionless continued his meditation.[169]

This defeat did not discourage Māra in his evil intentions. He forthwith assembled his army of devils round the Bodhisatva to shake his undisturbed constancy. These devils are described minutely : "Each assumed his own peculiar form ; some were holding spears, others grasping swords, others snatching up trees, others wielding diamond maces ; armed with every sort of weapon. Some had heads like hogs, others like fishes, others like asses, others like horses ; some with forms like snakes or like the ox or savage tiger ; lion-

[168] *Ibid.*, pp. 369-370.

[169] *Ibid.*, p. 370.

headed, dragon-headed and like every other kind of beast. Some had many heads on one body-trunk with faces having but a single eye and then again with many eyes ; some with great-bellied mighty bodies. And others thin and skinny, bellyless ; others long-legged, mighty-kneed ; others big-shanked and fat-calved ; some with long and claw-like nails. Some were headless, breastless, faceless ; some with two feet and many bodies; Some with big faces looking every way ; some pale and ashy-coloured ; others coloured like the bright star rising, others steaming fiery vapour, some with ears like elephants, with humps like mountains, some with snaky forms covered with hair. Some with leather skins for clothing, their faces partly-coloured, crimson and white ; some with tiger skins as robes, some with snake skins over them, some with twinkling bells around their waists, others with twisted screw-like hair, others with hair dishevelled covering the body, some breath-suckers, others body-snatchers, some dancing and shrieking awhile, some jumping onwards with their feet together, some striking one another as they went. Others waving in the air, others flying and leaping between the trees, others howling, or hooting or creaning, or whining, with their evil noises shaking the great earth".[170]

The purpose of Māra was to disturb the Bodhisatva in his pious enterprise and to make him interrupt it. But he did not succeed ; Gautama remained calm and unshaken "surrounded with an uncounted host of devils, shaking the heaven and earth with sounds ill-omened".[171] These numberless hirelings of Māra could not stand that unexpected rout. "Like as when some cruel chieftain slain, the hateful band is all dispersed and scattered, so the host of Māra disconcerted fled away".[172]

Nevertheless Māra did not consider himself finally defeated. Even when Gautama had already finished his meditation and become a Buddha, Māra tempted him with feelings of desperation. "Thou art bound by fetters, and canst not escape me," he told the Buddha. But he received the following uncompromising reply : "I am delivered from all fetters, from all desires : thou art defeated".[173]

After this, it is said that Māra did not leave the Buddha alone. The Nikāyas very often commemorate these temptations which are always rejected by him while saying : "I know you, evil one" or "wicked one." They say that when he was already an old man, this thought was still inspired by the devil : "Now all your mission has been accomplished : disciples, monks and nuns,

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170 *Ibid.*, p. 171. This scene has been represented many times by Indian and Tibetan painters from the days of Ajanta up to now. The modern Spanish artist Eduardo Chicharro has once more reproduced this scene in vivid colours. The French artist Collot in his painting of the temptations of St. Anthony the Abbot seems to have been inspired by reading the above description of the devils by Aśvaghoṣa.

171 *Ibid.*, p. 372.

172 *Ibid.*, p. 374.

173 *Mahā Vagga* (S. B. E.)

laymen and laywomen have been trained, who can teach and explain the doctrine to others. Let the Blessed one enter on his final extinction." The Buddha still replied that he would die at the prescribed time, not at the time selected by Māra.[174]

Such is the daily intervention of the devil in the life of man, according to Hindu ideas. The evil spirit is the ill-adviser of man on all occasions. This interference of the devil in procuring the evil of man, both in the physical and in the moral realm, is undoubtedly the foundation of the so-called "demon worship."

It is not correct to say, as has been unfortunately stated that "demon-worship" is "so closely combined with Hinduism that it is now impossible to discriminate the rival elements." This worship first of all is not worship at all, but only propitiation not to be persecuted by the devils. It is an act born out of fear, not caused by devotion.[175] Nothing is said about it in Indian scriptures ; it is only a popular practice, very common in South India not among the Dravidians, but among the aboriginal population only.

CONCLUSION

The story of the devil, as has been studied from ancient Indian scriptures, is a striking confirmation of what we know of the nature, rebellion and intervention of the devil in the life of man, from the time of our first parents' Fall in the earthly paradise, from the biblical text. Has there been any influence from either side ? We cannot trace it at all, nor do we consider it probable.

The modern study of the religions of the ancient civilized nations, as well as of the myths of primitive tribes and peoples, have revealed many such extraordinary similarities between those faiths and those legends and some biblical dogmas. A fortuitous coincidence cannot explain them nor is it a sound principle of criticism to suppose a general influence from one to another in all the cases. Independent anthropologists have explained these parallelisms by invoking the first original revelation of God to man. Relics of this revelation are found in all the nations. The faith of the Indian nation in the nature, sin and punishment of the devils, as well as in their intervention in the Fall of mankind is only one of those relics, which Indian *śruti* has preserved, by a wonderful Providence of God, for the enlightenment of the people of India in the high tenets of the true religion.

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174 *Parinibbāna Suttanta*, 39.

175 Cf. Macnicol, *The Living Religions of the Indian People*, p. 55.

THE MAHĀBHĀRATA TEXT-CRITICISM
(Apropos of a recent publication)*

By

A. Esteller

This fascicule is a veritable monument to the tenacious industry and outstanding scholarship of its editor. Its difficulties are far above the average in such a critical edition, and it fully needed a hand as thoroughly at home in the world of epic thought as is Dr. Belvalkar's. For the "popular encyclopedia of religion and ethics" (*and* Philosophy *plus* "de omni re scibili et quibusdam aliis" for good measure), which is the Mahâbhârata as a whole, becomes in this enormous farrago labelled "śântiparvan" the most baffling, confusing and tiringly trying "omnium gatherum" that a many-headed, haphazard (and not seldom less than mediocre) authorship could dump together in the course of many centuries.

But in all this tangled forest there is no more thickly-grown and thorny part perhaps than the one bearing the dazzling title of "mokṣadharma"—"*moha*dharma" might suit better its maddening repetitions, contradictions, inconsequential irrelevancies and irritating meanderings in which the poor dying Bhīṣma is supposed to indulge while on his harrowing arrowy deathbed. "More than any portion of the epic", notes the editor quite rightly, "the "Mokṣadharma" contains a very large number of philosophical passages the exact interpretation of which presents several difficulties. *Sâmkhya* metaphysics for instance occurs, even in the chapters so far published, more than half a dozen times with crucial differences in nomenclature and details. Orthodox commentators like "Nīlakaṇṭa" (in the time-honoured style of their text-torturing tribe !) "gloss over those differences and interpret them all in consonance with dvaita Vedânta....."

The present fascicule embraces from adhy. 168 (why is that first number missing in the printed text?) to 226, 8ab, and constitutes the beginning *only* of the third and longest of the three traditional sub-parvans of the "śântip." The general good standard of neatness and presentation has been maintained, though here and there the quality of the paper and the inking is not up to the mark. Misprints seem to be rare, but mistakes affecting the critical apparatus (like 212, 6ef, and 217, 15cd) should have been eliminated.

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* The Mahābhārata—Śāntiparvan : Mokṣadharma (Fascicule 22). Editor: S. K. Belvalkar. Pp. viii+951—1264. Poona : Bhandarkar Oriental Research Institute, 1951.

As regards the critical value, the by now traditional methods inaugurated by the late-lamented spiritus rector of this magnum opus, Dr. V. S. Sukthankar, have been followed on principle as a matter of course. This is as it should be generally speaking, though here and there one may feel like demurring at the practical application of those principles in individual cases. Still one has the feeling that the present editor, rather naturally, is being torn between two very understandable tendencies : first, to lead his task to a final consummation (devoutly to be hoped for, indeed !) in the not too distant future—which considering the magnitude of the enterprise is all the more a pressing matter ; secondly to give it as much critical-edition value as is possible within the limits imposed by that very pressure of time. Now the first tendency works *accelerando*, but it also involves the danger of striking the line of least resistance in mechanically tending to follow certain set rules for the quick solution of the critical problems—with the possible result that the edition may turn out to be more a collection of critical materials than a real critical elaboration of its data. The second tendency works, of course, *ritardando*, but its outcome is likely to be all the more valuable, permanent and definitive, at least in a relative sense.

I. Sample Doubtful Cases

It must be confessed that the present work, excellent though it is in general, does leave at times the sense of a (never foolish, far from it ! but still noticeable) over-anxiousness "to get it over." And one would almost welcome this but for the danger that certain avoidable flaws may creep into the work. It is, for instance, in the application of the much-beridden principle of "lectio difficilior" that one seems to discover the inclination to overlook its tempering control : "ceteris paribus."

Let us take as an example the doubtful reading in 168, 26a : "ye tu buddhisukhaṃ prâptâḥ." The context seems rather to suggest that the unusual "buddhisukham" must be read either as "buddhiṃ sukham" (with "sukham" understood adverbially, as in 24c or 39ab, in the original sense of lightly, smoothly) *or rather*, looking especially at 27, to which this śloka is most intimately related (much more so than to the *previous* text, to which we think the editor paid too much attention), as "buddhiṃ susaṃprâptâḥ"—which, besides being a reading which explains the different variants on whose account the text is left doubtful, is also what 27a requires as the antithesis in whose context "dvandvâtîtâḥ" (of 26b) seems evidently to exclude *both* "duḥkha" *and* "sukha." That the transmitters should have been easily misled by the influence of the *preceding* sukha-word employment is very understandable. But if "buddhisukham" had been originally there, how could the variants have started ? Hence, since the Mss give us no final solution but leave us with a conjecture, would not a conjectural reading with an asterisk be justified ?

Again in 168, 49d we get the "double saṃdhi" : "ayaṃ kânteti maṃsyate." The text implies that the readings of the extreme N. and S. are attempts at ridding the text of this unpaninean solecism. But at least a wavy line should have indicated a doubt. And the doubt is whether all the variant readings, including the middle-of-the-road accepted text, may not rather be an attempt at rounding off an original "ayaṃ kânto 'bhimansyate" by including the missing "iti"—which classically would be "de rigueur." This all the more since the verb with "abhi" (as supported by the solid S.) with its meaning "wrongly to think" is precisely what one expects. This is confirmed by the fact that the S variant "kâ hyakântam" seems alone to give sense to the sentence in the context, esp. with reference to 48 and 50. Hence the text in both cases should at least have a wavy line, we suggest. We might remember that elsewhere also an "iti" appears in the text in an awkward position—as at the junction of two pâdas, soldering them into one unit, for all the world like an afterthought, while the epic is freer about it (cfr. 215, 14c).

In the same adhy. 168, 40c is given "tadâtmajyotir âtma ca'âtmanyeva prasîdati" with an inter-pâda hiatus. Here there is a considerable body of Mss reading "âtmâyam" (strengthened by the "câyam" of 42a) while the whole S. turns round a variant "âtmaśrîr." The reading adopted seems to go counter the style ("yadâ.....tadâ.....ca!") or (ca..prasîdati" !) and offers us a (classically unacceptable) inter-pâda hiatus. We suspect that it is the "lectio difficilior" idea that tipped the balance in favour of the accepted text. In itself two forms could have given rise to the variants : "âtmā sa" (whence "ca" by misreading ?) or "âtmâyamâtmany....." misread as "âtmâya âtmany" ("mâ" as "â") and then "ya" as "ca" by misreading or "correction." But the form that would most easily give the rationale of all the variants would be a conjectural*"....âtmâ ya(ḥ)" which because of the continuous writing of a hemistich would give ample room for trials and errors (or for attempted improvements as in the S).

II. The Problem of Hiatus

This question of the hiatus deserves a special study. There may be such a thing in the Mahâbhârata. But in our considered opinion *only* (if at all) between the two pâdas of one hemistich, and *only* in relatively ancient layers or as preserved from ancient sources. Hence it should be admitted only as a *last* resort, because too evidently the overwhelming trend of the epic kavi-redactors (at least the last generation which gave us *our* Mhbh. text) is decidedly *against* this "solecism" : they simply do *not* want hiatus even between pâdas of the same hemistich ; they will bear with them only "à contrecoeur." And in this they are in a way the parallel (though not so cavalierly regardless of rhythm and meter) of those unforgivable pedants that were the perpetrators of the Rgveda samhitâ text-form, who just to avoid an inter-pâda hiatus would cheerfully

proceed to mangle the verses they preserved for posterity. The tendency of our Mhbh. redactors is rather to consider (in the approved manner of *later* versifiers) the two hemistich-pâdas as one single unit without a break, and as subject to the rules of samdhi—*with the proviso* that for them, *almost* invariably, the first pâda-end is a word-end too and they avoid with rare exceptions all vowel-endings and word-beginnings which might give rise to a real hiatus or to a syllable-fusing vowel-samdhi. Such exceptions will be more easily acceptable if they seem to belong to a younger text—like 223, 5ab where the abhinihita-saṃdhi *might* seem more plausible than the possible popularism "haṃkāra" for "(a) hamkāra," to which we would rather give preference on principle. This shows that they are in a transitional stage : on the one hand the pâda-end is a *real* end still, on the other the artificial grammatical tendencies are beginning to prevent them from making unrestricted use of that traditional fact with the complete freedom enjoyed by the more ancient original kavis (and by the vedic ṛṣis before them—no matter what the samhitâ-redactors later on thought or did).

a) *Inter*-PĀDA HIATUS

Cases confirming this can be found in 170cd (unless "dhanajyânyâ(ḥ)" is to be preferred, as explaining better all the variants) ; 171, 43cd (unless purposely changed by the redactors from an older interpâda hiatus : "vakṣye anâdṛtya"—or is it "nādṛtya"?— since this is a "purâtana itihâsa"); 176, 5cd and 180, 11cd (unless in both cases it is an attempt by a later copyist-redactor to introduce the—originally missing—"iti," whose presence had been considered unnecessary by the original kavi because of the pâda-end *and* the sentence end). Add 177, 3cd, and 224, 57ab breaking the compound, as also 181, 3ab (rather doubtful because of the variants *and* the style of the śloka), and others besides. In 193, 24ab, there should be no interpâda saṃdhi, whatever the reading in a, because b must begin with an *epic* imperfect *without* the augment, all the more so since it has the backing of good Mss—which was not easily to be expected at this stage of the transmission.

As *against* that tendency and *for* hiatus we find, for instance, (within about the same range of adhyâyas for a sample) besides the 168, 40c studied above, the following (and, please, note *how little* they really are *for* hiatus !) :

1) 180, 23ab where there is a good possibility that the "hiatus-filler" "hi" is spurious (as often elsewhere) but for the fact that our muddling epigon is messing in grand style what the kavi in the "âranyaka," 203, 30-31 had said; hence if we read our text here so that we unite 23cd with 24ab that "hi" may then have sense and therefore leave *no hiatus* at all ;

2) 186, 14ab which *may be* a genuine hiatus, since it seems to have been borrowed from ancient dharma-sources, unless a "*svâthithim" has been misread ("svā" as "ā," and then "corrected" to "a" ?) which would explain it all (and here it is interesting to see how the Mss, as often elsewhere, try to fill the hiatus with "apy" or "hy") ;

3) 207, 28cd is a very special case since it is connected with one of the rare "hypermetric" pâdas, and originally may *not* have contained any hiatus, as we shall indicate further down ;

4) 214, 3cd and 215, 12ab are *scarcely real* hiatuses (because both are cases of beginning of a new sentence with "utâho" after a vocative and the same may be said of 214, 10ab, since "....cârî ṛtau...." (*if* it were to be accepted—which it is *not*, as we shall see) is not really a hiatus for the popular ears, for which the original ṛ-vowel sounded actually ri- or ru ;

5) There is a very significant case in 220, 109cd : it belongs to one of the smoothest, longest, most self-contained adhyâyas—a narrative, with the usual epic solecisms or rather "popularisms", *but* no hiatus in 115 ślokas ! Hence the conclusion : the text should be a *conjectural : ânṛśaṃsyaṃ paraṃ dharmam" with "dharma" neuter, as it exceptionally can be—but *no hiatus*, if context and style have any value at all, as we feel they must.

6) An intriguing case is 201, 25ab : "yavakrīto 'tha raibhyaśca" where "raibhya" could stand by itself and excuse the hiatus on the strength of being in a list of *proper* names (and probably an old one ?) ; but the enormous list shows *no anomaly* of prosody or meter, and *besides* the dual making up b : "arvāvasuparāvasū" *happens* to be the names of two sons of Raibhya ; hence are we not entitled to the conjectural emendation : *"sārvavasuparāvasuḥ"—which, of course, would easily give rise to the "correction" by those "experts" who knew only *too* well that there was no such *name* as "sārvavasu". *Hiatus ?*

7) The case of 192, 124cd : "puruṣaṃ samatikramya âkâśaṃ pratipadyate" is also very important. The whole long adhy. has *no hiatus* (98 is not a real one : "gṛhṇâsi ṛṇam—which a Ms typically reads "raṇam" !), but, *if* anything, tends to interpâda *samdhi* (though probably spurious—as an attempt to smuggle in the inevitable "iti", against the original "karisye'ham" of other Mss). Hence the tendency is the general middle-of-the-road one of the bulk of the Mhbh. : *neither* samdhi *nor* hiatus between pâdas. Therefore this hiatus here is suspect—and its solution helps to solve a whole series of problems in this seemingly smooth text. For any one can see that 122,123 break the context —so that our juggling commentaries (here Cs, Cv) have to stand on their (metaphorical) heads to make "âkâśam" mean no less than "paramātma" ! The real reading should be restituted by inter-changing the place

of the two words "puruṣam" and "âkâśam" whose present position is obviously due to an "ideological" correction by the transmitter-redactors (the same who probably inserted 122-123). For *them* The Supreme could not be a "puruṣa" (naturally the "brahmâṇaṃ parameṣṭhinam" of 118 and the "tam" of 121?), but something impersonal, corresponding to the neuter of "brahma" in 122-123 ! Hence the swapping of places by the two words. Originally the text must have read : "âkâśaṃ samatikramya puruṣaṃ pratipadyate" which fits well into the context, especially with reference to 120.—Hence *no hiatus*.

8) There remains finally 214,11cd. This is given as a doubtful text and looks for all the world like an attempt of the N. to ring the changes of "bhavet, bhavati, syât" by avoiding repetitiousness, and therefore the text should read "pavitrassyâd/asvapanaś. . ." *without* hiatus ; and this, by the way, means that 10c must be read as an "hypermetric" (which alone explains all the variants) : "ṛtâvâdî sadâ bhavati" (with "bhavati" read *as* pronounced : *bhawti, like in so many other places—including probably 224, 23a, as we shall see) and with another "hypermetric" of the same kind in ab (as in other places also !). This is simply *demanded* by the context in order to destroy the stupid and impossible word-order which no kavi in his senses would ever dream of composing ("bhâryâṃ gacchan brahmacârî/ṛtau bhavati Brâhmaṇaḥ" forsooth !) and which is evidently nothing but the unscrupulously clumsy subterfuge of the transmitter-corrector to avoid the original : "bhâryâm gacchann ṛtau bhaw(*a*)ti/brahmacârî ca brâhmaṇaḥ"—or rather : "brahmacârî sadâ dvijaḥ" (as suggested by the Mss), for we think it next to impossible that the original Kavi could have broken the rhythm so hopelessly as to write brâhmaṇaḥ at a b-pâda end, "lectio difficilior" or no "lectio dificilior" !

With the whole śloka so reconstituted we have a sensible text, and we also get rid of an impossible "ca" in e : "ṛtâvâdî sadâ ca (!) syâd"—(and please note the word "sadâ" which confirms its parallel in b as proposed above). That "ca" is at loggerheads with the "ca" in d : "jñânanityaśca yo naraḥ"—(though the context requires that the S variant "maunanityaśca", in correspondence with 5c : "muniśca syâtsadâ vipro", should be preferred)—which "ca" in d is the only conjunction needed to unite the two hemistichs. All these readings support one another like links of a chain, hence the reading of 11c proposed above ("pavitras syâd" *without* hiatus, as *against* the text !) proves also that the reading accepted in 6d is wrong ("pavitraṃ ca sadâ japet") and should be substituted by the strongly supported : "pavitraśca (or : pavitrî ca ?) sadâ bhavet".

This concatenation of readings brings out one of the defects that we should like to see eliminated from this critical edition ; the lack of consideration for the context and the total sense, or in other words, the too mechanical weighing of readings and Mss as isolated and non-literary units. One of the funda-

mental principles on which our great guru (Dr. Sukthankar's as well as this writer's), Dr. H. Lüders, insisted most emphatically was precisely the assumption (till the contrary is proved) that the ancient *authors* were first and foremost rational beings talking sense, but that there was no limit to the nonsense of which the *scribe-transmitters*, (mostly semi-pandits, pseudo-pandits and would-be-pandits) could be guilty. Hence anything which does not make good sense must be suspect, and no amount of superficial Mss evidence in its support should allow us to sit back and rest satisfied : the scribes are surely at their monkey-tricks again—and how devilishly can they manhandle and mishandle the text without any respect or compunction, if only any of their hobby-horses tempts them to take a joy-ride ! Hence there should be no advantage given to a "lectio difficilior" *if* it shows signs of being also a "lectio stultior" in itself or in the context, as for example in the above instances in 214, 6d, 10ab, and 10cd. q. v.).

(9) 215, cd : "kâncanc vâtha loṣṭe vâ ubhayoḥ samadarśanam". This occurs in a context where there are several cases of interpâda hiatus—true or apparent, as in 215, 2ab—with "utâho" (as pointed out above), but also some false ones (214,10-11). Both facts seem to have influenced the *transmitters* to change the original (kept *or* reconstructed by some Mss ?) from the expected "kâncanc vâtha vâ loṣṭe" : obviously for the sake of clearness in the opposition of the two *locatives*, which *seemed* lost by the effect of the (spurious !) interpâda samdhi "loṣṭa ubhayoḥ". *Again no real hiatus !—And* the same is the case with 225, 4ab, where the (spurious) samdhi of an original" pratiṣṭhanta ûrmimatyo (for "pratiṣṭhante" as given by some Mss) was avoided by changing the verb into "parasmaipada" (a thing in which the epic bards feel and act with a most non-chalantly un-pâninean freedom !) in order that it might not look as a *past* tense in a context of *presents*—among which there is one 'tiṣṭhati" in "parasmaipada". Here the fact that for many adhy. previous the text shows no hiatus but a tendency to interpâda samdhi should be given weight also.

(10) One more case for its instructiveness : 221, 43cd : "indriyasya visargaṃ te 'rocayanta kadâcana". This occurs in a long adhy. where all pada-hiatus or pâda vowel-samdhi is religiously avoided by the kavi. On the other hand we know that the epic can dispense with the augment. Hence the text should be *without* "avagraha" or "abhinihita" samdhi—all the more since the original Mss (at least) did *not* carry any sign for this samdhi.

(11) Another case (218, 31cd) carries the editor's approval who backs it with an *emendation* in a six-pâda śloka. (This latter, by the way, is in itself a critical "crime" caused by an additional hemistich meant to supplant an original "balir uvâca", not "bhîṣma" !, in 30ab ; hence the six-pâda śloka should have been 30 (not 31 !) in order not to dismember pitifully the unity

of verse and sense—but we shall come back upon this problem). The text in cd reads : "tathâ madhyaṃdine sûryo *astam eti yadâ tadâ". But the emendation *and* the consequent hiatus are really unwarranted, since the middle-of-the-road Mss have what must be the correct reading : "nāstam eti" which is *backed by the context*—the (impossible) condition being that the sun will be in the exact zenith *and* not move from it westwards ("*home*wards"). But the transmitters (especially the extreme N and S, who are not seldom especially "clever") thought it meant that the sun would *set* at midday ! *And* the commentators—how they twist and tie themselves into knots to explain : Cn the *right* reading (with a glorious "near-miss"), and Co the *wrong* variant (with one of their usual tricks of the trade : "it means what it does not say" sort of twist). All very entertaining, but scarcely a sufficient basis for an *emendation*, we submit ("nā" misread as "ā"—then "corrected" into "a" for "astam"?).

We may then conclude that there is a certain tendency in the genuine text to consider the two pâdas of an hemistich as *one unit* for the purpose of samdhi, though the immense majority (practically the totality) of the cases plainly and on principle avoid *both* hiatus and vowel ("praśliṣṭa" or "abhinihita") samdhi as well as the running-over kind of continuity found *within* single pâdas.

b) *Intra*-PADA HIATUS

But as regards *hiatus inside* the pâdas, *that* is as a rule *out of the question*, and no emendation should strike that way except as a back-to-the-wall expedient ; for it is unthinkable for the state of mind of the *kavi-redactors* (as distinct from the scribe-transmitters) of our Mhbh. text as such—whatever the primitive *popular bards* of their raw materials may or may not have done. We are aware that this sounds bold, for even our late revered Dr. Sukthankar inclined to that solution in some rare cases, whose possibility and plausibility we do not deny ; but we feel sure that a new thorough study of the critical materials will reduce the number of genuine cases to such insignificant proportions as to make it very doubtful whether we can be critically sure of *any*. We mean of course *real* hiatus, *after* due consideration has been given to facts of the *living* speech like the end of a sentence (esp. in direct speech) the actual pronunciation of words (like the value of initial ṛ-vowel) and survivals in tradition-consecrated texts. *Intra*-pâda (as against *inter*-pâda !) hiatus is *on principle suspect*.

Hence the solitary emendation in 225, 5c "âpas tadâ âttaguṇâḥ" is unacceptable, though the four-mâtra length of the two vowels in hiatus (ā+ā) may give it a chance from the point of view of the *living* speech (one remembers the double-syllable value of the ṛg-vedicâm). And it is unacceptable because both the sense and the variants themselves suggest a non-hiatus form. And

first the kavi does not want any such hiatus, four-mâtra ones inclusive : in 6a he gives us dutifully "yadâdityam" and in 11a "tadâtma" ; hence, though the variants seem to be stop-gaps, and the parallelism with 6c sustains the reading "âttaguṇâḥ" (as against a very possible and plausible "prâttaguṇâḥ"), the solution lies in a text that could easily be misread as "â" while not being it—and that is evidently the one suggested by the two leading Kaśmiri Mss : "âpas tadâthâttaguṇâḥ" ; because the "thâ" could easily be so misread, and so give rise to the variants, all the more so, since the tempting parallelism of 6c would mislead the scribes (as it has also influenced our editor, it would seem). And this reading makes the impossible "ca" at the end of 5d lose all justification, and so the "vai" (which our author uses in nearby verses) of so many Mss acquires a practical certainty. Again a misapplied use of the hiatus and "lectio difficilior" ideas in the constituting of the text ?

c) Double-Samdhi

In connection with the hiatus problem the question of "double samdhi" calls for special attention. It should be noted at the outset that a text which tends to this device shows "ipso facto" a "horror vacui" that almost logically excludes the hiatus—which only goes to confirm what we had just now said on the latter subject. The cases are, all the same, few and far between, due to the fact, obviously, that the latest *redactors*, the immediate parents of *our* text, are touched by the pro-Paninean fever and want to "regularise" as much as they can, and (like the procrustean editors of even our Rgveda text) they have very little respect for the original text, its meter and prosody as soon as the Moloch of grammar (as *they* worship it) asks for a victim. They *must* super-sanskriticise the popular forms, except when the ever-recurring "solecisms" force them to recognise their validity at least as "ârṣa"—and that only because Pânini's superior good sense had given them the lead. Hence it is that even the few cases that we get from our Mss. are rightly suspect and have the burthen of proof on themselves and, unless no other reasonable explanation gives a satisfactory solution, one must incline to think that they would not have been allowed to pass unchallenged.

Some such cases are outstanding : 1) 168, 49d : "ayaṃ kanteti maṃsyate" which as we saw above may be doubtfully genuine ; 2) 171,12a : maṇivoṣṭrasya lambethe," which our editor seems to want to exclude by writing the words separately (since the dual "manî" is a Paninean "pragṛhya", hence "manî va"?) but which seems genuine enough as born from the living language in that "purâtana itihâsa" ; 3) "doṣâḥ kaṣṭatarâdhane" in 171, 35b, which our editor accepts. (In passing, the reading—suggested by K2—for c : "sâpi duḥkhaiḥ pidhīyate" should have been put into the text, if necessary as an *emendation*—no matter what the silly Ca commentary tries to make out !). 4) Possibly too 212, 37a : "yattamopahatam cittam, but which is probably—

we would say practically certainly—"tamopihitam" *without* any double samdhi either. (And by the way, why have adhy. 211, 212 no rhythm changes (except *one* ?) in the first and third pâdas ? This is likely to point to a change in authorship. Hence a new study of the epic rhythms is sure to repay abundantly the researcher's labours). 5) 209, 8c : "veda sottamapûruṣaḥ" has all the appearance of a wilful "correction" of an original "sa vedottamapûruṣaḥ" (Mss) in order to avoid a misleading misunderstanding. Hence no double samdhi here either ?

III. Hypermetric Padas

One more head demands to be studied and that is the one concerning the "hypermetric" pâdas. The present writer has given special consideration to this subject, and his conclusion is that the best working hypothesis is that "there ain't no such thing" : the original *kavis* of our text never composed one single such pâda *as such.* Any such monstrosity would have simply split their ear-drums and broken their poet's hearts. The "hypermetric" pâdas that we have are the later, super-re-sanskriticising, pedantic fruit of the *later transmitters* and meddlers—those half-pandits and super-pandits who have kept tinkering with our Mss tradition down the centuries. But they are a very ancient tribe, for their would-be "improvements" date in this case from very early times in the history of our Mhbh. text—*before* the split into N. and S. ! Were they the very ultimate *redactors* of our epic text ? Possibly, but we doubt it and rather like to think that they were a later generation of transmitters.

One thing is certain : the present apparent "hypermetric" pâdas are due to the re-sanskriticising of certain popular forms of pronunciation or formation which were in keeping with the *living* speech tendencies (mostly influenced by the then living vernaculars). One key-word in the Adip. is "Janamejaya". Now, anyone with any sense for Indian linguistics—even if he does not derive it from such supreme "authorities" (on linguistics of all things ! as well as genetics and everything else) like Marx and Stalin, as some of our ultra-modern scholars are doing in this very review. . . . "risum teneatis?" —will realise that such a popular legendary name never sounded in the ears and from the lips of the *popular* kavis except in the popular form of "Janmejaya". This with one single stroke disposes of a whole series of those so-called "hypermetric" anomalies in our epic. Another of the key-words is "puruṣa", as in 203, 9a, which of course—as the Pâli "poriso" "posso" (and the popular pronunciation "purshotamdas") clearly indicates—*could* have, for the kavi's ears, only *two* syllables ("puṛṣa"), but which the re-sanskriticising redactors-transmitters could not abide to see *written* according to the popular *spoken* form. The third key-word is "bhavati", which, as the pâli "hoti" shows, was felt to be "bhauti" "bhoti", all the more since there were the cases of roots

similar to "bhû" which had such-like forms ("nû : nauti", "sû : sauti", and others with short u- even)—and such is the case in the crypto-hypermetric pâdas (214,10a+c) discussed above, and also in another similar case (which seems to have escaped the editor) in 224, 43a. Another word is "paripakva" which again, (unless an original "*vi*pakva" was misread as "*ri*pakva" and then "completed" ?) in the same popular syncopating way, was really pronounced "parpakva" or possibly "prapakva"—(this latter being discarded because of technicho-medical unwelcome associations ?). This is found in 207, 28. And this popular tendency is similar to the one that pronounced "parśurâm" and later even "Parsrâm" as well as the above-mentioned "Janmejaya". This, by the way, shows the sort of svarabhakti-value that short a, i, u, had in the position represented in these words (s. Wackernagel, I, 51 foll.) as shown by the outstanding example of "parṣad" for "pariṣad" and "pârṣada" for "pâriṣada" ; and though it is true that here "ṣ" favours the dropping of "i" yet it creates in the ear the sense of equivalence between "par" and "pari" in *spoken* sanskrit, whence its admission into the *written* one—except for the "pāninifying" purists, of course.

There is still a possibility of a crypto-hypermetric pâda in 202, 24c, where the Mss go poles apart in recording "petuḥ" or "patitâḥ", this latter constituting an hypermetric pâda. The variant "patitâḥ vyasavaścaiva" offers, it seems at first sight, a much better chance of being the original text, since the variants with "petur" look rather obviously a correction and clarification. It would be possible to conjecture a primitive "pannâ(ḥ) gatâsavaścaiva" in which by different attempts at smoothing the text all the variants would find their explanation. In that case the hypermetric variant would only be an afterthought of the scribe-transmitter based on the existence of other (for him) obviously hypermetric pâdas. But scribes do not take to hypermetrics by choice ; they only bear with them if forced. Hence in reality what we have here in the Mss (with their seemingly irreducible variants) is the remnant of an obvious grammarian-correction that had shied at a "gatâsvaścaiva patitâḥ with a declension transference not rare in the epic (cfr. Wackernagel III, 78) in "dhenu : dhenvaḥ" or "vṛṣṭi : vṛṣṭyaḥ". It is especially instructive, we may add here, that this remnant of an hypermetric pāda should be found in an adhyāya that clearly has a specially striking *popular-paurānic* text for its basis (so different from other adhyāyas), though most glaringly "ornamented" by a second hand. That is why we find here other ślokas that look suspiciously like crypto-hypermetric ones as well, like 14c, 30c.—A similar thing we find in 214, where the underlying text seems to be of an ancient popular smṛti type. And here is an evident example of both how the Mss lead *beyond* themselves to an ancient text, and also how very far we have come from it. That is why the Mss alone offer here no definitive solution. Which again goes to show what an immense amount of research work remains to be done *after* the critical edition is completed.

The case of 207, 28cd is connected, as we saw, with an interpada hiatus and probably solves it—by eliminating it (if the case for "vipakva" of a good many Mss is—not unreasonably—rejected). For the tendency of the scribe-correctors is to put the offending hypermetric word at the beginning of the pâda in order that the *end* of it, more strictly regulated as to the rhythm, may not be offensive to the ears (theirs !). Hence the original was a perfectly rhythmical : "kâlena par(i)pakvabuddhiḥ", which when re-sanskriticised by giving full value to the "i", was a monstrosity. This forced them to change it into our "paripakvabuddhiḥ kâlena" which left the ending in perfect order, at the insignificant cost of an "ârṣa" hiatus. It would be possible to conjecture that a "tvâ" (tu +ā) has been misread as "â" at the beginning of d, for the sense seems to require it and the misreading would be easy ; but we do not think it is needed—and in text-criticism, as in any other scientific or philosophical subject, "entia non sunt multiplicanda sine necessitate."

The case of 224, 23a seems, as we pointed out above, to have been overlooked by the editor. The Mss give a variant that would make the text read "śarîrâśrayaṇâd bhavati" to which the editor gives no consideration at all because it looks like an assimilation to the same word in 42c ; but the sense, together with the doubtful tad : tam in 43c, make it questionable whether the subject is not "puruṣa" with the consequent masculine readings in b and with the consequent logical necessity of accepting the above variant as the only one making sense. Be that as it may, the fact that this is an hypermetric pâda makes it a different case altogether. This gives a double possible solution : either from "śrayṇâd" or from "bhauti", the first giving us perfect rhythm with the same word-order, but with the difficulty that the same word is read prosodically in two different ways in two consecutive ślokas—unless the variant reading in 42c "śarîrâśrayaṃ saṃprâptâḥ" is adopted as giving a much better sense and as explaining better the meaning and the position and prosodical value of "śrayṇâd" at the beginning of an hypermetric pâda. This (whatever the readings adopted) seems a good solution. If "bhauti" has to be preferred then the original text will necessarily have to be "śarîram śrayaṇâd bhauti" (or "śarîrâśrayaṇâd bhauti") because of the rhythm ; but it is not likely that the redactor would have allowed this *apparently* (if "bhavati" is given the tri-syllabic value that the *written* text represents) irregular rhythm to remain. Hence we may conclude that our immediate text is the one adopted in the edition, though the original on which its redaction was based had most probably the *second* form proposed above (with "bhauti" as the most likely syncopated *popular* form).—Incidentally, this whole context of adhy. 224 is a veritable temptation with its parallel in the Manusmrti (where there are a few hypermetric pâdas as well, for instance II, 201 with "bhavati" twice !) ; but we shall have to forgo the pleasure of entering upon that alluring subject. The same must be said (with regret) of the "Dham-

mapada" parallels, esp. 169, 17 ff., whose readings are far from giving the last word.

Before leaving this chapter on hypermetric verses it is well to notice how, as shown by the last example, they are like a palimpsest : they show us the way *beyond* even the text of our redaction to the raw materials that the last redactors had before them. An example will show what we mean : Dr. Sukthankar in his admirable Prolegomena gives us an instance of an "hypermetric" pâda—"karavâṇi kiṃ te Kalyâṇi", and of course we know now that "karvâṇi" is the real reading in the original. But a *popular bard* is not likely to compose a dialogue with that stilted and unnatural word-order, if he could as well say "kiṃ te karvâṇi kalyâṇi" or "kiṃ te kalyâṇi karvâni" or "kalyāṇi kiṃ te karvāṇi". And the *bard* had all the freedom to do so, since for him the tri-syllabic "karavâṇi" was no hindrance to correct rhythm. But the *redactor*. (first or second generation ?) *had* to put the four-syllabic "karavâṇi" at the *beginning*—or kill his rhythm. Hence we may feel pretty confident that the popular bard spoke the fresh and idiomatic style of real life—and was probably not a little proud of the jingle-like "-âni -âni" that would tickle the popular audiences.

IV. Six-Pada Slokas

Another point that should be well borne in mind is that the so-called *six-pâda ślokas* are a mere transmitter-redactor myth. No *kavi* ever composed one as such—which shows what a mess our text is in (after being manhandled by the "tradition-keepers") when we consider the amount of them that are taken over by our critical edition. They are all on principle suspect of being the illegitimate offspring of a generation of transmitter-correctors who tried to "improve" *the already-constituted Mhbh* with glosses and ampulosities and "finishing touches"—that very nearly "finish" both the Mahâbhârata as literary value and our patience as well. Most of the extra hemistiches bear the mark of afterthought so plainly branded on their foreheads that in the critical edition there should be a special sign introduced to single them out. We propose a +sign when clearly additional, and the same with ? when it is doubtful which is the additional hemistich. But the six-pâda arrangement should not be admitted into the text when clearly against the sense of the context, no matter what the Mss say !

Hence we do not see why in an obvious case of *wrong* grouping, like in 185, 11-12, we find three *perfectly normal* ślokas received into the text in the form of two abnormal six-pâda monsters, with the evident sense continuity and concinnity torn asunder. But this is nothing to what such a misguided second-hand would-be redactor can do to the text. In 192, 12 he has added one hemistich just to substitute in verse what the reference "Bhîṣma uvâca"

puts in the *ancient* prose-form. (By the way, this is probably one of the sources of the six-pâda monstrosities : the substituting of prose titles—in order forsooth to make it all a perfect "kâvya"—by our pedantic scribes). But the added hemistich simply throws into confusion the arrangement of the verses up to 16—where a stop-gap six-pâda arrangement restores the balance. It is nothing short of an insult to intelligence—though in itself it is a *mute* testimony against the *written* documents, for it shows how the instinct of tradition clings to the fact that the *normal* śloka is a *four*-pâda one, for it keeps cutting those unfortunate verses into four-pâda stanzas till the new turn of the narrative *forces* it to accept the inevitable in the last śloka.

Those things can do no honour to a *critical* edition, and if there is room for emendation, here was the place for the editor to assume the responsibility which is his. The additional hemistich (which is so obviously such !) should have been marked off as suggested above, or else the *first* stanza (which it equally obviously introduces and to which it evidently attaches itself) should have been made into a six-pâda śloka. The whole body of the Mahâbharata backs *the unity of sense with the unit of four-pâda ślokas* so that it always has the benefit of the doubt and the "conditio possidentis" in its favour. Hence an extra hemistich can be permitted ("faute de mieux" !) to be attached to the śloka with which it forms a sense unit, but under no circumstances dare it destroy the sense unity and unit of the other *normal* four-pâda ślokas that exist in their own right.

V. The Prose vs. Verse Problem

There is another, seemingly minor, point to which I should like to draw the editor's attention. *The references* "Bhîsma uvâca" etc. are, some times at least, included or excluded (esp. the latter) without any weight being accorded to the Mss evidence, following, it seems, the trend of the present state of the text, that is to say, taking into consideration whether the preceding context says the same in effect—but of course in the spread-eagled form of a half or full śloka in lieu of the simple prose reference. Now this is critically of the highest importance, and those short prose pieces have always on principle to be included in the text and to be given the benefit of the doubt at least, for they represent an older text form and are often a pointer to the fact that the "expansionistic" ślokas for the introduction of the speakers are of later origin and form part of the possibly second complete (strongly kṛṣṇifying ?) redaction of the epic which inflated it like a shapeless balloon to almost bursting point. How obvious this retouching hand is we can see especially in this very fascicule in cases like adhy. 175, 192, etc.

Here we have also specimens of the famous *prose-verse mixture* which at one time renowned scholars thought were giving us indicia of the *oldest*

stages of epic development. As it appears here it certainly bears, on the contrary, the imprint of the *latest* Mahâbhârata stage—the stage that makes, like a blind all-amassing avalanche, no distinction whatsoever between dross and metal, gravel and diamonds. It only leaves us on the one hand aghast that the Indian cultural treasures should have had to pass through such hands, and on the other thankful that a kind providence should have allowed so much to be preserved in that mass of débris—almost one feels constrained to say, *in spite* of the agencies at work.

VI. Swapping Tricks of the Transmitters

Besides the case of 192, 124cd studied above (under II, 7), 197, 5ab is another clear case of swapping of places for the sake of clarity : "ajñânadṛpto (not "tṛpto" as in the text !) 'vagāḍho viṣayeṣu na dṛśyate" seemed to the transmitters misunderstandable, because it leaves doubtful with what word the locative is to be joined ; "ajñânadṛpto viṣayeṣvavagâḍho" clears the doubt at the cheap price of another little liberty with the text (to be put to the all covering account of the "ârṣa" style ? Poor ṛṣis ! And there is no redress for them, since they are not there to defend themselves against those vandals.)

198, 14ab is again a wilful swapping of places for the sake of concinnity in the stanza : "tathâ" *first* word in a, like "yathâ" (do. in c !). Yet naturally the original order was not the present chiastic stumbling one, but "indriyâni yathâ pañca vimuktâni svakarmabhiḥ", which of course the transmitter felt he must improve upon—it being so easy besides.

197, 4ab : "abuddhir ajñânakṛtâ abuddhyâ duṣyate manaḥ". This hiatus comes just before 197, 5 (where we caught the transmitter red-handed swapping words to suit his own ends) and in the neighbourhood of other cases, already examined, where similar liberties are taken by the same agencies. Hence it is doubly suspect ; and therefore, considering the text of 5a (which we should read "ajñânadṛpto" as we said there, in view of the Mss variants in a) together with the ideas and style of 199, 25, we *could* propose the original as : "abuddher ajñânadṛptau" as the one involving the least change—with a locative absolute which, with its syntax and saṃdhi, would explain the desire of smoothing over the text felt by the transmitters. But we do not think that our meddlers would have stopped at minor changes ; and, considering the construction of cd, we feel that the text ought to be "buddher ajñânadṛptâyâḥ" which has all the tempting potentialities for a meddler who would like to have his correspondence perfect : "a-jñâna," "a-buddhi" (not realising that (in c) it is "manas", not "a-manas", that forms the next link—of course, "duṣṭa" ! the same as the kavi wanted "buddhi", *not* a-buddhi, "dṛptâ"). Hence again *no hiatus* !

197, 6ab.—The meddling tendencies at work (in 197, 4+5, just shown) force us very strongly to suspect that here too an original "hypermetric" pâda or, rather, two of them have been smoothed away : "tarṣa*sya* chedo na *bhauti pursas*yeha ca (tu ?) kalmaṣât". (The text should besides read "tadâ" and "yadâ" in cd, instead of the text "tathâ" and "yâtha" which should *not* have been given preference).

199, 6c—an hypermetric pâda also. The extra akṣara is only due to orthographic hyper-re-sanscritisation. The kavi merely made use of the common epic popularism (canonised in the typical case of "pihita" for "a-pihita") which, as a consequence of the frequent abhinihita samdhi, suppressed the first short a- of "abhi" and *said* "bhisaṃdhipûrvakaṃ karma" in c, as well as (though the *written* samdhi disguises it !) "lipsâpûrvâbhisaṃdhitâ" in b. By the way, this popular tendency is the same that already in the ancient inscriptional prākṛts had given us "ham" or "hakam" for the regular "aham", and has later on been perpetuated in the first personal pronoun in modern Indo-Aryan dialects. (Cfr. above, under II).

200, 11 : a case especially typical of the liberties that the transmitters take with the text as regard swapping. Here the śloka : "âsrayaṃ sarvabhûtânâṃ manaseti viśuśruma / sa dhârayati bhûtâtmâ ubhe bhûtabhaviṣyatî" tells its own tale to any one who has ears and eyes for the epic mannerisms "manaseti ha śuśrûma" (as *we* would read it) should not be pâda b, as in the text, but obviously c, as the *end* of the stanza. Of course, it is just possible that the two similar words ("bhûtânâm" and "bhûtâtmâ", especially in a Ms !) could have misled the transcriber into a pure *copying* error—but more likely it is an intentional "correction" for the sake of clarity, from a good and common construction with the object *before* the verb : "âśrayaṃ sarvabhûtânâm ubhe bhûtabhavisyatî/sa dhârayati bhûtâtmâ manaseti ha śuśruma".—*No inter-pâda hiatus* again.

N.B.—How often have the transmitters played us a similar swapping trick ? *Untold times, most likely* (whence our right to lose all confidence in them, as against reasonably suspicious indicia—the onus probandi is actually on them !) ; but it is only the anomalies of a hiatus or similar epic "licences" (which so many commentators and other gullible "vidûṣakas" of the same ilk are ready to gloss over with the proverbial "ârṣa" or—worse still !—"kûṭa") that betray their treacherous underhand manoeuvres. The hour for their unmasking has finally struck.

VII. Conclusion

The above are some of the remarks that have suggested themselves out of a long-standing study and familiarity with the critical edition as it has been

coming out. They are accompanied by an unstinted admiration for the great achievement of the editor (and the other editors as well) ; but they are also prompted by a desire to contribute a little mite towards the completion and perfection of a work to the initiation of which the institution to which this writer belongs (St. Xavier's College, Bombay) gave so much of its best in the persons and unstinted labours of its Professor, Fr. R. Zimmermann, S.J., and its Old Alumnus, Dr. V. S. Sukthankar. And though much of what has been said here may seem like "carrying coals to Newcastle" as regards the learned editor and his colleagues (and "caviare to the general" with regard to the average reader,) yet there is hope that some of the younger generation of scholars may be thereby awakened to the fact that this great critical edition is no mere "fait accompli" but very much still-in-the-making and calling for fresh minds and youthful energies.

Hence for the future we should like to make a suggestion. A group of young research scholars should be set, under proper direction and supervision, to work on the parvans *already critically edited* in order to produce a systematic series of monographies on subjects likely to throw new light on the text-critical problems. So much can already now be gleaned that could make the last volumes of this edition a vast improvement on their predecessors by the help of the latter's results and on the basis of their excellent editors' achievements! It would not be rash to think, for instance, that the editor himself would edit now 12,154,17cd differently in view of 12,213,11ab—or that in the latter he would have changed the senseless pāda-grouping of the passage, if he had kept the former in mind.

If a specialising little band of such workers, under, say, the joint auspices of the Bhandarkar Institute and the Deccan College and the advisory direction of the present and past editors set to work along those lines and tackled that most fruitful of all research provinces—the *anomalies* in the constituted text—it would be indeed an auspicious deed for the future of Epic Studies and Indian culture. May that day dawn soon ! And may the deserving editor live to see it in its full glory—such that "madhyaṃdine sūryo nāstam eti. . . . . ."

REVIEWS OF BOOKS

Indological Studies. Part II. By Dr. B. C. Law. Pp. ii+408. Calcutta: Indian Research Institute, 1952.

An acknowledged international authority on Buddhism and Jainism, Dr. B. C. Law has to his credit over 40 standard works and about two hundred articles on Ancient Indian History, Geography, Archaeology and other aspects of Indology. This variety of subjects mastered by him coupled with precision, thoroughness, perfect documentation and objectivity which characterise all his writings marks out Dr. Law as an outstanding Indologist. The present volume contains nineteen of Dr. Law's published and unpublished articles on different aspects of Buddhism, Jainism, Architecture, History, Indian Flora, etc.

Out of nineteen chapters in the book, Buddhistic Studies account for thirteen, there are three on Jainism, and one each deals with Cave Architecture, Slaves in Ancient India, and Ancient Indian Flora. Particulars are given about early Buddhist monks and nuns (Ch. I) as also about some distinguished men and women in Jainism (Ch. XIII). Buddha's first discourse (Ch. II) and Reincarnation in Buddhism (Ch. IV) find their counterparts in Mahāvīra and his doctrine (Ch. XIV) and Jain view of Karma (Ch. XV), and show the author's mastery over both systems. There is an interesting comparison between Tirukkural and Dhammapada (Ch. XVII) which brings together common teachings of both texts along with parallel ideas from the Bhagavadgītā. Some new and important topics dealt with in Samantapāsādikā, Papañcasūdanī and Sāratthappakāsinī—three commentaries by Buddhaghoṣa —are considered at some length in three Buddhist commentaries (Ch. XVIII). The expansion of Buddhism in India and outside (Ch. XI) is a detailed account of how Buddhism spread in all directions. Evolution of Cave Architecture in India and Ceylon (Ch. IX) and Buddha's life in art (Ch. X) show the author's interest in art and architecture and his thorough study of the subject. The book will amply repay perusal.

No uniform system of transliteration has been followed ; "c" and "ch", "ṣ" and "sh", "r" and "ṛi" are indifferently used to denote the same sounds. There is likely to be confusion about the correct sound of "ch" at some places. "Barhut" and "Bharhut", "Yue-chi" and "Yueh-chi" also appear side by side. There are several misprints besides those mentioned in the Errata at the end, which does not refer to the number of the line on the pages cited. On p. 31, a whole line has been omitted after 1.19 ; on p. 114, 1.29, "Central Provinces" should be "Central India" ; on p. 145, 1.15, "Paland" should be "Palnad" (Index also cites the word as "Paland"). Sir Flinders Petrie (p. 182, 1.4) and Taklamakan (p. 182, 1.5) are the correct spellings. The reviewer casually noted the following corrections :—the (p. 5,1.19) ; who (p. 29, 1.25) ; consisting (p. 31, 1.7) ; ascetics (p. 34, 1.12) ; imprisoned (p. 81, 1.16) ; pertaining (p. 93, 1.9) ; Buddhism (p. 114, 1.19) ;

formerly (p. 127, 1.22) ; including (p. 169, 1.26) ; cannot (p. 171, 1.12) ; foreign (p. 174, 1.11) ; famous (p. 178, 1.21) ; profoundly (p. 180, 1.1) ; and are (p. 199, 1.24).

A. D. PUSALKAR

The History of Buddha's Religion. (Sāsanavaṃsa). Translated by Bimala Churn Law. Pp. xvii+174. London : Luzac & Co. Ltd., 1952.

The Sāsanavaṃsa was written in Burma in A.D. 1861 by a monk named Paṇṇasāmī, and it gives the history of the spread of Buddhism in Burma and other Eastern countries. The accounts of Ceylon and Burma are described in more detail. We get a good idea of how missionaries were despatched to the far off countries like Siam, China, Burma and Ceylon, by the Elder Mahāmoggaliputta Tissa and how the new faith influenced the social and intellectual life of these countries. We are told (p. 86) how, as literacy spread, canonical texts began to be studied even by women residing in the town of Arimaddana.

A very interesting fact revealed by this book is the importance given to the study of Vedic texts by the early Buddhists. We are told that the Elder Siddhammasiri turned into the Maramma language a Vedic text (Vedasattham) called the Brihaja (p. 83), and that the king of the Maramma country sent a message to the Elder Ariyālankāra : "Send to me in the Rāmañña country monks who are of thirty or forty years standing well versed in the canon and learned in the Vedic texts" (p. 112). Again, the daughter of the chief Queen of Amarapura is stated to have been well versed in the Vedas (p. 154). There is a general misconception about the attitude of Lord Buddha towards the Vedas, wrongly supposing him to be anti-Vedic, and this evidence to the contrary is, therefore, most welcome.

Lord Buddha, when he referred to the Vedas, spoke of the Tiveda (as the Buddhists regard the Atharvana as of less authority), and he is himself described as Tevijja (learned in the three Vedas). Lord Buddha held that the Vedas originally contained pure and unmixed truth, when uttered by Mahā-Brahmā, but that they have been corrupted by the Brahmans to suit their own purpose, so that they are now made to defend the sacrifice of animals and are not to be relied upon as divine revelation. (Anguttara Nikāya, Pañcaka Nipāta).

This is the first translation into English of an extremely interesting and useful book, giving us a good idea of the zeal of the early Buddhists in spreading far and wide the teachings of Lord Buddha. And in publishing it, Dr. Law, the learned translator, has done a great service to the lovers of Buddhist literature.

V. M. KAIKINI

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