

offshoots. However Kanarese has an extensive and ancient literature of its own and at present it is written in a character similar to that of Telugu. Malayalam took its distinct form as a separate dialect from its mother Tamil about ninth Century A. D.

Telugu or the Andhra language is the other important Dravidian speech. It is spoken by nearly 22 millions in northern Dravida. It has copious literature of its own written in a character akin to Deva-nagari.

The most important group of the Hindi Vernaculars is the speech of Indo-Aryan origin. It is spoken by nearly 240 millions of people. Its principal subdivisions are : Northern and Northwestern Hindi (40 million) ; Midland Hindi (80 million) ; Southern Hindi or Bihari (40 million) ; Gujrati (10 million) ; Marathi (20 million) and Bengali (50 million).

We have shown that the Vedic Aryans settled in the Indus basin (Sapta-sindhavas). But they did not all come at once. They infiltrated slowly into the territory in the course of centuries. And it is certain that the later immigrants did not speak exactly the same language or at least had not the same accentuation and pronunciation as their predecessors. And when the second band of immigrants from Mesopotamia reached India and pushed their way to the Madhya-desa where they established powerful kingdoms and extended the Aryan influence and culture, there was more confusion of speech. And it was in the Madhyadesa a standardized literary language was regulated with fixed grammatical rules and canons about the 8th Century B.C. and it has been known since as Sanskrita which means reformed, from the root *kṛi* (kar) cognate with the Latin *Creo*=to make and *sam*=together.

But the Indo-Aryan people did not speak the Sanskrit. It was simply cultivated by the scholars who wrote in it as a common standardized vehicle of understanding. The people spoke their own natural language, first the Vedic dialects which gradually degenerated into Prakrita (natural) by the softening of the harsh consonants into almost fluidic sounds, as from *putra* into *puttya*.

In the Seventh Century B.C. the petty Aryan city-republics were confederated into a powerful kingdom under Kosalas, with their capital at Savatthi and as at the court of Savatthi, Pali was spoken, it became the standard language of the whole North-eastern India. When Goutama the Buddha decided to preach his Dhamma in the language of the people, he himself being a Kosalan and Pali being the most spoken language at that time, he chose it and with the spread of Buddhism, Pali became the sacred language of the Buddhists. Buddhist literature being written in Pali, its grammatical rules and regulations were fixed and like Sanskrit, it soon lost its elasticity and became crystallized.

About the fifth century B.C. Mathura was the capital of the powerful Panchala confederacy which extended as far as Kausambi (Kosam) and Kanyakubja (Kānauj). Saurasenians being the ruling princes in the court of Mathura, it became the standard language of this extensive and powerful kingdom, and after their rulers, the language as spoken was known as Sauraseni. Many of the Jaina sacred scriptures are written in Sauraseni. However though known by different names, there was hardly any difference between the Pali and the Sauraseni and both were very alike to the later Vedic dialects, excepting in the deterioration of the harsh consonantal sounds.

But as the Aryan conquest extended farther and farther, the Aryan language not only absorbed many of the vocabularies of the conquered, but there were also manifest phonetic changes. Many of the consonants have entirely disappeared and the remnants of the worn-out detritus are loosely strung together round faint and floating vowel-combinations—diphthongs, and the declensional and conjugational terminations, if not entirely lost, are at least well polished and smoothened, so that the language became sweet and melodious. Though it was called Apabhramsa which means *corrupt* or *decayed*, its utility for lyric poetry was early recognised. In the well-known Sudraka's drama—*Mrichchakatika* (Little Clay-cart), we come across fine specimen of Apabhramsa speeches. Songs are generally in Maharashtra, the speech of the 'great kingdom, Vidharva (Berar) extending southwards from the River Nerbuda to the Krishna, including part of Hyderabad and the Bombay Presidency. Sauraseni for prose, Avanti (Ujjain), Ardhamagadhi (Oudh), Shaurastri (Gujrat), Magadhi (Berar) and the Pisacha language are put in different characters, thus showing the cosmopolitan ancient Hindu culture, and that these speeches were but slight local variations and there was not much fundamental difference. Nor is the Apabhrangsa literature insignificant. Though much has been lost, there is enough to testify to its ancient greatness. The oldest Jaina *Sutras* are in Ardhamagadhi, as the Buddhist *Sutras* are in Pali. The canonical works of the Digambara (Nude Jaina sect) are in Sauraseni and the non-canonical literature of the Svetambara (White-clad Jaina sect) is in Maharashtra. Hala (between 3rd to 7th Century A.D.) made his famous collection of lyrical poems, which is well-known as *Sattasai*.

(Saptasaptika). Pravarasena wrote his great epic *Ravanavaha* based on the Ramayana traditions before the Seventh Century A. D. His contemporaneous Vakpati celebrated the conquest of Bengal by Yasovarman, king of Kanauj, in his well-admired *Gauravaha*. Hemachandra (1150 A. D.) wrote his famous *Dvyasraya Mahakavya* of which the last eight cantos *Kumarapala-charita* were in *Apabhramsa* to illustrate his Sanskrit-Prakrit Grammar—*Siddha-Hemachandra*. Rajshekhara wrote his entertaining comedy *Karpuramanjuri* which indicates that the language of the Aryabharta was yet of an uniform standard with but slight local variations.

In course of time, with lack of rapid communications, the foreign invasions, the splitting up of mighty kingdoms into petty states with mutual jealousy and internecine wars, the decay and the disappearance of the central Buddhist organisations and their influential university-centres and last though not the least, the Mohammedan conquest, accentuated the local differences of the *Apabhramsas* and which has resulted in the development of local vernaculars, though there is a fundamental unity among all of them, *e. g.* the predominance of Sanskrit words is common to all, varying from about 90 P. C. in Bengali to 40 P. C. in Sindhi.

Hindi is the corrupt form of Saraseni in the Gangetic-Jamuna basin, of Avanti in Rajasthan, Ardhamagadhi in Oudh and Bundelkhand. Of these Braja-Bhasha spoken round Mathura is the purest and very similar to that of older Sauraseni of which it is the direct lineal descent. Though Hindi is designated by various local names as Bhraja-Bhasha, Kanauji, Bangaru, Bundeli, Bhoj-puri, Marwari (Rajasthani), Lahnda (Gurumukhi),

the dialects merge one into the other with but difference of delicate shades of accentuation and intonation. In the Punjab, the language is a little abrupt and sharp, as well as partially mixed with foreign words, especially Persian. This Persianised Hindi is called Urdu. The name originated from *Urdu-e mu'alla* (the Royal Military Bazar) where psycophant courtiers used this kind of expression to flatter the vanity of Persianised invaders and their underlings, and it became popular. And now it is generally spoken by the Mahomedans in upper India and Hyderabad.

However in Cashmiri, there is a substratum of Pisacha speech. And it is found in Sindhi, Gujrati and even in Marathi. It is probably Scythian in origin. It is an intermediate form of speech between Aryan and Iranian. Its cognate tongues, Kafir is spoken in Kafiristan, Khowar in Chitral country, Shina in Gilgit valley, and Kohistani in the Kohistans of the Indus and the Swat rivers.

Sindi is derived from Avanti like Lahanda of the Punjab and has Pisacha basis, and is mixed with many Persian and Arabic words.

Gujrati is a mixture of the derivatives from Shaurasthi and Maharastri with a slight infusion of Pisacha (Shina) language. Marathi has sprung from Maharasti. It has two local dialects known as *Konkani* and *Desi Marathi* but they hardly differ from each other except in a few accents.

Bihari, Bengali, Uriya and Assamese are the corrupt forms of Magadhi. And their relation is so intimate that there is hardly any difference, between Bengali, Assamese, Uriya and Southern Bihari except in a few intonations.

In fact all the Hindi vernaculars are kindred tongues and they merge into each other. They may be called by different names, as the Scandinavian language is known, Danish, Swedish and Norwegian, though they are identically one, and there is more difference between French Patois, from the North and the South German, between the North American and the English, between the English and the Welsh, than between Bengali and Braja-Bhasha or Gujrati. Assamese loses its identity and fuses easily with Bengali, and Bengali into Bhojpuri and Bhojpuri into Bhraj-Bhasha, and Bhraj-Bhasha into Gujrati or Marathi and so on; the connecting chain is too intimate and binding and hardly there is any gulf of separation between any of them. Bengali spoken in any part of Northern India would be understood as Hindi in Bengali. It is true the colloquial expressions of Hindi are better understood not only in every part of India, but also in greater India. But Bengali or Gujrati written in Nagari character would by no means be a difficult thing for a Hindi *litterati* to comprehend. The Bengali women often ignorant of Sanscrit and even of reading their language easily comprehend Tulsi Das's Ramayana or the sacred *kathas* of the Pandits of Benares. The expulsion of Persianized words, the gradual elimination of local slangs and the steady introduction of Sanskrit vocabularies in their place are slowly moulding an unified language, and a common script like Nagari would in a few generations create an uniform, standardized, literary language.

The Indo-Aryan language is a member of a very large family, called Indo-Germanic or Indo-European, Vedic and its derivative formations. the classical Sanskrit. Pali.

Avanti, Sauraseni, Maharastri, Magadhi, Ardha-magadhi, Pracya ; and their secondary transformations, Western Hindi (Hindustani, comprising of Bhraj-Bhasa, Bundeli, Kanaui, Dakhini and their tertiary accumulation, Urdu), Eastern Hindi (Awadi, Bagheli), Lahnda (Hindki, Jatki, Multani), Kashmiri, Kohistani, Sindi (Lari), Marathi (Desi, Konkani), Gujrati (Bhili), Rajasthani (Marwari, Jaipuri), Bihari (Bhojpuri, Magadhi, Maithili), Orya, Bengali, Assamese, Punjabi, Pahari (Naipali) and Sihghaese form but a minor section of the whole.

Their next kindreds are in Gandhrra (Afganistan), Iran (Persia) Caucasia and Armenia.

Afghanistan : Afghan (Pukhtu, Pasto), Beluch, Galcha, Chitral, Kafirstan : Pisacha (Shina, Khowar, Kafri).

Iranian : Avestan, Bactrian, Old Persian, Pahlavi, (Pazend, Parsi, Huzvaresh), Modern Persian, Kurdish, Ossetic.

Anatolic (Armenia, Ancient Phrygia, Southern Russia): Armenian (Old and Modern) ; Phrygian, Scythian.

Thracio-Illyrian : Thracian, Illyrian, Albanian (Gueg, Tosk).

Balto-Slavic : Old Slavic, Russian, Bulgarian, Servo-Croatian, Slovenian Czech or Bohemian, Moravian, Slovakian, Polish, Kasubian, Polabian, Old Prussian, Lithuanian, Letish.

Hellenic : Old Ionic, New Ionic, Attic, Doric, Æolic, and Modern Greek.

Italic : Latin, Langue d'oil, Langue d'oc, French, Provençal, Franco-Provençal, Catalan, Spanish (Andulasian, Argonese, Asturian, Castilian, Leonese), Portugese (Galician), Italian (Sicilian, Tuscan, Milanese), Rhæto-Romanic, Rumanian.

Celtic : Gaulish, Cornish, Welsh, Breton (Armorican), Irish, Scotch Gaelic, Gaelic (Erse), Manx.

Teutonic : Gothic, Old Norse, Icelandic, Scandinavian, Old High German (Frankish, Alemanic, Bavarian), Middle High German, German, Old Saxon, Plattdeutsch (Low German) Dutch, Flemish, Friesic, Anglo-Saxon (Old English), English.

And though English forms but a link in a distant chain, yet its relation with Sanskrit has not been entirely effaced and can be easily traced as the following examples will show.

Skt. *bhu*=become, be ; Gk. *phy-o*=grow ; Lat. *fu-i*=became ; Eng. *be*. Skt. *bhaja*=divide, share ; Gk. *phag-ein*=get one's portion, eat ; *phag-os*=oak (tree yielding edible fruit) ; Lat. *fag-us*=beech ; Eng. beech. Skt. *bha*=shine, appear ; Gk. *phe-mi*=reveal, say ; Lat. *fari*=say : Eng. *ban*=public proclamation. Skt. *vabh*=weave ; Gk. *uph-e*=web ; Eng. *weave*. Skt. *lubh*=desire ; Gk. *lips*=longing ; Lat. *lub-et*=it pleases ; *lief*=dear.

Skt. *pada*=foot ; Gk. *pod-a*=foot ; Lat. *ped-em*=foot ; Eng. *foot*. Skt. *para*=far ; Gk. *pera*=distant ; Lat. *peren-die*=day after ; Eng. *far*, *fore*. Skt. *apa*=away, off ; Gk. *apo* ; Lat. *ab*. Eng. *off*.

Skt. *dvar*=door, Gk. *thur-a* ; Lat. *for-is* ; Eng. *door*. Skt. *rudhira*=red ; Gk. *erythros* ; Lat. *rub-er* ; Eng. *red*. Skt. *udhar*=udder ; Gk. *outhar* ; Lat. *uber* ; Eng. *udder*. Skt. *dva*=two ; Gk. *duo* ; Lat. *duo* ; Eng. *two*. Skt. *tri*=three ; Gk. *treis*, *tria* ; Lat. *tres*, *tria* ; Eng. *three*. Skt. *udra*=otter ; Gk. *udra*=water-snake ; Eng. *otter*. Skt. *dant*=tooth ; Gk. *o-dont-a* ; Lat. *dentem* ; O. Eng. *tano*=tooth. Skt. *jnana*=know ; Gk. *e-gno* ; Lat. *cogno-vit* ; Eng. *know*. Skt. *jan*=beget, be born ; Gk. *ge-gon-os*=born ;

Lat. *gen-ui*=begat; Eng. *kin*. Skt. *yuga*=yoke; Gk. *zug-on*; Lat. *jug-um*; Eng. *yoke*. Skt. *go*=cow; Gk. *vous*; Lat. *bo-s*; O. Eng. *cu*=cow.

Of course the relation between the Vedic Sanskrit and Avestan is very close. Gatha can be translated into Sanskrit, almost word by word, with but slight phonetic changes. But even the relation of Sanskrit with Greek or Latin is not very distant as is generally supposed. Thus for an example, the hymn of the Rig-veda, VI. 51. 5 can be translated into Greek or Latin with but little change :

Dayus	pitār	prithivi	mātar	adruk
Zeus(s)	pater	plateia	meter	atrek (es)
Agne	bhrātār	vasvah	mrlata	nah
Ignis	frater	———	be mild	nos.*

The Indo-Germanic people must have lived together in a cold climate, as the Sanskrit *hima*, Greek and Latin *hiems*, and Old Slav *zima* could not have otherwise the identical meaning.

Even the verbal terminations are almost the same :—

	Sanskrit.	Avestan.	Greek.	Latin.
<i>I am :</i>	asmi	ahmi	emmi	sum
<i>Thou art :</i>	asi	ahi	essi	es
<i>He is :</i>	asti	asti	esti	est
<i>We are :</i>	'smaś	hmahi	esmes	sumus
<i>You are :</i>	'stha	sta	estē	estis
<i>They are :</i>	santi	henti	enti	sunt

* Dyauś (Sky) father, Prithivī (Earth) kind mother, Agnī (Fire) brother, ye Vasus (Bright Ones) have mercy upon us.

	Old Slavic.	Gothic.	Lithuanian.	Armen.
<i>I am :</i>	yesme	im	esmi	em
<i>Thou art :</i>	yesi	is	essi	es
<i>He is :</i>	yesto	ist	esti	ē
<i>We are :</i>	yesmo	sijum	esmi	emo
<i>You are :</i>	yeste	sijuth	estē	eq
<i>They are :</i>	somte	sind	(esti)	en

M. Paul Regnaud has given a complete list of Sanskrit roots, he found in Latin and Greek in his scholarly work *Dictionnaire Etymologique du Latin et du Grec dans ses rapports avec le Latin d'après la méthode évolutionniste—linguistique indo-européenne appliquée*. However as it may not interest the general readers, we are giving below* a partial list of the common words found in Sanskrit, Zend, Greek, Latin, Teuton, Slav and Celtic languages after F. Max Müller's collection in his *Biography of words and Home of the Aryans*.

* See Appendix A.

PHOENICIAN		GREEK		ROMAN	
NAME	LETTER	EARLY	LATE	EARLY	LATE
OX-HEAD	𐤀	Α	Α	Α	Α
HOUSE	𐤁	Β	Β	Β	Β
CAMEL	𐤂	Γ	Γ	Κ	Β
DOOR	𐤃	Δ	Δ	Δ	Δ
WINDOW	𐤄	Ε	Ε	Ε	Ε
HOOK	𐤅	Υ	Υ	Φ	Φ
DAGGER	𐤆	Ζ	Ζ	Ζ	Ζ
FENCE	𐤇	Θ	Θ	Θ	Θ
HAND	𐤈	Ι	Ι	Ι	Ι
HAND	𐤉	Κ	Κ	Κ	Κ
OX-GOAD	𐤊	Λ	Λ	Λ	Λ
WAVES	𐤋	Μ	Μ	Μ	Μ
FISH	𐤌	Ν	Ν	Ν	Ν
EYE	𐤍	Ο	Ο	Ο	Ο
LIP	𐤎	Π	Π	Π	Π
HEAD	𐤏	Ρ	Ρ	Ρ	Ρ
HEAD	𐤐	Σ	Σ	Σ	Σ
TEETH	𐤑	Τ	Τ	Τ	Τ
MARK	𐤒	Τ	Τ	Τ	Τ

COMMON ENGLISH	ARCHAIC ROMAN	ARCHAIC GREEK	PHOENICIAN	BRĀHMA	DEVELOPMENTS OF BRĀHMA				MODERN NĀGARĪ
A	A	Α	𐤀	𑀅	𑀅	𑀆	𑀇	𑀈	अ
K	K	𐀀	𐤂	𑀅	𑀅	𑀆	𑀇	𑀈	क
G	C	Γ	𐤄	𑀅	𑀅	𑀆	𑀇	𑀈	ग
T	T	Τ	𐤄	𑀅	𑀅	𑀆	𑀇	𑀈	त
TH*	Θ	Θ	𐤄	𑀅	𑀅	𑀆	𑀇	𑀈	थ
D [†]	D	Δ	𐤄	𑀅	𑀅	𑀆	𑀇	𑀈	द
P	Ρ	Ρ	𐤄	𑀅	𑀅	𑀆	𑀇	𑀈	प
B	B	Β	𐤄	𑀅	𑀅	𑀆	𑀇	𑀈	ब
Y	Υ	Υ	𐤄	𑀅	𑀅	𑀆	𑀇	𑀈	य
V	V	Υ	𐤄	𑀅	𑀅	𑀆	𑀇	𑀈	व

Borrowed from Monier-William's Sanskrit-English Dictionary.

V.

HINDI SCRIPTS.

The history of the Hindi alphabets is shrouded in mystery. It can not be traced directly step by step to its origin as in the Egyptian hieroglyphic or Assyrian cunei form writing. In the specimen of its most ancient writing, or the first time we see it mentioned, we find it already well developed in its evolution. * The oldest allusion to writing is found in one of the Buddhist *Silas* incorporated in *The dialogues of Buddha* and was compiled within the first century of Buddha's death and which can not be later than 450 B.C. In this the disciples were enjoined not to indulge in children's games, of which *Akharika* is mentioned as one of them, interpreting it as *guessing at letters traced in the air, or on a playfellow's back*.* In *Vinaya* which is a treatise on conduct and which is almost contemporaneous with the previous work mentioned, writing (*lekha*) is praised as a distinguished art.† And though the sisters of the Order were forbidden to indulge in worldly arts, there were exceptions to the rule and writing was one of them.‡ A criminal "who had been written in the king's porch" which means that such a man was a refugee of justice and to that effect, a notice was hung at the entrance of the palace for the public

* T. W Rhys Davids-Dialogues of the Buddha, Vol. I. P. 3-26.

† Vinaya, IV. and 7.

‡ Vinaya, IV. 305.

knowledge, was forbidden admission to the Order.* In an argument as to what profession a boy should select, the parents say that if he adopt the career of a *writer*, he will live in ease and comfort : but on the otherhand his fingers will ache.† If a member of the Order write to a man, disserting on the advantages of suicide, then for each letter in the writing, he commits an offence.‡ All this clearly indicates that writing was well known and was very ancient and popular in India at that time, otherwise it could not be children's sports, or public notices given through writing. Of course the word writing is expressed by *lekham chindati* which really means *scratches a writing* perhaps with an iron stylus like the Assyrians, but instead of on the clay, it was done on the palm leaves and wooden boards. It is well-known that all the modern alphabets, at present used in India, Ceylon, Burma and Siam have evolved out as local adaptations from the *Brahmi lipi*, the sublime writing. But did the *Brahmi lipi* originate in the country, as did the Demotic, Hieratic and Lienear scripts in Egypt out of the Hieroglyphics (Gr. *ieros*=sacred, *glyphein*=to curve) as abbreviated and conventionalized forms ? Or was it imported from abroad and if so by whom, whether by the Aryans or by the Dravidians ?

It is true that the Indian climate is not suitable like Egypt for the preservation of writing materials, for not only the dampness and heat, but also the insects and worms are very destructive. However from whatever

* Vinay, I. 75.

† Vinay, I. 77. IV. 128.

‡ Vinay. III. 76.

has been discovered, it is evident that the art of writing has been introduced into India by the Dravidians.

The Bower* manuscript found in Mingai, near Kuchar, containing some medical formulas, though written on birch bark-sheets with ink, was made in the shape of palm leaves (*Corpha talipot*) and pierced in the centre with hole through which a string could be passed to hold them together, and which is very well suited to the palm leaves but quite unsuitable to the birch bark-sheets, for they are very delicate and fragile and a hole and a string are very apt to break and tear them down. This clearly indicates that writing was introduced into northern India from the southern part where palm leaves were available as a writing material, and which could not be had in the northern section of the peninsula where chiefly the Aryans settled.

Now the question arises whether the Dravidians developed the alphabets out of the pictographs or borrowed them from abroad, either through commercial intercourse or they brought them when they migrated from the Euphrates valley. According to Weber and Buhler, quite a large proportion of the oldest Hindi alphabets are fundamentally identical with the letters on certain Assyrian weights and especially the Mesa inscription of the seventh century B. C. Almost one third of the twenty Assyrian letters of the seventh century B. C. are identical with the oldest forms of the corresponding Hindi letters. Another third are very similar. And the remaining third are not radically different from each other.*

* Weber : Indian studies, Part III. Buhler : Indische Paléographie.

The oldest specimen of Hindi writing, yet discovered, is perhaps found in the inscriptions on the vases, discovered by Peppe in the Sakya tope. Here the letters are not only primitively inscribed, but also they have not yet attained to their phonetic maturity and fullness. Thus Sakyanam is written as *s ki y nm* which is almost syllabic and neither the vowel or the diphthong is yet well developed. In the edicts of Asoka, the letters are clear and fine and have their complete phonetic expressibility. The earliest sample of manuscript is perhaps the one discovered in the ruins of the Gosinga Vihara, thirteen miles from Khotan, written on birch bark-sheets, held together by silk thread sewn at both ends, in Kharosti character, used at that time in Gandhara and introduced in Khotan about 500 B. C.

The question then arises that if the Dravidians introduced the art of writing, when did they do it and why did they not use the clay tablets like the Babylonians as the writing material? The Vedas were for a long time transmitted from generation to generation orally, and the advantage of recording the sacred literature in a permanent unforgettable and reliable form was not utilised. This is not difficult to answer. Firstly the Aryan conquerors were a haughty and arrogant people, and regarded their own institutions much superior to those of the conquered and in their pride disdained to borrow new-fangled ideas and preferred to adhere to their own system of recording their sacred literature by memory culture, which by cultivation through generations after generation, they had almost developed to perfection, as the Egyptian priests long after the knowledge of Demotic character and which was principally used for

private correspondence, and official and commercial transactions, still preferred the pictographs (hieroglyphics) for their sacred purposes. And the Dravidians themselves might not have found clay as a handy available material and they had to adapt themselves to local conditions. So they utilized palm leaves and for more permanent recording they used copper* silver and gold plates.† However clay was not entirely excluded, as we find a fine specimen of a brick tablet, discovered by Dr. Hoey, with a Buddhist Sutta inscribed on it.

Of course as to when and how the Dravidians brought the knowledge of writing from the Euphrates valley, either as they emmigrated or through the commercial intercourse, which was facilitated by the regular monsoon wind, can not yet be definitely answered. One thing is certain, we have not up to this time discovered any evidence testifying to the autochthonous development of writing. On the other hand in Egypt and Mesopotamia, the natural history of the alphabet, its birth, growth, infancy and development can be easily traced step by step. All alphabets in their final analysis might owe to the Egyptian and Accadian pictographs and hieroglyphics, with the possible exception perhaps of the Chinese ideographs and yet they show a very close resemblance.

Egyptian hieroglyphics were undecipherable and were shrouded in mystery until Napoleon's expedition in the land of the Nile awakened keen interest in France in its sacred treasures and a young imaginary officer, Boussard by name, found in the year 1799 near Rosetta in the

* A copper plate of Takli-ula, *Epigraphia Indica*, Vol. IV.

† The Maung-gon gold plate, *Epigraphia Indica*, Vol. V, p. 101.

suburb of Alexandria, a slab stone* inscribed in three languages, hieroglyphic, demotic and the Greek. Of course the Greek could be easily read, but the other two languages still retained their profound peace. And the door to the ancient Egyptian store house remained unlocked before the celebrated French archeologist Jean Francois Champollion. (1790-1832) found the key to solve the enigma of this strange picturesque epigraphy. He observed that there were cartouches or ovals round some pictographs and they appeared again and again and contained the same hieroglyphics; he therefore rightly guessed they were the royal names of Ptolemy and Cleopatra which were in the Greek text. As the personal names can not be written by ideographs, the first sound of each picture was utilized as a phonetic alphabetic equivalent and it was the custom of the land to put the names of royalties in cartouches as distinction of honour. And knowing as he did the language of the Copts, the descendants of the ancient Egyptians and who retain more or less the purity of their blood and dialect, he could easily ascribe to their phonetic value. Cleopatra was written thus :—Quadraat for K ; the lion for L ; the reed for I or E ; the knotted cord for O ; the shutter for P ; the eagle for A ; the hand for T ; the mouth for R ; the eagle for A ; and the eggs stand as a determinative for the feminine sex. Ptolemy was inscribed as follows :—shutter for P ; a cap for T ; the knotted cord for O ; the lion for L ; the tongs for M ; the two reeds for Ai ; the crochét for S. It should be remembered that the primitive Chippewa Indians of Lake Superior in their petition to the Government of

* Now known as the Rosetta stone and is in the British Museum.

the United States of America in the year 1849 used clau-totems to designate the names of the petitioners. The whole petition consisted of a picture of the representative totems of the clans, held together by strings and they are placed on striped band below which lay attached to the string four small fruit-like impressions. The totems, crane, martens, bear, man-fish and cat-fish, represented the chiefs of those clans and the string holding them together signified their unity of purpose and the striped band is the Lake Superior and the fruit-like prints are the islands to which they lay claim to settlement. Here as it can be easily seen, the power of expressibility is very elementary, crude and clumsy and is far behind the cultural needs, which in the fertile valley of the Nile, the Egyptians developed to an extraordinary degree, even in the remote and misty period of human history. Rosetta stone is also a petition and by the priests for re-dress and it runs as follows :—

“To king Ptolemy and queen Cleopatra his sister and queen Cleopatra his wife, gods Euergetae welfare. We, the priests of Isis, the very great goddess (worshipped) in Abaton and Philae, seeing that those who visit Philae—generals, chiefs, governors of districts in the Thebiad, royal scribes, chiefs of police and all other functionaries, as well as their soldiers and other attendants, oblige us to provide for them during their stay, the consequence of which is that the temple is impoverished and we run the risk of not having enough for the customary sacrifices and oblations offered for you and for your children, do therefore pray you, O great gods, if it seem right to you to order Numenius, your cousin and secretary to write to Lochus, your cousin and governor of the Thebiad, not

to disturb us in this manner and not to allow any other person to do so and to give us authority to this effect that we may put up a style with an inscription commemorating your beneficence toward us on this occasion, so that your gracious favour may be recorded for ever ; which being done, we and the Temple of Isis shall be indebted to you for this among other favours. Hail."

"King Ptolemy and queen Cleopatra the sister and queen Cleopatra the wife, to Lochus our brother, greeting : Of the petition addressed to us by the priests of Isis in Abaton and Philae, we place a copy below, and you will do well to order that on no account they be molested in those matters which they have declared to us. Hail."

Not only ancient Egypt inscribed magnificently, in her temples, buried tombs and sarcophagi with the most solemn and picturesque effect, but she also wrote on papyrus rolls, which were manufactured by pressing the fibres of the papyrus plants which grew on the Nile and gleuing them together. Some of these papyrus rolls are very long and they can be seen in various museums of Europe. The Papyrus of Ani is 78 feet long, that of Nebseni of Thebes, 77 feet long and that of Nu is 65 feet long. In some of the papari, the writing is in pictographs in vertical registers, while in others in hieratic, a cursive abridged form of the hieroglyphics, from right to left, a kind of short hand writing. Part of the papyrus Hu-Nefer in primitive picture writing expresses this way —Adoration of Ra, when he riseth in the horizon, eastern of heaven. Behold, Osiris, Hu-nefer, triumphant, he saith : Homage to thee, Ra in his rising : Temu in his setting. Thou risest, thou

shinest, diademed as the king of the gods. Thou art lord of heaven, lord of earth, maker of the beings of heaven and of the beings of the earth, God one who came into being in time primeval, maker of the world, creator of mankind, maker of the god Nu, creator of Hapi, creator of the watery abyss, making to live what is therein, binding fast the mountains, making to come into existence men and women."

The phonetic value in juxtaposition to the picto and ideographs has been transliterated in the following manner :—for a, eagle ; ah, reed ; e, arm ; ai, double reed ; u, chicken ; b, leg ; ch, shovel ; d, t, hand ; f, snail ; g, altar ; h, twisted loop ; k, cup ; kh, disk ; l, lion ; m, owl ; n, water waves ; p, shutter ; r, mouth ; s, crochet ; sh, tank ; t, cap ; th, looped cord ; z, cerastes.

Below is the translation of a part of the Papyrus Prisse in hieratic writing, about 2500 B. C. which is in the Bibliothèque National, Paris, and which is mentined to be copied from an original of 3350 B. C. It reads as follows : The advice of a father to his son :—
 "If thou hast become great, after thou hast been lowly, and if thou hast amassed riches, after poverty, so that thou hast become, because of this, the first in the city ; and if the people know thee on account of thy wealth and thou art become a mighty lord, let not thy heart be lighted up, because of thy riches, for the author of them is God. Despise not thy neighbor, who is as thou wast, but treat him as thine equal.....who shall make me to speak noble words ? How shall I tell him (my son) the words of those who have heard the wise counsels of olden times, the counsels which have been heard from the gods ?" The father mourns about

the good old times and yet he lived more than five thousand years ago.

The history of the cuneiform writing is similar to that of the hieroglyphics. Father Schiel's Sumerian votive tablet, as named after the discoverer, is perhaps the oldest specimen yet found of the art of picture writing. It is so archaic in its simple design, for these primitive drawings can by no means be called standardized alphabets, yet so expressive in its meaning. It has three vertical registers without any definite demarkation and consists of a jar on a stand, a star, throne, two trees on a canal, four musical instruments, pouring out the libations, a covered jar before an altar and a foot.

The Monuments Blau, named after the discoverer, are also Akkadian votive tablets in quaint and impressive pictographs. The Akkadians and the Sumerians were the same Turanian people and spoke the same language. Only those who lived in the northern mountainous region were called Akkadians, for Akkad meant in their language the mountains and those who lived between the rivers, were called Sumerians for *Sumer* in their language meant the river valley. When a branch of the savage Semitic race was attracted to the land for its fertility and wealth and conquered the Sumero-Akkadian race, the conquerers not only mixed with the conquered, but also borrowed their superior arts, crafts and culture and developed into what is known as the Assyrian and later the Babylonian civilisation. As the only writing material in the river valley was clay and it was impressed with a sharp-edged stylus, soon the pictographs were converted into cuneiforms as soon as they became conventionalized. This transitional stage of writing is exemplified in the Our-Nina brick

(about 4000 B. C.) which reads: Our-Nina, king of Shirpoula, son of Nini-hal-shin, the abode of Ghirson, he has constructed and in the fragment of the Entemena tablet (4500 B. C.).

Further standardization is noticed in the famous statue Gudea (now in Lovre), the priest-king (Patesi) who ruled Southern Babylonia about 3100 B. C. His front dress, arms and back are covered with exquisitely clear inscriptions in horizontal linear columns. It reads as follows :—

"In the temple of the god Nin-Girsu, his king the statue of Gudea, the Patesi of Shirpurla, who the temple of Enninu has constructed: 1 qa of the fermented liquor, 1 qa of food, half a qa of.....half a qa of.....such are the offerings which it institutes. As for the Patesi who shall revoke them, who the orders of the god Nin-girsu shall transgress, let the offerings instituted by him in the temple of the god be revoked. Let the commands of his mouth be annulled."

"To the god Nin-girsu, the powerful warrior of the god Ellila, Gudea the architect, the Patesi of Shirpurla, the shepherd chosen by the unchangeable will of the god Girsu, regarded with favourable eyes by the goddess Nina, dowered with power by the god Nindara, covered with renown by the goddess Bau, the offspring of the goddess Gutumdug, dowered with sovereignty and the sceptre supreme by the god Galalim, proclaimed afar among living creatures by the god Dunshaga, whose primacy has been firmly founded by the god Ningishzida, his god. After that god Ningursu had turned towards his city a favourable gaze (and) Gudea had chosen as the faithful shepherd of the country,

(and) among the divisions of men had established his power, then he purified the city and cleansed it; he has laid the foundation (of the temple) and deposited the foundation-cylinder. The adorers of the demons, the evokers of spirits, the necromancers, the phphetesses of divine decrees, he has banished from the city. Whoever has not departed obediently, has been expelled perforce by the warriors. The temple of the god Nin-girsu, in all respects in a pure place he has constructed. No tomb has been destroyed, no sepulchral urn has been broken, no son has ill-treated his mother. The minsters, the judges, the doctors, the chiefs, during the execution of the work have worn garments of.....during all the time (of its construction), in the cemetery of the city no ditch has been excavated; no corpse has been interred. No Kalu has performed his funeral music or uttered his lamentations. The female mourner has not caused her lamentations to be heard. On the territory of Shirpurla, a man at variance to the place of oath (court of Justice) has taken no one; a brigand has entered the house of no one. For the god Nin-girsu his king (Gudea) has made the dedicatory inscriptions; his temple Eninnu which illuminates the darkness, he has constructed and re-instated. In the interior his favourite Giguṇu of cedar wood he has constructed for him. After that the temple of the god Nin-girsu he has constructed, the god Nin-girsu, the king beloved by him, from the sea of the Highlands (Elam) to the lower sea has forcefully opened (the roads) for him. In Amanauṃ, the mountain of cedars, (joists) of cedar, whose (length) was seventy spans, (and joists) of cedar, whose (length) was 50 spans, (and joists) of box whose length was 25 spans, he has caused to

be cut ; from this mountain he has caused to be brought. The.....he has made. The.....he has made. The.....he has made. * As for the cedar to form great gates, he has employed ; with brilliant ornament he has enriched them and in the temple Enninu he has placed them. In his sanctuary E-magh-ki-a-sig-de-da he has used as beans. Near the city of Ursu, in the mountains of Iblajoists of Zabunum trees, of great shaku trees, of talubum trees, of gin trees, he has caused to be cut ; in the temple of Enninu he has caused them to be used as beans. From Shamanum in the mountains of Menua, from Susalla, in the mountains of Martu, nagal stones he has caused to be brought ; in slabs he has caused them to be cut ; the Holy of Holies in the temple of Enninu he has constructed of them. From Tidanum in the mountains of Martu shirgal-ghabbia stones he was caused to be conveyed : in the form of urpadda he has caused them to be cut ; to (receive) the bars of the gates in the temple he has arranged them. From the country of Kagal-adda-ki in the mountains of Kimash he caused copper to be taken, to make the arm, from which one escapes not he has employed it. From the country of Melughgha kala trees he has imported ; he has caused to be made. From Kilzanim he has imported, to make the arm he has employed. Gold-dust from the mountain of Ghagum he has imported ; for the fabrication of the arm.....he has utilized it. Gold-dust from the mountain of Melughgha he has imported, to make Emartu he has employed it. Lidri he has imported. From the country of Gubin, the land of ghaluku trees, ghaluku wood he has imported ; to make pillars he has employed it. From the country of Madga in the mountains of the river Gurruda bitume (?)

he has imported ; the platform of the temple of Enninu he has constructed. Imghaum he has imported. From the mountains of Barsip nalua stones in large boats he has caused to be brought ; the foundation of the temple Enninu he has encircled with them. By arms the city of Anshan in the country of Elam he has conquered ; its spoils to the god Nin-girsu in the temple Enninu he has consecrated. Gudea, the Patesi of Shirpula after that the temple Enninu to the god Ningirsu he had constructed, has built an edifice : a pillared temple to Patesi for the god Nin-girsu had constructed ; he has constructed for him. He has written there his name ; he has made dedicatory inscriptions. The orders of the mouth of the god Nin-girsu he has faithfully executed. From the mountains of the country of Magan a hard stone he has imported. For him a statue he has caused it to be cut. "O my king, whose temple I have built, may life be my recompense." By this name he has named (the statue) and in the temple Enninu he has erected it. Gudea unto the statue has given command : "To the statue of my king speak." After that the temple Enninu his favourite temple I had constructed, I have remitted penalties ; I have given presents. During seven days obeisance has not been exacted ; the female slave has been made the equal of her mistress ; the male slave has been made the equal of his master. In my city the chief of his subjects has been made the equal. All that is evil from this temple I have removed. Over the commands of the goddess Nina and the god Nin-girsu I have carefully watched. A fault the rich man has not committed ; all that he has desired the strong man has not done. The house where there is no son, it is its daughter who new

offerings has consecrated ; for the statue of the god, before the mouth she has placed. Of this statue, neither in silver, nor in alabaster, nor in copper, nor in tin, nor in bronze, let any one undertake the execution. Let it be hard stone. Let a sacristy be established and of all that shall be brought there, let nothing be destroyed. The statue which is before thee, O god Nin-girsu, the statue of Gudea, the Patesi of Shirkula, who the temple Enninu of the god Nin-girsu has constructed, whosoever from the temple Enninu shall remove (or) its inscription shall efface.....may be become a man without a name. May his princely race be reduced to subjection. May this man like every man who has acted evilly towards his chief, afar under the vault of the heaven in no city whatsoever find a habitation. Of the champion of the gods, the lord Nin-girsu, the greatness, may the people proclaim."

This lengthy translation is here given to get a glimpse of the contemporaneous civilization. However in the inscription of Hammurabi (2250 B. C) stanardized linear Babylonian script is seen. It was a code of laws, differentiating between the intentional and non-intentional injury. It has been translated thus :—2. "If a physician open an abscess (in another's eye) with a bronze lancet and destroy his eye, he shall pay silver to the extent of onehalf of his price." But "if a man destroy the eye of another man, they shall destroy his eye." The original reads as follows :—Sum ma a-wi-lum, i-in--mar a-wilim, uhtab-bi-it i-in-su u-ha-ap-po-du.

The deciphering of the cuneiform has been facilitated by the fact that the rock inscription of Bahistum being trilingual, cuneiform old Persian, Medic and Babylonian and the Zend language being more or less known, it gave

clue to two other languages and revived a long forgotten strange history and civilization. The Bahistan inscription was made by the order of Darius (522-486 B. C.) to glorify his new conquest.

The late Babylonian and the Assyrian cuneiforms were but the condensed and shortened form of the Sumerian and early Babylonian pictographs. And its use was very wide-spread and its prestige was universal, even in Egypt gradually supplanting the demotic writing. The scribes versed in cuneiform and the book-tablets in the same script, were everywhere. In the Tel-el-Amarna exploration nearly three hundred tablet letters have been found, addressed to Amenophis III from kings of Babylonia (Kardungyash), Assyria, Mesopotamia and subject princes and governors in Palestine and Canaan and all written in Babylonian cuneiform and language, except only in one, written by Dusratta or Tushratta king of Mitenni, whose daughter was married to Amenophis and which consisted of 512 lines of which 7 are in Babylonian and the rest in the strange and hitherto unknown language and script of Mitanni and it has been found impossible to decipher it yet. All this clearly indicates the wide-spread influence of the Babylonian culture and the use of its cuneiform syllabic signs which were nearly five hundred.

Though the invention of the alphabet has been a great advanced step over the primitive and cumbersome method of picto and ideography thus facilitating the cultural progress by quickly recording and transmitting to the next generation the experience of the age, on phonetic principle, yet Egypt and China accumulated a great literary treasure and tradition, on pictographic principle. Egypt had according to Salvolini 300 hieroglyphic and

34 alphabetic signs. Alphabetic signs also originated from pictorial symbols. Thus, L from 'lave (lion) ; R from 'or' (mouth) ; A from 'ahem' (eagle) etc.

China still uses modified pictorial symbols and there is no alphabet in her word-formation, nor is there any conjugation, declension, inflection and termination in grammatical construction. Each sign represents an idea or an object. According to the tradition, Chinese writing was invented by the mythical emperor Hwang-le or Nak-hon-ti, a name almost identical with the Susian deity Nak-hon-ti, and who is also mentioned in the same role of selecting for the art of writing, objects in the air, on the earth and in the world around and substituting these representations for the knotted cords, then in use. The zodiac symbols used by the Chinese and by the Assyrians as seen in the boundary pillar of Nebechandnessar (1150 B. C.) are also identical.

The Chinese writing signs consist of the symbols of the following object and ideas :—(1) *Hsiang hsing* re-present natural and artificial objects, as the heavenly bodies, man, animals, birds, trees, house, knife, cooking vessels, amounting to 600 characters of which 214 are radicals or keys like Egyptian determinatives. (2) *Chih shih* represent suggestive ideas, as the sun in the horizon is meant to convey the idea of the morning, the sun beneath a line, evening ; a mouth with a line in the middle indicates speech or eating ; several strokes of brush before a door, a crowd in the gateway ; a man in water means swimming and there are 107 characters of this nature. (3) *Huii* represent associative ideas as the sun and the moon indicate light, a mouth and a bird singing, a dog and a mouth barking, an axe and a tree cutting, a man on

a cliff danger, a hand and a woman safety, an ear at a door listening, two hands joined cordiality and there are 740 combined ideographic signs. (4) *Chuan chu* are indicative signs, as the extended right or left hands indicate right or left directions and there are 372 of them. (5) *Chia chieh* are metaphorical signs, as beauty is indicated by a woman or a bird, forgetfulness by a heart and death, love by a woman and a child and there are 600 of them. (6) *Hsieh sheng* are the final phonograms of the Chinese language, which amount to nearly 20,000 to 30000, the combination products of the picto and ideographs with necessary radicals and determinatives, (2219) to convey the exact meaning and of which the knowledge of 5000 to 6000 is essential to read or write an ordinary newspaper or for private or business correspondence.

In the transmission of the Chinese system of writing to the Japanese, there has been quite an adaptability, for the structure of the Japanese language is polysyllabic and quite unlike the Chinese which is monosyllabic. The consequence is that the Japanese only adopted those phonetic symbols which were necessary. The Japanese language as spoken in ordinary use, has only five vowel and fifteen consonant sounds and they can not combine in more than seventy-five sounds and a good many of them never occur, forty-five of these syllabic signs are all that is necessary to write any Japanese word and this abbreviated Chinese system of writing is known *Ka-ta-ka-na*. The other system used for Chinese classics, is known as *Hi-ra-ka-na* and is more complicated, containing nearly 300 signs and was derived from the cursive Chinese script.

It is among the Phœnicians, that we see for the first time alphabets, purely based on phonetic principle and to them the civilised world owes the art of writing excepting in China and Japan. In the monolythic sarcophagus of Eshmunazar II king of Sidon (400 B.C.) though the character is entirely well-formed phœnician, the design of the statue is Egyptian in all details, thus indicating the close relation to the Egyptians and the Phœnicians, if not also in their origin. The Mesha inscription (now in Louvre) is the oldest yet found of the Phœnician writing. It is of the ninth century B.C. The distinguished paleographers like Buhler and Weber find a very striking resemblance between the alphabets of this inscription and that of the Pepe vases of the Sakya tope. In the Moabite stone there are thirty-four sentences, written from right to left like the Arabic and the words are separated by dots and the sentences by short vertical lines (dhari) as in Sanscrit and Hindi languages. That the Sanscrit used to be written from left to right and the Phœnician from right to left is not of fundamental importance. For we know that the Greeks borrowed the alphabet from the Phœnicians, who according to Herodotus settled in Boetia and introduced the art of writing and for a long time even in Greece itself their alphabets were known as '*Phonikia grammata*,' that is, Phœnician letters. And in the beginning the Greeks used to write from right to left as is exemplified by the archaic inscriptions in the buried tombs of Thera and a little later alternately right to left and left to right and which they called '*Boustrophedon*' turning like oxen in plowing.

The Phœnicians were a trading people and were

the greatest navigators of their time. They sailed on every sea and established colonies and trading stations in every land known in those ancient days. However Phœnicia was not a powerful military state. It mainly consisted of prosperous city republics on the fringe of the rocky littoral of the Mediterranean and in stress of necessity they simply formed coalition for offensive and defensive purposes. Their wealth was due to their commerce. They were the carriers of merchandise of all nations. Their position is almost analogous to that of England for the last two or three centuries. Their power, prestige and wealth did not lie in conquests but in the monopoly of the vast and expansive empire of the sea which touched on every land. Arvad first grew in importance as a sea-port for exportation of the cereals of the fertile Hittite empire in exchange for the varied merchandise of Cyprus, Egypt and Asia Minor. But with the expansion of commerce Byblos became the first city of the Mediterranean. The origin of this holy city is shrouded in the mists of antiquity. The Assyrian name of it was Gubal, like the Arabic designation Djebail, which means the city of the mountainers and the Greeks called it Tripolis and which was vulgarised in later time as Tarabulos. Byblos is hoary and venerable with age. Its ancientness can be easily judged by the sanctity with which it was held by the Phœnicians. It was at Byblos the 'lady' Baalat reigned, the Goddess who gave birth to God Tammur, the Greek Adonis who dies and is reborn every year as the symbol of nature which is in perpetual process of death and re-birth. However hardly anything remains of its precious monuments which have been all destroyed by the fanatical Christian

priests, except the necropolis which was curved out in the solid rock.

But Byblos was found too small for the growing commerce. Then Beeroth (Beirut) the Beryte of the Greeks became the centre of the sea-borne trade. Beeroth (fountain) in its place also proved insufficient. Then grew the powerful Sidon (Seida) "The mother of Tyre and Arad" as one inscription said. And the daughter soon succeeded the mother, but she was called the Poleo-Tyr (Old Tyre) by the Greeks.

However like England Sidon and Tyre were but outposts of her vast maritime empire. Phœnicians colonised, fortified and established trading stations at every strategic point. Finding the importance of Bosphorus, they built a fortress on its shore and called it Kalta or Karta, the Kalkeodon of the Greeks and the modern Chalcedoine. In the centre of the Mediterranean they seized the island of Malta and on the favourable promontory built the city of Carthage, the true daughter of Tyre, who soon surpassed her mother in opulence, power and influence. On the Mediterranean littoral on the European side they founded many business centres, especially Mars-el (the God's port) due to its beautiful natural harbor and advantageous situation, the present Marseille.

The Phœnicians had also a large fleet on the Red Sea and they had not only opened ports on the Arabian and Persian coasts, but also on the Euphrates the Tigris (they were separated from each other in ancient time by nearly 30 miles and they have been but recently united owing to the retirement of the sea more than thirty two miles due to alluvial deposits), the Indus

(Abhira), Malabar coast (Musiris), Tambrapanni (Ceylon) and even up to Borneo where recently (at 'Rejang') many Phœnician inscriptions have been discovered, dating as far back as twenty three centuries. The intercourse of Phœnicia is more conclusive. There are orientalist who believe that Ophir mentioned in the Bible, meant India.* However if this is a controversial point, it is certain that when Solomon built his temple in the year 1014 B.C. he employed Phœnician navigator Hiram who brought for him 'ivory and apes and peacocks'.† Now not only these were indigenous to India, but the Hebrew names mentioned for them are decidedly Indian in origin. Thus the Hebrew word employed for ape is 'Koph' which is from Sanscrit 'kopi'; for ivory 'harnoth-sheng' which is from Sanscrit 'ibha'; for peacock 'tukhin' from Malayalam or Tamil 'tagai'.

The Phœnicians also circumnavigated the African coasts and established many stations, thus preceding Vasco de Gama by more than twenty centuries. On the other hand crossing the 'Gate of Hercules' (Streight of Gibraltar) they made a port of Gades (Cadiz) and ventured further into the 'dark sea' in search of tin which was in great demand at that time in Egypt, Assyria, Greece, Persia and India for making bronze to manufacture arms, vases and statuary and which they found and mined in Devonshire and Cornwall in England. The ancient name of the tin, Assyrian 'Kasa-

* G. Oppert : Tharshish und Ophir, Zeitschrift fur Ethnologie, 1903. Weber : Indische Skizzen.

† 1. Kings X. 22.

zatirra' Greek 'kassiteros,' Arab 'gazdir' and Sanscrit 'kastira' have been all derived from the Phœnician 'Kasatira.' According to Reclus* the Phœnicians had the following trading stations:—1. Rhodes; 2. Chalcedoine (on the Bosphorus); 3. Thasos (in the Greek archeplego for gold mines); 4. Malta; 5. Sicily; 6. Sardinia; 7. Marseilles; 8. Pityuses (Gibraltar); 9. Gadez (Cadiz); 10. Utica and Carthage; 11. Cassiterite Islands (Scilly) and tin mines of Cornwall and Devonshire; 12. On the coast of Ambre and Thule (Shetlands); 13. Promontory of Solœis (Cape Cantin in Maracco); 14. Cerne (Rio de Oro) and colonisation of Hanno; 15. Sherbrook Sound (Sierra Leone about 600 B. C.); 16. Ezeongeber (Suez); 17. Cape of Aromates (Cape Guardifia); 18. Sofala and the interior gold mines (East Africa); 19. Periple de Nechao (South west Africa †); 20. Tylos (on the Euphrates); 21. Bahrein (on the Arabian coast on the Persian Gulf); 22. IV. 18. Hadramaut (South Arabia after the name of the daring mariner who dared to navigate the Arabian Sea directly in order to come to the Malabar coast during the Monsoon instead of slow sailing through the coast); 23. Abhira (on the Indus); 24. Musiris (on the Southern Malabar Coast); 25. Rejang in Borneo.

Phœnicians had two kinds of letters, Sidonian and Tyrian, but they were but slight variations of the same characters. It is well known how the Roman letters have evolved out of the Greek alphabets. The word alphabet is after the Greeks first two characters, alpha

* Elisee Reclus: *L'Homme et la Terre*, Vol. II, P. 55.

and beta. Yet the Greek, Hebrew and the Arabic are not only less variants than the Greek and the Roman but they have almost the same identical alphabetic sound, and the phonetic value.

Phœnician alphabet with phonetic value :—Aleph (ah), beth (b), gimel (g), daleh (d), he (h), Vau (v), Zayin (z), cheth (ch), teth (t), yod (y), kaph (k), lamed (l), mem (m), nun (n), samekh (s), ayin (a), pe (p), tsade (ts), qoph (q), resh (r), shin (sh), and tau (t).

Greek :—Alph (ah), beta (b), gamma (g), delta (d), epsilon (e), zeta (z), eta (a), theta (th), iota (i), kappa (k), lambda (l), mu (m), nu (n), xi (ks), omicron (o), pi (p), rho (r), sigma (s), tau (t), upsilon (u), phi (f), chi (k), psi (ps), and omega (o).

Hebrew :—Aleph (ah), beth (b), gimel (g), daleh (d), he (h), vau (w), zayin (z), cheth (k), teth (t), yod (y), caph (k), lamedh (l), mem (m), nun (n), samekh (s), ayin (a), pe (p), sadhe (ts), qoph (q), resh (r), shin (s), shin (sh), and tav (t).

Arabic :—Alif (ah), ba (b), ta (t), tha (th), jim (j), ha (h), kha (kh), dal (d), ra (r), zay (z), sin (s), shin (sh), sad (s), dad (d), ta (t), za (z), ain (a), ghain (k), fa (f), qaf (q), kaf (k), lam (l), mim (m), nun (n), ha (h), waw (w), and ya (y).

Sanscrit :—A (like au in naughty), ah (as a in father), rhashya ee (short I as in thin), dheerga ee (long ee), rhashya u (short u as in German or Spanish U or French ou), dheergha u (long u), a (as a in animal), ai (as oi in oil), o (as o in note), ou (as ou in house) ri (as ri in Critian), rhi (as ri in Spanish rifar) anusvara (as ong in French ongle), bisharga (wa); Ka (k), kha (kh), ga (g), gha (gh), uma (as ng in French langue)

cha (as in Spanish ch or ch in church) sa (s), ja (j), jha (jh), nia (a, variant of uma), *(dentales) ta (t), tha (th), da (d), dha (dh), na (n), tha (tha), tha (aspirita), dha (dha) dha (media aspirata), na (nasalis n variant), pa (p), pha (ph) ? ba (b), blia (bh), ma (m), ya (y), ra (r), la (l), wa (w), sa (s), sha (sh), sa (s), ha (h), ska (ska).

The Sanscrit character as it is known to-day, has been greatly modified. The word Sanscrit itself means purified. The vowels and the consonants have been separated. And it has attained a phonetic richness, which is almost amounting to perfection, and it was lacking in it, as we have shown in the Pepe vases in the Sakya tope. It is now well known and admitted that the numerical figures, 1, 2, 3, 4, 5, 6, 7, 8, 9, 0, developed in India independently, out of the shortening of the cursive lines, which were used in primitive times and if it is known as the Arabic Numerals, it is because, it was introduced into Europe from the translation of an Arabic work of Al-Khowarazami, by Leonardo of Pisa in 1202 A.D. into Latin and from which Europe got its knowledge. But Al-Khowarazami, that is the native of Khwarazm (Khiva), surname of Abu Jafar Mohammed ben Musa, who wrote his famous book in the latter part of the ninth century, on arithmetic, that is the art of computing with figures known as Arabic notation, in which especially the value of 'sifr' (cipher that is zero) was emphasized, learnt and borrowed it from India where it was long known before him and developed out of astronomical calculation, and computation as well

* *Dentales modificatee.*

as the art of measurement (geometry) from sacrificial altars.*

*(1) In the Black Yajus Veda VII. 2. 11-26, in the horse sacrifice the number is invoked thus, clearly showing that the value of zero was tenfold to the number it was added :—

Vii. 2. 11.

To one hail ! To two hail ! To three hail ! To four hail !
 To five hail ! To six hail ! To seven hail ! To eight hail !
 To nine hail ! To ten hail ! To eleven hail ! To twelve hail !
 To thirteen hail ! To fourteen hail ! To fifteen hail !
 To sixteen hail ! To seventeen hail ! To eighteen hail !
 To nineteen hail ! To twenty-nine hail ! To thirty-nine hail !
 To forty-nine hail ! To fifty-nine hail ! To sixty-nine hail !
 To seventy-nine hail ! To eighty nine hail ! To ninety-nine hail !
 To a hundred hail ! To two hundred hail ! To all hail !

Vii. 2. 1. 3.

To two hail ! To four hail ! To six hail ! To eight hail !
 To ten hail ! To twelve hail ! To fourteen hail ! To sixteen hail !
 To eighteen hail ! To twenty hail ! To ninety-eight hail !
 To a hundred hail ! To all hail !

Vii. 2. 15.

To five hail ! To ten hail ! To fifteen hail ! To twenty hail !
 To ninety-five hail ! To a hundred hail ! To all hail !

Vii. 2. 17.

To ten hail ! To twenty hail ! To thirty hail ! To forty hail !
 To fifty hail ! To sixty hail ! To seventy hail ! To eighty hail !
 To ninety hail ! To a hundred hail ! To all hail !

Vii. 2. 18.

To twenty hail ! To forty hail ! To sixty hail ! To eighty hail !
 To a hundred hail ! To all hail !

Vii. 2. 19

To fifty hail ! To a hundred hail ! To two hundred hail !
 To three hundred hail ! To four hundred hail !
 To five hundred hail ! To six hundred hail !
 To seven hundred hail ! To eight hundred hail !
 To nine hundred hail ! To a thousand hail ! To all hail !

(I) Perhaps it was brought by the Indian embassy to Bagdad in 773 A. D. with the astronomical tables. The use of numerals in India is seen as far back as the third century B. C. as found in the Nana Ghat inscriptions.* In the cave inscriptions of the first century A. D. a further evolution of these numerals is seen.† And a little later Brahmi (divine) numerals similar to Devanagari (character of the gods) with zero is observed in the inscriptions and in the sixth century A.D. the Hindi Mathematicians wrote learned discourses showing the function IV. 20 and the utility of zero in arithmetical notations. The Greeks designated numerals by alphabetical signs. Thus alpha stood for 1, beta for 2, gama for 3, iota for 10, rho for 100, sigma for 200, tau for 300, phi for 500, alpoa with a stroke behind for 1000, beta with a stroke behind for 1,000,000. The Roman numerals are well known,

Vii. 2. 20.

To a hundred hail ! To a thousand hail ! To ten thousand hail !
 To a hundred thousand hail ! To ten hundred thousand hail !
 To ten million hail ! To a hundred million hail !
 To a thousand million hail ! To a hundred thousand million hail !
 To ten hundred thousand million hail ! To dawn hail !
 To the dawning hail ! To him that will rise hail !
 To the risen hail ! To heaven hail ! To the world hail !
 To all hail !

From this it is manifest that not only the value of zero, but also multiplication, division and country a great number was known to the Vedic Rishis.

* E. C. Bayley : Journal Royal Asiatic Society 1882.

† Burnell : South Indian Paleography.

They used vertical strokes, I, II, III, for 1, 2, 3, like the Greeks before the time of Solon, and the rest by additions and subtractions and after the first letter of the number and thus C stood for centum (hundred), M for milli (thousand). The Phoenician numeral symbol were like the Egyptian hieroglyphics. Short vertical strokes upto 9 meant that number. Ten they designated by a pictograph of a bent finger, especially the thumb, which proves that number was in the beginning counted primarily on the finger ends, as it is even the custom among savages. For twenty they had two signs for bent finger and so up to ninety. For 100 they had a sign like a fishing hook. For 1,000 they had another symbol; for 100,000 a frog, for a million, a wonder or astonishment sign, a man with arms stretched out in admiration. The Arab numerals known as 'Ghobar' meaning sand, indicating perhaps that the sand-tablets were used for calculations, are very similar to the Bhami numerals of India. And as the Bhrami numeral is anterior to the Arabic by many centuries and both the numerals are very similar, it is logical to conclude that Arabia received them from India.

However it may be possible that India owes her system of division of time and value to foreign influences. For we, not only find day divided into sixty divisions (dhanda), and each 'dhanda' into sixty 'mahurtha' (moments) and each 'mahurtha' into sixty 'pals' and each 'pal' divided into sixty 'bipals', which was the Assyrian custom, but we also find '*mina*' mentioned in Rig Veda* as a standard of value. Mina was an Assy-

* VIII. 67. 2.

rian coin, equivalent to 50 shekels of silver or gold. Among the Greeks 'mna' was worth 100 dracmae. There is nothing astonishing in it. While the Aryan tribes were nomadic and pastoral in habits, the Egyptian and the Assyrian civilisations were already venerable and ancient.

We find that the Dravidians used decimal method. Thus in Tamil, the expression for twenty is '*iru-badu*' which virtually means two tens, from '*iru*' (two), '*patu*' (ten). But the division of the year was duodecimal and the year was divided into twelve months and the first month of the year was called 'Baisaka' after 'Brisha' (Taurus) as the sun was at the taurus in the vernal equinox which was in 4700 B.C. This was practically the Akkadian custom.

This Akkadian civilisation dates back to 7000 B. C. and is as old as Egypt, if not older. We have shown in the inscription of Gudea, the Sumerian Patesi, the power, influence, and culture of the race. The ancient capital of Akkad was called Ashar, Aushar or Ashur, meaning watered plain. When Saragon I. (3800 B.C.) the Assyrian chieftain and warrior conquered the Akkadians, he removed the capital to Agame or Agade. Nineveh (the Mighty) was yet unknown and was but an insignificant collection of fishermen's primitive huts on the swift-flowing Tigris. But the Assyrians regarded the Akkadians with great respect, and borrowed culture from them as did in much later time the Romans from the Greeks. They studied their language as a classic, as we study Sanskrit. In the Ninevite remains we find that Saragon established one of his greatest libraries at Agade, and it consisted primarily

of famous Akkadian and Sumerian works with translation in Assyrian. The works were inscribed on clay tablets, the translation being either in the alternate line or the original in one column and the translation in the opposite column. And to facilitate learning vocabularies were compiled giving the Akkadian word and its equivalent in the Assyrian. A great prominence was given to an astronomical work, known as 'The observations of Bel' which consisted of seventy two books. Berossus the priest astronomer of Bel at Babylon translated this great ancient masterpiece into Greek in 250 B.C. and compiled also in three books the history of his country with documentary evidence. Unfortunately they are all lost now except a few extracts, quoted by Josephus and Eusebius. Another interesting compilation was a collection of the sacred books of the Sumerians in two hundred tablets. It not only contained the magic formulas and incantations but also their religious outlook of life and philosophical speculations. It should be remembered that the Accadians had Ziggurates, the temple observatories for astronomical observations and astrological studies. And the fame of Chaldean wisdom and power of divination was far and wide and lasted for a long time. The Sumerians had also seminaries for priests and seats of learning for scribes and magnificent libraries as at Erech which means 'City of Books.'

In one of his proclamation inscription Saragon the great patron of learning, father of 'Naram-Sin, king of four races, conqueror of Apirak and Magan and king of Four Regions,' says :—

"Forty-five years the kingdom I have ruled and the black Akkadian race I have governed. In multitude of

bronze chariots I rode over rugged lands. Three times to the coast of the Persian sea I advanced. The countries of the Sea of the setting sun I crossed. In the third year of the setting sun my hand conquered. Under one command, I caused them to be only fixed."

Here he calls the Accadians black. We have shown before that the Akkadians and the Dravidians were the same people belonging to the Turanian race.

The question is now whether the Dravidians brought with them the rudiments of alphabet from their Akkadian home and developed them independently in India or learnt from the Phœnicians at a much later period ?

The only alphabet used in northern India, similar to that of the Iranians was Kharoshti. It was introduced into India by the 'Darius' conquest and was partly modified by local environment. It is a very similar to that used by Darius the Great in his famous and magnificent inscription at Bahistun in which he says :—"I am Darieiros, the great king, the king of kings, the king of Iran, the king of nations. There are eight of my races who have been kings before me. I am the ninth. In a double line we have been kings." It was the script during the Achemenes dynasty as it is testified by the inscriptions of Persepolis. It was derivative of the Babylonian cuneiform. We find that only in the Asoka Edict of Kapur di giri. But at that time, Brahmi lipi was well known, as we see in the inscription of the vases of the Sakya tope, which is much older and which reads :—"I (ya)m sal (i) lanidhane Budhasa bh(a)g(a)v (a)te sak (iya)n(a)m Sukitibh(a)—tin (a)m s(a)bh(a)ginik (a)n(a)m s(a) put (a)d(a)l(a)n(a)m." (This casket of

relics of blessed Buddha is the pious foundation of the Sakayas, their brothers and their sisters together with their children and wives).

This old Iranian cuneiform script was replaced by Greek with the conquest of the country by Alexander about 334 B. C. But with the overthrow of the Hellenic supremacy by the Arsachids, the Pahlevi script was introduced and under the Sassanian kings, it became the official script and language. Pahlevi was the Persian form of expression for 'Parthavi' the language of the Parthivans (Parthians). According to tradition it is said that there was an original copy of Avesta (Divine Law) in a Median character invented by Spitama (the most beneficent) Zarathustra (Zoroaster) himself, written on twelve thousand cow-hides with a golden ink and bound together by heavy gold-bands and this was destroyed with the burning of the palace of Persepolis and which was set on fire by Alexander in a frenzy of jealousy by an act of one of his mistresses. Whatever fragments of the various nosks were in the hands of the Mazdean priests, and thus escaped the ravages of Iskander (Alexander) or were preserved by oral tradition, were gathered together under the patronage of king Vologases the last of the Arascids about 225 A. D. According to a proclamation ascribed to Khosrab Anosharvan (531-579) the compilation of the remnants of the Avesta was undertaken by the order of the last king of the Arsacides Vologases (Valkash) and was finished under Shapur II. (309-380). However the first Sassanian king Ardeshir Babagan raised the Mazdean Church from the humiliating position into which the Greek invasion had

made it sink and made it again the state religion. But it was Adarbad Muraspand who revised the Avesta and Shapur (309-380) issued a proclamation thus:—"Now that we have recognised the Law of the world here below, they shall not allow the infidelity of any one whatever, as I shall try that it may be so."

The text was written in original Avestan language, very akin to Vedic Sanscrit, both having originated from the same ancestral speech, but in Pahlevi script. The commentaries of the text, however were both in Pahlevi language and character. What is known as the Zend alphabet was the further evolution of the Pahlevi letters, and not the Avestan script it might have been originally written in.

Even in the Avestan text there are evident interpolations, as the two following quotations will show : one showing the pathos and misery of the slavery, which must have been experienced under the Greek domination and another polemic against the teaching of Buddhism, which was making headway in Iran and was supplanting Zorasteranism and the Buddhists were called Ashemaoga (disciples or followers of Sakya Muni).

"O Maker of the material world, thou Holy One, which is the fifth place where the Earth feels sorest grief? Ahura Mazda answered: It is the place whereon the wife and children of one of the faithful, O Spitama Zarathustra, are driven along the way of captivity, the dry, the dusty way and lift up a voice of wailing." Vendidad III. II.

"Verily I say unto thee, O Spitama Zarathustra, the man who has a wife is far above him who begets no

sons ; he who keeps a house is far above him who has none ; he who has riches is far above him who has none. And of two men, he who fills himself with meat, is filled with good spirit much more than he who does not do so ; the later is all but dead ; the former is above him by the worth of an '*asperana*' (a dirhem), by the worth of a sheep, by the worth of an ox, by the worth of a man. It is this man that can strive against the onsets of '*asto-vidhotu*' ; that can strive against the self-moving arrow ; that can strive against the winter fiend, with thinnest garment on ; that can strive against the wicked tyrant and smite him on the head ; it is this man that can strive against the ungodly Ashemaogha who does not eat." Vendidad IV. 47-49.

"How many are the sins that men commit and that being committed and not confessed, nor atoned for, make their committer a Peshotanu ? Ahura Mazda answered : There are five such sins, O holy Zarathustra. It is the first of the sins men commit when a man teaches one of the faithful a foreign, wrong creed, a foreign, wrong law." Vendidad XV. 1-2.

"Who was the first Priest, the first Warrior, the first Plowgher of the ground ; who first took the turning of the wheel from the hands of the Daeva." Farvardin Yast XXIV. 89.

"'Turning of the wheel' means the wheel of sovereignty, a typical Buddhist expression."

Pahlevi was a cursive script, evolved out of the Aramean, a short hand commercial writing then prevalent in Mesopotamia, a daughter of the Phoenician.

Kharosthi, a script of commercial intercourse in Northern India (Gandhara), Bactria, and Khotan Daria

also was derived from Aramean and was modified to Sanskrit phonetics. It was possibly introduced by the Achæmenian conquest of Gandhara in the fifth century B. C. According to the Buddhist tradition, Kharosthi was invented by a man named Kharostha (Ass-lip). But there are others who think that it might have been simply the transliteration of the Aramic '*haruttha*' = engraving, writing.

The history of Brahmi-lipi has a more ancient history. Panini (350 B. C.) the celebrated grammarian mentions '*yavanāni*' the writing of the Yavanas (Ioneans), thus indicating that in his time the people not only knew the art of writing, but also the scripts of distant countries. '*Panini's*' '*Dhātupāṭha*' gives for the verb 'likh' the meaning 'akṣaravinyāsa' = arranging letters or syllables, which proves unmistakably that the Buddhistic and Jaina Pali sacred Books are much older, where the expression 'likham chindati' = scratches writing, is used and the word 'akkhara' means 'indelible' which can not be effaced, that is, scratched on the palm leaf, wooden board or clay tablet.

In the Vinaya Pitaka it is found that if one 'cuts' (chindati) an inscription (lekham) to this effect, '*He who dies in this manner, will obtain wealth, or will obtain fame, or will go to Heaven,*' (the cutter) is guilty of a Dukkata (dushkrita) sin for each single letter (akkharakkharāya). (If any body) sees the inscription and forms the painful resolution to die, (the engraver will be guilty) of a Thullaccaya (sthulātyay) sin; (in case the reader actually) dies, (the engraver will be guilty) of a Parajika offence.'

In the Kathaka Jataka there is an amusing story,

how a slave forging a letter of his master, married the daughter of his friend and came in possession of wealth :

"He (Katahaka) who performed in the Sheth's house the work of a store-keeper thought, 'These people shan't make me always do the work of a store-keeper and treat me as a slave, striking, imprisoning and branding me, if they find fault with me. In a neighbouring kingdom there is a Sheth, a friend of our Sheth. If I take him a letter (lekha) written in our Sheth's name, and if I go to him and say that I am the Sheth's son, I may deceive him, obtain his daughter and live comfortably.' He himself took a leaf (panna), wrote as follows, 'I have sent my son N N. to thee ; mutual connection by marriage is suitable for us ; give, therefore, thy daughter to this boy and let him live there ; when I have time, I will also come,' and he sealed the letter with the Sheth's seal. Then he took money for his journey, perfumes, clothes and so forth according to his pleasure, travelled to the neighbouring kingdom and stood before the Sheth there, respectfully saluting him. Then the Sheth asked him, 'Friend, whence hast thou come ? ' 'From Benares.' 'Whose son art thou ? ' 'The Benares Sheth's.' 'For what purpose hast thou come ? ' Thereupon Katahaka handed over the letter, saying, 'You will know it when you have read this.' The Sheth read the letter, and exclaiming, 'Now I live indeed ! ' he gave him joyfully his daughter and established him there."*

* Fausböll : Jatakas, Vol. I. P. 451.

It certainly must have taken centuries, if not longer to make the writing so popular that even a slave knew the art of writing. It is mentioned in the *Lalitavistara* that when young Shidārtha, the future Buddha, went to the Brahman school-master Visvamitra 'with a golden pencil and tablet (phalaka) of red sandal wood' he learnt at once the sixty-four alphabets of which are enumerated at least three of the characters of 'the writing of the Dravidian country'. As *Lalitavistara* was translated into Chinese in 308 A.D. the book could not have been composed later than the third century A.D. How many centuries must it have taken to develop an independent character of the deviation of the Brahmi-lipi? In the Asoka edicts and inscriptions, the scripts are so varied and especially in the Bhattiprolu relic caskets, the deviations are so great as to form almost independent alphabets, that it indisputably proves the great antiquity of the Brahmi-lipi.

In the *Kautiliya-Arthasāstra*, which is attributed to Vishnugupta who is better known to the public as Chānakya and who according to the tradition overthrew the Nanda dynasty and placed Chandragupta on the throne which is about 321 B.C., the entire tenth chapter of the second book is devoted to 'The procedure of forming Royal Writs'. And in this we find the following instructions :

"(Teachers) say that 'sāsana', command (is applicable only to) royal writs (sāsana). Writs are of great importance to kings inasmuch as treaties and ultimata leading to war depend upon writs. Hence one who is possessed of ministerial qualifications, acquainted with all kinds of customs, smart in composition, good in legible

writing and sharp in reading shall be appointed as a writer (lekhaka).....Arrangement of 'subject-matter (arthakrama), relevancy (sambandha), completeness, sweetness, dignity and lucidity are the necessary qualities of a writ. The act of mentioning facts in the order of their importance is arrangement. When subsequent facts are not contradictory to facts just or previously mentioned and so on till the completion of the letter, it is termed relevancy. Avoidance of redundancy or deficiency in words or letters ; impressive description of subject matter by citing reasons, examples and illustrations ; and the use of appropriate and suitably strong words (asīāntapada) is completeness. The description in exquisite style of a good purpose with a pleasing effect is sweetness. The use of words other than colloquial (agramya) is dignity. The use of well-known words is lucidity. The alphabetical letters beginning with Akāra are sixty-three."

To develop 63 alphabets out of crude and primitive Phœnician 22 characters must have a long antecedent history, requiring service of generations of master grammarians and phœniticists. Phonetically the Sanskrit letter is almost perfect. The following is the catalogue of the Sanskrit character which has been derived from the Brahmi and enclosed within the bracket are those which are not found in the Phœnician.

Ten simple vowels : a, (ā), (i), (ī), (u), (ū), (ṛ), (ṛ'),

Four diphthongs : ē, (āi), (ō), (ōu).

Thirty-three consonants :

guttural : k, kha, g, gh, (ñ) ;

palatal : c, (ch), j, (jh), (n') ;

lingual : (ṭ), th, (ḍ), dh, n ;

dental : (t), (th), (d), (dh), (ṇ̃) ;

labial : p, (ph), b, (bh), m ;

Four semi-vowels : ȳ, r, l, v ;

Three sibilants : palatal ś, lingual (sh) and dental (s) ;

A soft aspirate : h ;

Spirat : visharga ;

Nasal sounds : anusvaram, jivnamulam ;

Yamas that is consonantal combinations

Spirat : Visharga.

Nasal : Anusvaram.

Yamas = consonantal diphthongs as gñ, ksh, ñc, etc.

Of these the long vowels as ī, ū, diphthongs and ñ are not met with in Brahmi script and are later developments.

By comparative paleographic study of the ancient Phœnician of the Mesa-tablet period and earliest specimens of Brahmi-lipi, Bühler finds a very striking resemblance between many of the characters and others he thinks are but derivatives and adaptations to meet the phonetic requirements of the Arya-bhasha, and he concludes that 'the introduction of the prototypes of the Brahma letters (into India) lies between the beginning of the ninth century and the middle of the eighth, or about 800 B. C.' And 'as the Brāhma 'ha' goes back to a form of He, which is not found in the Phœni-

cian alphabet, but occurs on the Assrians weights, where also a 'Taw' very similar to the Brāhma 'ta' is found, the conjecture seems not altogether improbable that the Semetic alphabet may have come to India through Mesopotamia.*

Recent researches prove that Phoenician was but a short-hand, a synthetic commercial script of the Egyptian demotic and the Babylonian lineal. The learned Orientalist in plate III, has graphically illustrated the intimate correspondence between the Egyptian and the Brahmi numerals. As the Phoenician character has derived from the Egyptian as the very names of the alphabets clearly indicate, it seems more plausible that both the Phœnician and the Brahmi developed from the same parent stock. In the Teel-el Amarna find there are numerous tablets written in a strange script by Dasratha king of Mitanni to his daughter Gilukhipa, married to Pharaoh Amenophis or Amenhotep III (about 1410 B.C.). The Mitanni-Hittite treaty clearly indicates that Mitanni was a powerful kingdom. And we have shown that the Bharata tribes reached India from that source through Dvarakapuri between the fourteenth to twelfth century B. C. Is it not therefore reasonable to believe that they brought with them the proto-Brahma-lipi, which was developed later in India to its fulness and perfection? The Mitanni Aryas were in close touch with the Egyptians, Assyrians and Babylonians. So in their script entered all these elements to express fully their rich and vibrant speech.

* Georg Bühler : On the origin of the Indian Brahma alphabet, P. 84.

In the Egyptian language the ox was called 'aleph' but only the head of it was represented to express it in later hieroglyphics, as an abbreviated form. The Phœnician first alphabet '*Aleph*' is but the cursory form of the Egyptian 'aleph' to express the phonetic value of 'a'. So for the eye = 'ain'; the human head = 'resch'; picket = 'waw'; water = 'mem'; the hand = 'Jod'; serpent = 'nahash'; fish = 'nim'; etc. Thus the origin of the majority of the Phœnician alphabets can be directly traced to the Egyptian hieroglyphic signs to represent the almost identical phonetic values.*

The deviations of the Brahmi-lipi as seen in the Dravidi of the Bhattiporlu inscription (about 200 B.C.) gradually formed into independent characters especially into early northern and southern types.

The Nagari character developed from the northern variety about 8th century A. D. and spread over northern India and Dekhan.

The Bengali sprang up from the Gupta-character which was the official script of the Gupta-empire of Magadha, a variation of the Brahmi-lipi, about eleventh century A. D. Kathi, Uriya, Assamese have the same origin.

The Gujrati deviated from the early Southern and the Kanarese and Telengu branched off from the same source about the fifth century with adaptation to palm-leaf use.

The Tamil developed independent characteristic about seventh century from the Bhattiporlu variation.

* *Journal Asiatique*, Jan-March, 1921, P. 124.

The writing materials have been varied according to the needs. For permanent records, gold, silver and copper plates have been used for engraving, as well as inscriptions on statuaries and monuments. However, for every day general use wooden board was the common practice. But in the south palm-leaf and in the North birch-bark came into public favour and were used for all purposes, as they were cheap, abundant and easy to handle.

The use of ink was known as early as the fifth century B.C. It was made of finely powdered charcoal mixed with gum-arabic and water and it was applied on the writing material with a pen made out of wood or reed as available. In the South palm-leaves were written on with a metallic stylus and then the ink was besmeared on them and wiped out with a piece of cloth. It seems the writing materials were introduced in India by the Greeks, as their designations betray them to be of Greek origin: 'Kalama'=reed to write with (Gk. kolamos); 'Masi'=ink (Gk. melan=black); 'pustaka'=book (Gk. pyzion—tablets to write upon); 'pitaka'=tablet (Gk. pittakron); 'phalaka'=a wooden slab for writing or painting (Gk. plakos).

However teaching continued for centuries to be oral as the time-honoured fashion.

VI.

Caste.

When two distinct races are thrown together and one feels the superiority over the other and if they are separated from each other by the barrier of language and religion, the development of caste is the inevitable consequence.

And of all races the Aryans were a haughty, proud and exclusive people. Whatever may be the etymology of Arya, a term by which the Aryans in India designated themselves in contrast to the autochthonous inhabitants of the country whom they called Dasyus, there is hardly any doubt that by Arya they meant a noble and honourable epithet. Perhaps the word Arya is deprived from the root 'arare' meaning 'one who plows or tills.' The great veneration with which the Iranians and the Aryas held the cows, clearly indicates that the eastern Aryans had already given up nomadic life and had adopted pastoral existence. The cow is essentially unsuited to nomadic pursuits. It cannot run fast like horses and consequently can be easily captured by the enemy. It can not bear the hardship of barren water-less sandy wastes like camels. The cow is truly a domestic animal. She needs constant attention, rich meadows and plenty of water. She was regarded so sacred by the Iranians that they used her urine (Gomez) as a purifying agent to drive out the demons (Drugs)*

The Aryas made an early distinction between themselves and the non-Aryans, which is clearly explained

* Farg. VIII. 35-72 ; IX. 12-36.

by the following hymn in the Rig-Veda, 1. 57. 8. "Know the Aryas, O Indra and they who are Dasýus ; punish the lawless and deliver them unto thy servant ! Be thou the mighty helper of the worshippers and I will praise all these thy deeds at the festivals." The Iranians were no less proud than the Aryas in India. In the Zend-Avesta we find repeated prayers for the welfare of all the Aryan people, "the whole space of Aria (vispem airyo-sayanem) and their heaven was in 'Airyanem vae jo, Airianum semen' where the Aryans originated. Darius proudly inscribes his name on the Bahistan rock as 'Ariya' and 'Ariya-chitra' (Aryan and of Aryan descent) and Ahuramazda (Asura Varuna) the god of the Aryans. His great-grandfather called himself Ariyaramna (Arya Ramana = the ornament of the Aryans), Ariaramnes of the Greeks. (Herod. VII. 90). Strabo in his geography (XV. 2) calls the entire territory between the Indian Ocean in the south and the Indus in the east, the Hindukush and the Paropamisus in the north, the Caspian gates, Karamania and the mouth of the Persian gulf in the west under the generic designation Ariana (Sk. Aryabharta) and Bactria was the ornament of the whole of Ariana (XI. 12). Herodotus mentions that the Medians took pride in calling themselves 'Arii' (VII. 62). In Zenda-Avesta the non-Aryan countries are called '*anairyao dainhavo*' and the Sassanian inscribed themselves as kings of '*Iran va Aniran*'; in Greek '*Arionon kai Anarianon*' which is equivalent in sanskrit to '*Aryas and Anaryas = Aryans and Non-Aryans.*'

The antipathy of the Aryas against the Dasýus was terribly intense. They belonged to an entirely

different race of repulsive looks, dark complexion and flat nose, spoke a different language and worshipped different gods and contested fiercely the Aryan encroachments. There was nothing in common between them but fierce passion and bitter hatred. Racial animosity seems to be inborn in man. The Greeks distrust and hate the Italians, the Italians the French, the French the Germans, the Germans the English, the English regard themselves superior to all continental peoples and enjoy playing one power against the other which they pay back with venomous resentment and corrosive jealousy, the whole of Europe with burning heart feels hatred against America (U.S.A.) as an arrogant, unmannerly, barbarous opulent, and powerful country, full of passions, and America looks down upon all of them with contemptuous disdain. Yet they have prejudices, horrible crimes, vices, graft, greed and hypocrisy sprung from the same Caucasian stock, profess the same religion, have almost the same standard of civilisation and speak kindred languages. Individual greed, lawlessness and crime are controllable by religious injunctions and civic discipline, but when it expresses itself as a tribal or national will, the very solidarity of the social and national organisation seems, instead of checking it in its infancy, rather intensified and inflamed with violent fury. A Jew might renounce his religion and solemnly adopt a country into which he is born and whose language he learns to speak, yet there is an aloofness, reserve and distrust between him and the country which nothing can obliterate, even though on occasions he may be entrusted with honourable and responsible post for political purposes. The

Negroes in U. S. A. speak the English language, are zealous Christians, have cheerfully submitted to the domination of their white master, are docile and industrious people and whose labour is indispensable for the development of the South, yet there is a racial prejudice that is virulent and it is more hazardous to trespass and to cross the invisible 'color-line' than to break the rigid and fast rules of the Hindu caste.

But the Vedic Aryas had to wage a long, continuous and sanguinary war, lasting for centuries if not longer against the natives of the soil who were of different race, religion and language and who resisted with indomitable energy and resourcefulness every advance of the invader before they resigned to the inevitable and accepted the Aryan supremacy. Necessarily there was class distinction, the Arya and the Dasyu—the noble and the slave. There could be no intermingling between them on equal basis. War is savagery—licensed acrimony, robbery, rapine, rape and murder. It was no less so in ancient time than to-day. Here is the development of caste in its embryonic state. Thus the Vedic Rishi invokes the aid of Indra for destroying the Dasyus or capturing them as slaves with the raging passion in his heart :—

"Indra and Soma, burn the devils (Dasyus), destroy them, throw them down, ye two Bulls, the people that grow in darkness ! Hew down the mad men, suffocate them, kill them ; hurl them away and slay the voracious. Indra and Soma, together against the cursing demon ! May he burn and hiss like an oblation in the fire ! Put your everlasting hatred upon the villain who hates the Brahman, who eats (raw) flesh, whose look

is abominable. Indra and Soma, hurl the evil-doer into the pit, even unto the unfathomable darkness. May your strength be full of wrath to hold out that no one may come out again.

Indra protected in battle the Aryan worshipper, he subdued the lawless for Manu, he conquered the black skin." R. V. I. 130. 8.

"Indra gave horses, Indra gave the sun, he gave the earth with food for many, he gave gold and he gave wealth; destroying the Dasyus, Indra protected the Aryan colour (Arya-varna)." R. V. III. 39. 9.

But however the Dasyus might have been despided, the Aryas were not united among themselves and before long some of the Aryan chieftains found it expedient to make alliance with them. The reason is not far to seek. The Aryas reached India through different waves of invasions, lasting for centuries and the new-comers had often to fight their way through especially like the Bharata tribes who came from Mesopotamia and were a mixed people and spoke the language a little differently, and the old settlers did not give up their possessions or make room for them without stubborn resistance. So as a policy of defence, they made a common cause with the partially Aryanised native chiefs to ward off new invasions.

Divodaso, the chief of the most ancient and powerful Vedic Tritsu clan with the assistance of Purukutsa (Kutsa of the Puru tribe) an Aryanised Dravidian chief, defeated the Yadu-Turvasu (Bharata clans). (R. V. VII. 19). The Purus are often mentioned in the Rig Veda as firm allies of the Aryas. Purukutsa as an ally of Divodasa even fought against another power-

ful Dravidian chief Shambara, who built many wooden forts and they were put to flame. "From fear of thee (Agni) the black people fled; they dispersed, leaving behind their goods and chattels, when thou, Agni, blazing for the Puru, didst destroy their forts." VII. 6. 3. "Thou Indra didst destroy the seven forts, fighting for Purukutsa, O Lord of lightning; thou didst throw them like straw, before Sudas and help the Puru out of their streights." (I. 63. 7). This indicates that Purukutsa continued to be an ally of Sudas, son and successor of Divodaso.

However this friendship did not last long. Purukutsa joined the confederacy of the Bharata tribes, consisting of ten kings. Sudas in desperation begged and received the help of Prithu (Parthians), VII. 83. 1. Parsu (Persians), VIII. 6. 46; X. 33. 2; X. 86. 23. Shiva-Vishanin (Dravidian chief, follower of Shiva). The Confederate army crossed the Shatadru (Sutlej) and Vipash (Bias) and advanced forward to attack the army of Sudas which was on the other side of Purushni (Ravi). The fording of the rivers was celebrated by this beautiful piece of poem in the dialogue form:

"Down from the mountains, in merry race, like two mares let loose or two comely mother-kine at play, Vipash and Shatadru run along, carrying their milk-like waters. Spurred on by Indra like swift charioteers, ye hasten to the mighty mass of waters; with swelling waves ye beautiful ones run close to one another. I went down to the most motherly of streams, to Vipash, the wide, the fair,—to the two that like a pair of mother-kine fondling their calves, wander along to meet in one broad bosom.

'Swelling with sweet waters, travelling along towards the god-created bosom, nought can stem our swift current : what is the wish of the bard, that he calls to us rivers ?'

'Hark to my devout song and stay your course for a brief rest, ye holy ones ; to you rivers calls my heart's loud prayer ; with longing I call out to you—I the son of Kushika.'

'He whose arm bears the lightning—Indra, broke the way for us, killing Vritra who shut in the waters ; the beautiful Savitar, the god, guides us on ; following his lead, we spread our waters wide.'

'This heroic deed be praised for evermore, that Indra did when he cut the Serpent into pieces ; with his lightning he struck the robbers ; the waters sped away whither they longed to go.'

'Forget never, O bard, this word of thine ; let the latest generation hearken to it ; give us a long word in thy songs, O poet, let us not be forgotten of men, and honour shall be paid to thee.'

'Hear then, sisters, what the poet says : I came to you from far with loaded wagons ; now bend ye low, give me an easy ford ; let not your waves touch my axle-wood, O Rivers.'

'We will heed thy word, O Rish that cam'st to us from far with loaded wagons ; I bend low before thee as a willing slave, as to her lord submits the bride.'

'But when the Bharatas' hosts, animated by Indra and full of ardour, has quickly forded thee, then let the current shoot up again with arrow's fleetness ; this is the boon I beg of you, ye holy ones. The Bharatas filled with the ardour of battle, have crossed ; the bard

did win the Rivers' favour : now swell, now grow rapidly to end the work and hasten onwards with well-filled beds. "R. V. III. 33. 1-12.

Emboldened by this success the Confederate army again attempted to cross the river Purushni (Ravi). Here the river was coquetish and fickle, Before half the army could reach the northern shore, the river swelled and became turbulent. Many were swept by the flood-current and were drowned. Those who had reached the northern bank met their terrible end from the well-equipped army of Sudas and his allies. The victory was complete for the Tritsus and their poet sarcastically sang of the Bharatas' hordes fording the river, 'thinking fools as they were, to cross as easily as on dry land'. The Tritsus advanced as far as Saraswati (R. V. VII. 18).

In this war between the kindred Aryas, both sides took the help of the Dasyus, as is amply attested in the Rig-Veda :—

"He whom both battle lines call upon in the fray, both adverseries on this side and on that,—he whom they invoke, standing on chariots,—that, O men, is Indra" (R. V. II. 12. 8)

".....The warriors who leagued against us, whether kindred or strange, break their might." (VI. 25. 3).

"Thou Indra, dost strike both foes, the Aryan and the Dasyus." VI. 33. 3. "They (Indra and Agni) strike the foes, both Aryan and Dasa". VI. (60. 6).

"Whatever contemners of the gods, be they Dasa, be they Arya, battle against us, give us an easy victory over them, thy foes". (X. 38. 3).

"Thou (Agni) didst take the goods of mount and plain and didst strike the foes, both Aryas and Dasyus." (X. 69. 6.)

During this tragic war we see also the well developed class system. Visvamitra was the family priest (purahita) of King Sudas and he conducted the royal sacrifices. For the Rishi's sake, Indra was very favorable to him. (III. 53). But due to rivalry of Vasista who was winning favour of the king, Visvamitra forsook Sudas and went to the side of the Bharatas and he became their Purahita. And the Purahitas have been able to impress on the public mind that they were the intermediaries between gods and men. We do not know yet exactly how far the Vedas were the compositions of lay men or of well-trained hereditary priestly class. For the Rig-veda is a collection of hymns of only a few Rishi families and there are in them magic expressions of mystic import and of exegetic nature. Of course there is no rigid caste formation yet; but it was in the formative state. People could yet change their profession as we find in this well-known hymn:

"We men have all our various fancies and designs. The carpenter seeks something that is broken, the medicine-man a patient, the priest somebody who will sacrifice. The smith, with well-dried wood, with anvil and with feather fan, to cultivate the flame, seeks after a man with plenty of gold. I am a poet, my father is a medicine-man, my mother is a grinder of corn. With our different views seeking for gain we run (after our respective objects) as after cattle." IX. 112. 1-3.

Of course like the above, some odd pieces have

entered into the Rig-veda, especially in the tenth Mandala which is the latest collection. However it seems certain and Rig-veda is brimful of evidences that the priestly class was already exerting a tremendous influence. The priests arrogated to themselves the semi-divine rights. They became the intermediaries between gods and men. They alone could invoke the blessings of the gods and their curses, for they knew how to recite the hymns and to make sacrifices.

"The king before whom marches the priest, he alone dwells well-established in his own house ; to him the earth yields at all times ; to him the people bow themselves. The king who gives wealth to the priest that implores his protection, he will conquer unopposed the treasures, whether of his enemies or his friends : him the gods will protect." (IV. 50. 8-9).

"Did not Indra preserve Sudas in the battle of the ten kings through your prayer, O Vasisthas ?" (VII. 33. 3).

"This prayer of Visvamitra, of one who has praised Heaven and Earth and Indra, preserves the people of the Bharatas." (III. 53. 12.)

And they also knew how to curse the people who disdained their service :—

"No, by Heaven ! no, by Earth ! I do not approve of this ; no, by the sacrifice ; no, by these rites ! May the mighty mountains crush him ! May the priests of Atiyaja perish !"

"Whosoever, O Maruts, weans himself above us or scoffs at the prayer we have made, may hot plagues come upon him, may the sky burn up that hater of Brahmins (brahma-dvish) ! Did they not call thee,

Soma, the guardian of the Brahman ! Did they not say that thou didst shield us against curses ! Why dost thou look when we are scoffed at ! Hurl against the hater of the Brahman the fiery spear !"

"May the coming Dawns protect me, may the swelling Rivers protect me ! May the firm Mountains protect me ! May the fathers protect me at the invocations of the gods ! May we always be happy, may we see the rising Sun ! May the Lord of the Vasus order it thus, he who brings the gods and is most ready with his help ; Indra who comes nearest with his help ; Sarasvati, the swelling with the Rivers ; Parajanya who blesses us with plants ; the glorious Agni, who like a father, is ready to hear when we call ; All ye gods, come hither ! Hear this my prayer ! Sit down on this altar ! May they who are the sons of the Immortal, hear our prayers, may they be gracious to us ! May all the righteous gods who hear our prayers, receive at all seasons this acceptable milk ! May Indra with the hosts of the Maruts, accept our praise ! May Mitra with Tvashtar, may Aryaman receive these our oblations ! O Agni, carry this our sacrifice wisely, looking for the divine host. All ye gods, hear this my call, ye who are in the air and in the sky, ye who have tongues of fire (who receive sacrifices on the altar with Agni) and are to be worshipped ; sit down on this altar and rejoice ! May all the holy gods hear, may Heaven and Earth and the Child of the waters (Indra) hear my prayer ! May I not speak words which you can not approve, may we rejoice in your favours, as your nearest friends ! May the great gods who are as strong as the enemy, who

sprang from the Earth, from the conflux of the waters, give us gifts according to our desire, all our life, day and night ! Agni and Parjanya, accept my prayer and our praise at this invocation, ye who are well-invoked. One made the earth, the other the seed : give to us here wealth and progeny ! When the grass is spread, when the fire is kindled, I worship with a hymn, with a great veneration. Rejoice to day, ye adorable Visvedevas, in the oblation offered at this our sacrifice !" (VI. 52. 1-17).

In the 'Satyapatha Brahmana' (II. 2. 2. 6) we find that the Brahmans are almost identified as gods : "There are two kinds of gods : first the gods, then those who are Brahmans and who have learnt the Veda and repeat it : they are human gods (*manushya-deva*). And this sacrifice is twofold : oblations for the gods, gifts for the human gods, the Brahmans who have learnt the Veda and repeat it. Both gods when they are pleased, place him in bliss."

In the *Rig-veda* often five races (*Pancha manusha*, VIII. 9. 2 ; *Pancha Janah*, III. 37. 9 ; VI. 11. 4.) are mentioned as *Tritsu*, *Yadu*, *Turvasu*, *Anu*, and *Puru*. Of these we know positively that *Tritsu* was the most powerful ancient vedic ruling clan. *Yadavas* are mentioned as a dark complex people. *Krishna* of *Dvaravati* was of *Yadava* descent and a ruling chief (*Yadukula-pati*). Did the *Yadus* come from *Mesopotamia* and land at *Dvaravati* or were the pure *Dravidians* and for helping the *Bharatas* and the *Pandavas*, became intimately associated with them and with power and influence and later entered into the *Hindu Pantheon* ? *Turvasu* was probably a *Turanian* clan. *Anu*, was it a

Kolarian or a foreign barbarous tribe who ate raw meat like the Scythians? Turvasu and Anu are often found together as Yadu-Anu and Yadu-turvasa, (I. 36. 18; IV. 30. 17; V. 31. 8; VI. 20. 12; VIII. 4. 7). Purus were a dark people. Often their chief Puru-Kutsa is invoked as the faithful ally of the Aryas. But he deserted Sudas or Sau-das and joined the Bharata tribes, if not led the confederation of ten kings against his former ally. He was probably taken a prisoner on the Purushni by the army of Sudas, for it is mentioned that the birth of Trasadasyu, son of his daughter Purukutsi, was the only consolation sent to him by the gods in his tribulations. Trasa-dasyu (the terror of the Dasyus) became a powerful sovereign, for he took the title of 'Samraj' (king of Kings) and his name is mentioned as a true friend and ally of the Aryas. However the Purus were later identified with the Kurus. It is explained on the ground that Kuru was the grandson of Purukutsa and he extended his kingdom up to the Jamuna and he became so popular, that the people called his descendants after the great king as Kurus. And Kurus in turn were later known as the Bharatas. Who were the Purus? Were they Aryanised Dravidians and by intermarriage with the Aryas, became Arya kings and upholder of Aryan might, prestige, influence and culture? Or were they Mesopotamian mixed Aryan immigrants and were not regarded as Aryas, but by their military discipline and prowess pushed their way to the Gangetic Doab and became the empire-builders? The latter theory seems to be more plausible and is also partially supported by the Mahabharata legend.

In the Mahabharata it is mentioned that Pururava, the first king of the lunar race of the 'Kshatriyas, sprang from the union of the moon-god with Illa, the daughter of Manu, from whom the human race originated. We know definitely that the moon-god was the patron deity of the Chaldeans and the centre of its worship was located at Urech (Ur). Pururava was succeeded by his son Nahusha and Nahusha by his son Yayati. Yayati's kingdom was contiguous to that of Vrishaparva, king of Ashuras. Did Yayati's kingdom lie in the mountainous districts of Upper Euphrates Valley as Mitanni, adjoining Media and Iran in the East, Armenia in the North and Assyria in the South? Yayati had two queens, Devayani and Sharmishta. Sharmishta was the daughter of the Ashura-king and Devayani was the daughter of his preceptor Shukra, of Bhrigu descent. Both these maidens were intimate friends and it happened that while once in a pleasure excursion in the woods, they saw a beautiful spring and they could not resist the temptation of taking a bath there in. After the plunge was over Sharmishta by mistake put on the garment of her friend, which enraged the Brahmin girl and she severely rebuked Sharmishta for such an impertinence. This infuriated the haughty Ashura princess and she told Devayani that she was but the daughter of a bought slave and in the paroxysm of her anger she pushed the Brahmin girl while she was dressing herself on the brink of the spring and Devayani fell precipitously into the water, and entangled in her own clothes and in the water weeds while she was thus helpless, Sharmishta hurriedly left her to this pitiful fate. Yayati was at that time hunting

in the woods. Hearing her faint agonized cries, he came to her rescue. On reaching home she weepingly asked her father, whether it was true as it was told her by Sharmishta that he was the bought slave of the Asura King Vrishaparva. Shukra assured his daughter that quite on the contrary he was much esteemed by the Asura king, for he alone knew the art of revivifying the wounded Ashuras in the battles. Shukra went to Vrishaparva and told him that he would leave his kingdom. The king implored him to stay. Shukra told Vrishaparva that it depended on his daughter's willingness. And her consent could be purchased only on the condition that Sharmishta would become her slave. Vrishaparva agreed and Sharmishta cheerfully obeyed her father's wish and she confessed her guilt. While Devayani on another occasion went to the woods to enjoy a picnic with her friend Sharmishta, she met again Yayati on a hunting trip and she proposed marriage to him. Yayati was hesitant as being of Kshatrya birth he did not dare to marry a Brahmin girl without her father's consent, for as he said, the righteous anger of a Brahmin was terrible. But she assured him that her father would do anything that is pleasing to her. And so they were married and Devayani took with her, her friend and slave Sharmishta. Sharmishta demanded from Yayati her right of Ritu. When Devayani came to learn about it, her wounded pride revolted and she went to her father to punish her faithless husband. Shukra cursed Yayati with premature senility (impotence). Thus out of spite for others ; Devayani bit her own tongue and she soon regretted it and begged her father to rescind the curse.

But Shukra answered that it could be only made transferable, if any one was willing to take it. Yayati had five sons, two by Devayani, Yadu, Turvase, three by Sharmishta Druhyu, Puru and Anu. But none was willing to take it but Puru. Yayati touched by this filial love and spirit of sacrifice, made Puru the ruler of his kingdom and retired in the forest. Puru was succeeded by his son Dushyanta. Dushyanta once on a hunting excursion met a pretty hermitage girl, fell in love with her and made a secret marriage with her, assuring her that after his return to the capital, he will send for her. Surprised by his long silence, she went herself to the court and the king denied that he had ever married her. Shakuntala flashed with indignation and regret, told him that she sought no longer the man who had no respect for truth, for "Truth is more precious than kings and even children." Dushyanta feeling ashamed of his conduct, apologized to her and convinced her that he loved her as ever and it was but a device to reconcile his people to the marriage. Out of this union, Bharata was born and Bharata became a powerful king. He conquered the Gangetic-Yamuna basin and celebrated a magnificent Ashmeda Sacrifice for which he is much eulogized in the Satyapatha Brahmana XIX. From Bharata, the name Bharatabharsa has been derived. (Mahabharata, I. 76; I. 82-83).

And according to the same legend, from Yadu sprang the Yadavas, from Turvasu the Yavanas, from Druhyu the Bhojas, from Puru the Pauravas (who were later known as Bharatas) and from Anu, the Mlenchas. It is very hard to make anything definite out of this incoherent and incongruous intermixture and confusion.

of things. For Mlenchas were not certainly an Aryan people. In the Jaina Sutrakritanga (I. 1. 2. 15-16) we find that they even did not understand the Aryan tongue: "As a Mlecssya (Mlencha) repeats what an Arya has said, but does not understand the meaning, merely repeating his words, so the ignorant though pretending to possess knowledge do not know the truth, just as an uninstructed Mlessya." Yavanas have been positively identified with Ionians (Greeks). All that can be guessed from this is that Shukra an Aryan possibly fell into the hands of the Assyrians as a prisoner of war and for his proficiency in the art of healing the wounded soldiers, he was given his freedom and his friendship and good-will were esteemed by the Assyrian king. And his daughter married a neighboring Aryan prince who might have also another Assyrian wife, as it was not unusual and they later or their descendants migrated to India with their traditions which in course of time became mixed up and confused.

However it seems almost certain that Vedic Aryas settled between the Indus and the Sarasvati which was later called Bharmabharta. The Vedic hymns indicate that they brought sufficient women with them, so there was not much intermixture of blood between them and the Dasyus. But they took the slaves and the female slaves were highly esteemed. And in that age the conquerors always appropriated the prettiest women of the conquered. May be it is possible that there was not enough of it to change the Aryan type and Dasyu blood was more or less submerged.

In the Madyadesa settled a mixed swarthy com-

plexioned Aryans who in all probability migrated from Mesopotamia and they were known as the Bharata tribes. They could not bring sufficient women with them and they not only appropriated the most desirable Dasyu women, but also made alliance and intermarried with them. Even the Iranians did just the same. Siavush, son of Kei Kaoos (Cyrus), the crown prince of Iran when sent against the powerful Touran-king Afrasiab of Balkh, saw Ferenguz the pretty daughter of Afrasib, fell in love with her and married her and stayed in the Turanian capital, deserting his own army and the cause of his own father. It has been the custom every where to take the women of the conquered people. But the Madyadesa Aryas went farther. They even gave their daughters to the conquered. Thus Damayanti chose a Nishada prince (Kolarian) Nahu for her husband. And it is not improbable that Visvamisra composed the Gyatri as a confession of faith to take into the Aryan fold the Aryanised Dasys and called them twice-born (dvija). This reconciliation with the conquered peoples became the cardinal empire-building policy of the Bharatas and their high-priest Visvamisra conceded to this synthesis of races and religions as the most potent factor of Aryan expansion, glory and power. Thus four divisions of the Aryan India were recognised and acknowledged as is found in the Purushashutra. (R. V. X. 129. II) in the tenth Mandala of the Rigveda which is the latest accretion and in the pantheistic hymn of Purusha "the Brahman springs from his mouth, the Rajanya (Kshatrya) from his arms, Vaishya from his thighs and Shudra from his feet." In this classification

of society into priests, warriors, agriculturists traders and the slaves, there is no novelty, strangeness, or peculiarity. Every nation divided the society into these natural four classes and is doing practically the identical thing even to-day. The followers of Ahura Mazda were divided into 'Athravas, Rathæsvas and Vastrya' which are exactly the three upper Hindu classes, Atharvans (priests), Rajanyas (rulers = Kshatryas) and Vashyas. The ancient Babylonian Law divided the entire population into three classes, 'Amelu', the nobles to which the royalty, the priests and the military chiefs belonged, 'Muskinu' the freemen and the tillers of the soil and 'Ardu' the slaves, who were owned by Amelus and Muskinus. The modern society is divided into the Mercantile classes (Bankers, manufacturers and politicians), army and priests, farmers and the proletariat. The only difference between the modern system and the Brahmanic order is that the merchant class (Vaisyas) has come into power gradually displacing the priests and the warrior classes and it is more flexible and not hereditary. But the domination of society either by the priestly class or by the mercantile community is of but relative importance. In ancient times the priest was supposed to be in communication with the gods and he knew the magic craft and the healing art, so he was regarded as semi-divine and accordingly he held the position of supreme honour and enjoyed relative privileges and comforts. But as the gods of one tribe usually become the devils of others, the maintenance of the priestly influence needs the military support, so the warrior class came into power. At first the priest and the warrior was the same person.

as we see the priest-king in Sumer (Patesi), but efficiency demanded division of labour, and it necessarily created two classes, holding and dividing power and influence. Of course there was rivalry between them as we find in the legend that Parasuram 'thrice seven times cleared the earth of the Kshatriya race and filled five lakes with their blood' But the interdependence was early recognised as Manu wisely says : "Kshatriyas prosper not without Brahmans ; Brahmans prosper not without Kshatriyas. Brahmans and Kshatriyas being closely united, prosper in this world and in the next." But as money can easily buy both the prayer of the priest and the arm of the warrior, soon the Vasya came into prominence, as is seen in modern civilisation which subordinates everything to economic interest. But it may be soon succeeded by the proletariat, for they are the majority of the population and they want to possess other people's accrued wealth, as is indicated by Soviet power in Russia.

Of course in other countries the class distinction is not so rigid and steep as the caste in India. It is because that the Hindu caste system became crystallized and stratified in the social organisation before there was complete amalgamation and fusion of the races, as in other countries. Though there is a marked underlying sense of unity of race, culture, religion and the one designation of a common fatherland, yet side by side still can be seen distinct divergent ethnic elements retaining their primitive customs and habits, and India is a veritable museum of living races. When so many diversified races with marked distinctions of colour, cranium, nose, facial angle and stature, and

heterogeneous culture ranging from the stone age to that of the highest spiritual attainment of man, lived together, sharp classification was inevitable. Yet it is to the infinite credit of the Aryas and the Dravidians that they did not try to exterminate each other, or the other races, whom they enslaved, in order to monopolize the land and its products, which other conquerors have done under similar circumstances. If there are some disadvantages for lack of racial standard-uniformity, yet there is every reason to feel proud for the present generation that their ancestors out of humanity of impulse and generosity of heart let live the helpless aboriginal tribes and not butcher them as a sport. The very existence of the Veddas, Pariyas, Santals, Chandalas, is a living glorious monument to Indo-Aryan cultural refinement.

And even in the very early Vedic time the utility and the interdependence of divergent ethnic elements in the general social economy was realised and out of diversity an unifying link was created in the beautiful Purusha conception in which not only all classes founded their proper place as suited for their functional purposes, but also the whole universe merged in One Cosmic harmonious God :—

"Purusha of the thousand heads, the thousand eyes, the thousand feet, covered the earth in all directions and extended ten finger-breadths beyond. Purusha is all this (universe), whatever has been and shall be; he rules over Immortality which grows higher through food (sacrifice). So significant is his greatness, yet greater still is Purusha. One fourth of him is all creation (universe) and the three quarters of him make