

# **THE MYTHICAL ARYANS AND THEIR INVASION**

# **THE MYTHICAL ARYANS AND THEIR INVASION**

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## Preface to Second Edition

It gives me great pleasure to present this second edition of the book "Aryan Invasions — A Myth". The second edition has been renamed as "The Mythical Aryans and their Invasion." This was considered necessary because the earlier name does not bring out the fact that the Aryans who are supposed to have invaded India are not any people known to history independently but have been postulated by Linguists. Like the "Aryans" the "Dravidians" whom the "Aryans" are supposed to have vanquished are also not any people known to history but have been postulated by the selfsame Linguists. In other words not only the invasion but also the invaders as well as the invaded are imaginary.

In bringing out this second edition I have inserted some material which is based on researches conducted by me after the first edition was published.

The first edition had a satisfactory impact and some BJP governments had decided to amend the textbooks to say that the Aryan invasion is a theory and not a fact of History like the Babar's invasion and even as a theory it is not accepted by all Linguists of international fame. But even this modest amendment was not tolerated by the Marxist fundamentalists and they prevailed on the Central government to remove it after dismissing the BJP governments. Thus an issue which is purely Historical, concerning prehistory, was made an issue of party politics.

Another fact on which I must express my unhappiness is that many important writers changed their view about the Aryan invasion but in recording this change they have not referred to my book as the principal influence effecting that change. A writer holding an official and influential position in History has stated that she no longer regards the Aryan invasion as a historical fact in view of the recent interpretations of Vedic literature which show convincingly that the invasion-interpretation is untenable. She has not given a reference to this recent interpretation and to my knowledge there is no interpretation apart from mine in this book which has gone into such detail in discussing the Vedic texts.



I hope this second edition does not meet with this sort of reception but knowledgeable people examine every argument in it with the utmost scientific rigour at their command.

Some Professors have commented on the book orally while speaking to me. Their main point was that I have not referred to a good deal of writing on this subject. I regard this comment as of no consequence until they show that the literature I have not referred to renders my argument invalid.

I must also take this occasion to point out that I have taken the trouble to go to the original sources only when they are controversial. On references which are not controversial I do not think it is necessary to exhibit once meticulousness by going to the original sources.

I am sorry to say that I have not come across any cogent comment on my book in the course of my extensive tours which I undertook to propagate the book. In Pune one renowned Professor was approached by the audience to deliver a counter-lecture to refute my thesis. When I learnt this, I wrote to him that I would like to attend his counter lecture. Instead of sending an invitation for the lecture to me, he cancelled the lecture itself.

The same Professor said to me that my whole approach collapses if the points advanced by Thieme, a linguist, are taken into account. I asked him where the book will be available. He said the book is in German and is not available in English. He further added that he was bringing out an English translation of the book. I waited for six months and asked him when the book will be available. He said it will not be published in the foreseeable future. I then asked him to give me the xerox of the typescript of his translation for which I was prepared to pay. He then told me that even the typescript will not be available in the foreseeable future.

I have frequently found this tendency to evade discussion and it is one of the severest disappointments in my life.

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**N.R. Waradpande**

## **Preface to First Edition**

The view that the Aryan-invasion of India is a myth has been propounded before, but to my knowledge, no one has so far examined all the 'evidence' for it viz. linguistic, literary and archaeological. Sampurnanand's 'Aryoka Adidesh' for examples discusses only literary evidence.

Secondly most of these writings are vitiated by extra-historical biases like the eternity of the Vedas or that the Vedas originated with the world itself.

It is claimed that the following pages consider all the evidence for the first time without any motive other than that of finding out the truth, and not a single statement in it has been inspired by any emotional attachment to India and its history. Attempt has been made to state nothing but the truth. The whole truth of course is beyond the capacity of any human being.

I request the reader to cast aside all weight of authority on his mind and judge the following pages strictly according to the requirements of scientific method.

**N.R. Waradpande**

# I

## What is meant by “Arya”?

**The race-concept has no scientific basis, since given any two individuals, one can regard them as belonging to the same race by taking their common genetic characteristics, or, on the contrary, as belonging to different races by emphasising the genetic characteristics in which they differ.**

Max Muller,<sup>1</sup> on an unlucky day, used the word ‘Aryan Race’. Thus arose truly, out of talk alone, an imaginary creature: ‘Aryan Man’.

**Heredity, Race and Society  
by  
Dunn and Dobzansky**

The theory that “there were a people called the ‘Aryans’, who were living somewhere outside India, they invaded India; supplanted the indigenous powers and cultures, settled in India, and developed the Sanskrit language and the Vedic religion “was propounded by Max Muller. Originally he used the words ‘**ARYAN RACE**’ indicating that genetically the Aryans were a race with certain common genetic characteristics. He later changed this view and said that he does not regard the ‘Aryans’ a race in the genetic sense, but in the linguistic sense. The Aryans who invaded India spoke a language, from which Sanskrit is derived. He did not want to make any assertions about the genetic physical characteristics of the Aryans.

But Max Muller’s subsequent amendment did not click. The word ‘Aryan’ continued to be used in the racial sense and the Aryan-invasionists generally assert that the invading Aryans were white, sharp-nosed and blond.

### Meaning of "Arya"

Whenever the word Arya was used, after Max-Muller in the last 100 years, it carried the meaning expounded above. This would not have mattered but for the fact that Max Muller used a word current in Sanskrit literature and gave it a meaning which it never had. This enabled him to create an impression that his Aryan man is not a creature of imagination but is widely referred to in ancient literature. This is by no means the case. That the "Arya" occurring in Vedic literature is altogether different from Max Muller's Aryan will be shown later. Not only in the Vedic literature, but also in classical Sanskrit, the word Arya is not used even in a single place to refer to a group of people, whether linguistic or racial. All through it is used as an adjective. Amara's lexicon gives the following synonyms for "Arya": 1) of high family 2) a gentleman 3) good natured 4) righteous. The first meaning 'of high family' does not refer to race. In the same race, say that of Baniyas, assuming that the Baniya caste can be called a race, the descendants of Mahatma Gandhi can be called 'of high family' whereas a Baniya family not distinguished in any way will not be called 'high'.

**The other meanings 1:** 1) gentleman 2) good-natured 3) righteous etc are clearly adjectives of an individual. Nobody would describe any society on a whole as gentle, good-natured or righteous.

The Sahitya-Darpana gives the following rules about the use of the word Arya: 1) The actress and the manager in the play should address each other as Arya. 2) the elder, a Brahmin, and a minister should be addressed as 'Arya'.

Some readers may feel that the custom of addressing a Brahmin as Arya indicates that the word Arya refers to the Brahmin race. But it is absurd to suppose that a race can consist entirely of priests. The rule of addressing a Brahmin as Arya has to be interpreted in the light of other rules. The rules are about addressing individuals of certain categories. They do not show that Arya was a caste-name.

The following verse is current as a definition of Arya

*"Arya is one who does what should be done, and never<sup>62</sup> does what should not be done, and one who is never perverse."*

Arya is often used like 'Sir' before the name of a person, and never after, eg. Arya Chanakya etc. I do not think anybody would be heroic enough to suggest that the word Sir is the name of a race.

It may be argued that Max Muller may have been wrong in using an ancient word for signifying a linguistic or a racial group, but this by itself does not prove that there was no such group, i.e. the group may be called by some other name.

There certainly was a group of people, which spoke Sanskrit or its earlier form, the Vedic language, and this group could be called Arya, by stretching the ancient use of the term. But this does not suffice for Max Muller's theory. According to his theory the Aryans spoke, not Sanskrit, but a language much more ancient than Sanskrit, a language from which Sanskrit and a host of other languages called Indo-European are derived. It will be shown in the following pages that this original Indo-European language is a figment of the imagination. Max Muller's use of Arya as a linguistic group is therefore not justifiable.

### The Concept of Race

Let us now see whether the use of the term Arya by the Aryan invasionists to designate a genetic race is justifiable.

In order to prove the existence of the Aryan race, we have to prove the existence of a human group, which was descended from the same original parents. Suppose there was only one 'Arya' couple, A & E, somewhere in Europe thousands of years ago. This couple gave birth to some sons and some daughters. The family made a rule that no body should marry outside the family. These siblings therefore married among themselves. This kept on happening for hundreds of generations.

At the same time, suppose there was a 'Mongolian' couple B and U; they left descendants under the same marital rules as the 'Aryans'.

In such a case we shall get one pure Aryan, group and one pure Mongolian group and we could have inferred all the genetic characteristics of the Aryan or the Mongolian group by knowing the genetic characteristics of their original parents. By knowing one genetic characteristic of an individual which belongs only to one of the groups, we could have inferred all others.

But once we leave such hypothetical races, and take any actual human group, such inferences are not possible. Suppose we are told that Robin is a European. We can guess with a very high probability of accuracy that he is white. But if we are further asked whether he is dolicho-cephalic i.e. long-skulled or brachycephalic i.e. broad-skulled, the probability of our guess being wrong is very high. On top of this, if

we try to guess his blood-group, the probability of error rises, and becomes higher still if we are to get both the blood group and the cephalic type right.

It is known by actual observation that Englishmen are white, and there are few Englishmen who have curly hair, black eyes, and heights less than 5'7" or so. This however does not mean that white complexion, straight hair and tallness are genetically related. By confining ourselves to a particular geographical region, we have already selected our sample and our inference that Mr. Smith is both white and straight-haired, because he is an Englishman, is based not on genetic correlation, but on previous observation of English-men. If we are merely told that A is a fair-complexioned person, we can draw no inference about his hair or height, lips or eye-colour. The hair may be curly or straight, the height may be below or above the world-average, the lips may be thick or thin, and the eye-colour may be black or auburn.

Even within the group of Englishmen, if we do not just label all of them white, but grade them according to the degree of whiteness, and the amount of thickness of their lips, we are not likely to find that the whiter Englishmen have thinner or thicker lips. This shows that there is no correlation between these genetic characteristics. Inference from one genetic characteristic to another is not possible without such correlation.

In our hypothetical Aryan and Mongol groups, one uncommon characteristic would suffice for inferring the others, if we confine ourselves to these two groups only. If the world is peopled only with four such pure racial groups, any characteristic which belongs only to one of these four groups would suffice to infer all the others, provided we know the racial characteristics of the groups.

### The Scientific Classification

In order to demonstrate the existence of races in human beings, we must take a large enough random sample of the people in the world, say a sample of 10000. The samples we usually take are from the same country and even these are not random. Since the people in a country are living in one geographical region for a long time and before the last 200 years the means of communication were difficult, marriage relations were restricted to a small area, and so people living in that area are bound to have some genetic characteristics in common. But this does not demonstrate the existence of races. If such geographical groups are to be called races, we shall have to postulate thousands of races.

Hence the need for a random sample representing the whole world. A random sample would represent people in every area in proportion to their numbers. We then examine each individual in this random sample to note (1) sharpness or flatness of nose (2) eye colour (3) complexion (4) height, tall or short (5) blood-group (6) dolichocephalic or brachy-cephalic (7) Ears protruding or sticking.

In fact, there are 200 genetic characteristics and the proper course is to examine all of them in order to ascertain the racial composition of the world. But the above seven have been selected, because the most widely known classification of races, viz that of Risley, uses these seven, and for clarifying the correct methodology of race-research these seven are taken as an example.

But there are 200 genetic characteristics at least because a large number of characteristics hitherto not suspected to be hereditary are now being regarded as hereditary e.g. cancer, diabetes etc. With two hundred unrelated characteristics the possible racial groups are  $2^{200}$  because 2 characteristics give four combinations. If complexion is classified into only black and white, and eye colour only as black and brown we can have black complexion with black eyes or black complexion with brown eyes, or white complexion with brown eyes or white complexion with black eyes. 200 characteristics will thus give  $2^{200}$  different classes. Thus the number of races will be larger than the number of individuals in the world, proving the absurdity of the classification.

Even if we confine ourselves to the above-mentioned seven characteristics, let us see what happens.

After making the above observations, we prepare the following table-

**Table showing Correlation between  
seven genetic characteristics.**

Chara- cteristics	Nose sharp/ flat	Eye colour	Skin colour	Height tall/ short	Blood group	Head shape	Ear shape
Nose							
Sharp/							
Flat							
Eye							
Colour							
Skin							
Colour							
Height							
Tall/							
Short							
Blood							
Group							
Head Shape							
Ear Shape							

After making such a table, we calculate the correlations between the different characteristics tabled, e.g. nose-shape and eye-colour. If there is perfect correlation we can always infer the eye-colour of a person by knowing the shape of his nose. If there is no correlation, such an inference will not be correct beyond chance. If the correlation is in between, our inference will be correct above chance level, in proportion to the size of the co-relation. When such correlations are calculated, we enter them in the cells which are the inter-sections of the two characteristics between which the correlation is calculated in the above table.

It has been found that there is very little or no correlation in many genetic characteristics, if a correlation table for all genetic characteristics, in a big random sample is calculated, and these correlations are found to be zero, there is no point in talking of races of human beings, because a race is defined by a group of correlated genetic characteristics.

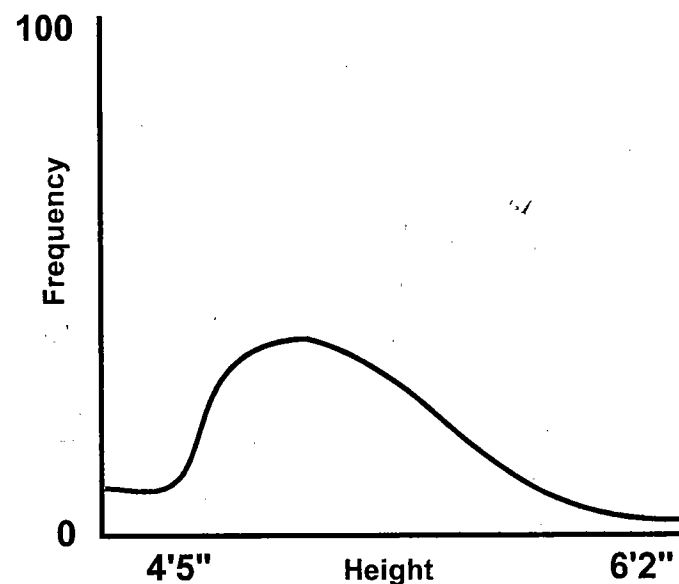
Suppose we succeed in getting a table with sizable correlations. In that case, the statistical technique of factorial analysis can be used to see whether the table affords grounds for classifying human beings into races. If only one factor explains all the correlations, then there is only one race i.e. the human species, but if more than one factor is required to explain the correlations, because the correlations fall into distinct clusters, we can postulate the number of clusters as the characteristics

on which to base our classification so that the possible number of classes is reduced to manageable proportions.

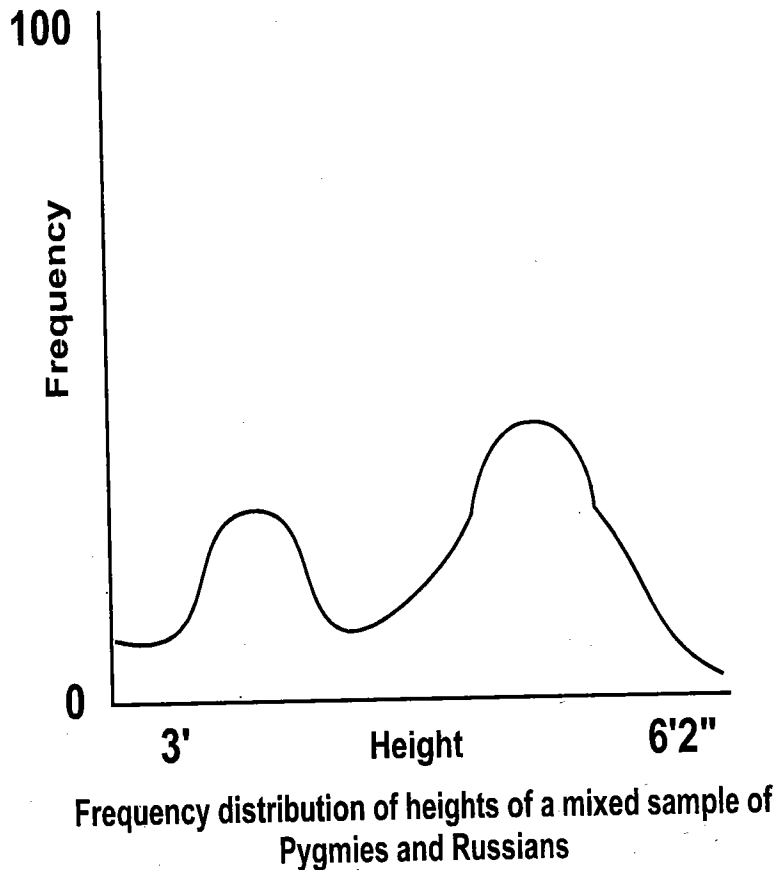
### Difficulties of Classification

It should be noted that no such scientific attempt has been made to demonstrate the existence of races. It can be asserted with a fair amount of reasonableness that the findings of such an attempt will be negative, as far as races are concerned. Take the example of complexion and the shape of the nose. There seems to be no biological reason, why white complexion should go with a sharp nose. Though complexion is genetic, it is influenced by climatic factors. Brown Indians, who visit the cold regions of Russia for three/four months, begin to appear fair, and this fairness disappears within a matter of days, when they return to India. The shape of the nose on the contrary is not affected by climatic factors. Similarly height, though genetic, is also known to increase with generations of prosperous living conditions. Such changes have taken place in Japan and America in the twentieth century. Thus even some genetic factors are amenable to the influences of the environment.

Another factor, which points against the existence of races in human beings, is that the frequency distribution of any human characteristic is



Frequency distribution of heights in an unselected sample



unimodal, whereas if human beings are divided into races, they are expected to be multimodal. This needs some explanation. Suppose we measure the heights of 100 individuals and draw the following graph: (p.10)

The base-line indicates height, the lowest being 4' and the highest 6'2". We count the number of people whose height is between 4' and 4" and put a dot at the height corresponding to the vertical axis which indicates the number of people. We do the same for heights from the lowest to the highest. If we join all these points we get a curve as shown in the figure.

It should be noted that the curve has a single hump around the average height. But instead of taking a random sample of 100, we deliberately take 50 Russians and 50 Pygmies and draw such a curve, we may find that it has two humps or two modes, one corresponding to the average height of Pygmies and the other to the average height of the Russians, as shown in the figure. The sample has two modes or most frequent values because the average height of Pygmies is very much different from the average height of the Russians, and the heights near about the average are the most frequent. Thus more than one mode is an indication that the sample is mixed with regard to the characteristic measured.

Such multiple modes are not found in human populations, if we do not deliberately mix heterogeneous samples. If we choose a sample representative of the population of the world, the frequency curve will have a single mode, above the height of Pygmies, but below the height of the Russians. This shows that humanity at large can be regarded as belonging to a single race.

One of the important hereditary characteristics is blood-group. In fact, very often the word blood is used in the sense of race, and a natural relation is called blood-relation. The human blood is of four types: 1) universal receiver i.e. in cases of deficiency, it can be replenished by any of the four types of blood. 2) universal donor, which can safely replenish the deficiency of any type of blood. The remaining two types are exclusive, i.e. their deficiency can be replenished by, and they can be safely given to, their own type.

If the classification of "Arya" and "Dravid" as racial is correct, the Aryas and Dravidas must not differ in blood within their respective groups.

Again, populations which have an extensive racial mixture should be more varied in blood than populations which are comparatively pure. The following table gives the order of the populations from greater to less mixture of blood.

### Populations with Descending Order of Blood Mixture<sup>2</sup>

- 1) Chinese
- 2) Russian Whites in Moscow
- 3) Hindu
- 4) Hungarian Gypsies
- 5) Negroes in West Africa
- 6) American White
- 7) Mellanesians in New Guinea
- 8) German (Shelswig Holstein)
- 9) Australian Aborigines
- 10) Red Indians in North America

The racialists very often say that the Hindus are a mixture of umpteen races, but the above table shows that they are purer in blood than the Moscow-whites.

The aboriginal Australians are of more mixed blood than the American Indians. The American Indians have the first type of blood in 80%, whereas the Australian aborigines have only 52%. One would infer from this that the American Indian has less admixture of the races, whereas the Australian aboriginal is highly mixed. But Seligman admits that historical evidence on the contrary shows that the Australian aboriginal is the least mixed of all the races.

### Risley's Classification

Seligman,<sup>2</sup> basing himself on Risley, reports that the Indian people consist of the following different races which are illustrated on the next page.

The very first thing that strikes the reader on reading this table is that the race differentia used in it are completely arbitrary. There are hundreds of hereditary characteristics, but only seven out of them are used for classification without giving reasons for the selection. Even these seven have not been used uniformly for all. The table says nothing about the facial hair of the Dravids, the hair and eyes of the Mongol/Dravids, hair of the Indo-Aryans and Turko-Iranians. Are we to suppose that these four races have no peculiarities of the characteristics stated?

### Different Races in India and their Characteristics<sup>2</sup>

Place & Race	Dravid Sri Lanka Tamil Nadu Madhya Pradesh Andhra Chhota Nagpur Gangetic Valley Pania Santal	Mongol-Dravid Southern Bengal & Orissa	Ary-Dravid Uttar Pradesh Rajasthan Bihar Sri Lanka	Seytho-Dravid Western India	Mongol Assam	Indo-Aryans Punjab Rajputana Kashmir	Turko-Iranians North West Frontier
Genetic Characteristics		Brahmins Kayastha Bangaladeshi Muslims	Hindustani Brahmins Chamars	Marathi Brahmins Kunabi Kurg	Kameti Lepcha Bodo	Rajput Khatri Jat	Balochistan Baloch, Brahui Afghan
height	Short	Medium	Medium	Medium	Short/Medium	Tall	Tall
Skin Colour	Black	Black	Light Brown to Black	White	Yellow Brown	White	White
Eye Colour	Black					Black	Black (sometimes cattle)
Head	Long	Broadish	Long	Broad	Broad	Long	Broad
Hair	Curly			Sparse			
Nose	Broad	Broad	Medium	Sharp but not Long	Broad to Sharp	Narrow Prominent	Medium Prominent
Facial Hair		Copious			Sparse curved Brows, Flat face	Copious	Copious

The hair of the Scytho-Dravids have been described as sparse. We are not told whether they are curly or straight. So even in using the same characteristic the principle of classification changes. Sparse hair can be curly or straight. Classifying hair as curly, straight and sparse is like classifying books into novels, plays and rare books, an elementary fallacy of cross classification.

Only in respect of the Mongols, curved eye-brows and broad face have been mentioned and nothing is said about the hair of Dravids, Aryan-Dravids and Scytho-Dravids. This is like giving information about the size of one set of books and the language of another set and asking us to compare them.

The nose of the Indo-Aryans is described as prominent. This quality is highly subjective. How is one to measure prominence?

Like the selection of the individual characteristics, the way these characteristics are combined is also arbitrary. Short stature, black complexion, curly hair, black eyes, long skull, and long nose are regarded as distinguishing characters of the Dravidian race. But why just these combinations? By alternating the Dravid combination with the Arya, we could postulate a race which is tall, black, straight-haired, black-eyed, long-headed, and narrow but prominent-nosed. We can easily find people who answer to this description, so the combination is not imaginary. Even if each of the characteristics is regarded as two-barrelled only, we can get  $2^7 = 128$  races. Since the hereditary characteristics are not only seven but hundreds, there are at least  $2^{200}$  races. It will not be difficult to find people belonging to each of the "races".

A minimum requirement of the race-classification is that it should be unique i.e. given any two individuals, it must be possible to say whether they belong to the same race or not. But with  $2^{200}$  combinations of hereditary characteristics possible, we can show them to be of the same race by choosing a combination which fits them both, and show them to be of different races by deliberately choosing a combination which fits one, but not the other. With  $2^{200}$  combinations to choose from, we have ample scope to find the desired combination.

Again, how many of the seven characteristics have to be common in order to regard the race of two individuals to be common? In the above table, the characteristics shared by the Dravids are 1) two with the Mongol-Dravids, 2) one with the Arya-Dravids, 3) zero with the Scytho-Dravids, 4) one with the Mongols, 5) two with the Indo-Aryans,

and 6) one with the Turko-Iranians. Thus, the Dravids share no characteristics with the Scytho-Dravids, and yet the Scytho-Dravids are called Dravids. The Mongol-Dravids and the Arya-Dravids are called Dravids on the basis of only two common characteristics. The Indo-Aryans also share two characteristics with the Dravids. Why are they not called Indo-Arya-Dravids?

In short, there is no logical basis for the classification.

The Rajputs, the Khatries, and Jats are regarded as Indo-Aryans in the above table. Some racialists however regard the Rajputs and the Jats as the descendants of the Shakas and Hunas.

The table mentions the habitats and the modern representatives of the various races. The veracity of these assertions can be ascertained by mixing the people of the different provinces of India in a random group of 100 seated in a chair and trying to guess their home province by looks alone. 'Seated in a chair' because, height could help distinguish the Punjabis from others.

It will be seen that in such conditions the guesses suffer from a high degree of error. It is a common experience that the most reliable clue to the home province of an Indian is his accent. Not until he begins to speak can we reasonably guess the home province of an Indian.

The assertion in the table that the Bengalis have more hair on their faces than the Tamilians, will be questioned by many.

Scytho-Dravids have been located in Western India. The Maharashtrian Brahmins, Kunabis, and Koorgis have been included in this race. These groups have been described as fair. This is by no means a correct description. Risley's samples were obviously biased.

The Vidarbhis are dubbed simply as Dravids, not Scytho-Dravids, like the Western Maharashtrians. Tilak, C V Vaidya, N G Chapekar etc, who regarded themselves as Vedic Aryans would have been shocked to read this. C V Vaidya<sup>3,1</sup> contended that not only the Maharashtrian Brahmins, but also the Marathas, are Aryans. He used the nasal index as his basis. In short, one could include anyone in any race by using a convenient characteristic. The racialists once regarded the dichotomy: dolichocephalic i.e. long-skulled and brachycephalic i.e. round-skulled as decisive. But according to this classification, the West African blacks were proved to be of the same race as the Scandinavian whites. The criterion was therefore dropped like a hot potato.



But the racialists argue 'even though they are vanquished'. They argue that race-classifications fail because nowadays there are no pure races. All populations are mixed and the very existence of mixed stocks points to the prior existence of pure stocks from which the mixed stocks have arisen by cross-breeding.

The mixed stock has mixed genes. The genes are the biological atoms determining hereditary characteristics. A fair Indian, though fair himself, can give birth to black children, because he has black-producing genes also in his body besides the white-producing ones, because he is a cross between a pure white, who has no black genes and a pure black who has no white genes.

The unmixed stocks are original, and therefore can be called races. If the hereditary characteristics are say twenty, the pure stock will breed all these characteristics true, and if there are say three such pure stocks, their progeny will be identical with them in all the twenty characteristics, giving rise to three unique distinct groups. These groups fulfil the criterion of uniqueness and all their genetic characteristics will form separate clusters.

It is true that the pure stocks can be described as races, if they breed all the characteristics true. But it is not true that all mixed stocks must have arisen from pure stocks by cross-breeding. The mixed stocks can arise out of pure ones, but they can also arise out of mixed ones, the mixed stocks themselves could be original. So the mixed stock does not necessarily point to an original pure stock.

The substances water, air, etc are compounds formed out of elements. From this, one cannot infer that in the remote past the world consisted only of elements, and the present-day substances like water and air are created by composition. It is quite possible that the world has always contained compound substances only.

The skeletons of five to ten thousand years ago do not afford any evidence of their bone-structures having bred true, and falling into unique separate clusters.

Scientific evidence shows that we cannot talk of an Aryan race in a meaningful way. We shall next consider whether the Aryan linguistic group is any more meaningful.

## II

# The Classification of Languages and The Original Home of the Aryans

**The Classification: "Indo-European Languages" is not based on features from which a common origin of the languages subsumed under the class can be inferred. Again the classification unjustifiably excludes the South Indian languages and equally unjustifiably includes English.**

The view that the languages of North India and most languages of Europe belong to one class and have descended from one Indo-European language, and that the South Indian languages belong to a different class called the Dravidian, is widely prevalent. The Indo-European is said to be the language of Aryans, who originally resided outside India.

### Is this true?

#### The Common Features of Indo-European Languages<sup>4</sup>

The languages which are classified as Indo-European are said to be similar in the following respects:-

- (1) The roots and bases of these languages are to a great extent the same, i.e. they have similar phonology.
- (2) The way in which nouns, verbs, and other parts of speech are formed from these roots is essentially the same.
- (3) The morphology or the inflexional and conjugational change of words signifying relationship within the sentence are of the same nature.
- (4) The pronouns, numerals, and some of the most common

words, e.g. those for family relationships etc, are the same. These are the most essential words in a language, and it is argued by the Aryan-invasionists, will not be given up in favour of those belonging to a strange idiom. Of these, morphological resemblances are the most important and telling.

### Obvious Misconceptions

Anybody who notices the way the English language has influenced the Indian languages will regard all these points as of no consequence for proving a common descent of a group of languages. We all know that the Indian languages have not descended from English, and yet, if we apply the above criteria, we shall have to regard English as the ancestor of all the Indian languages.

It is often said that borrowing is confined to words only, not to grammatical formations. This is a misconception. The phrase *en masse* is borrowed by English from French. The word *en* is the equivalent of 'in'. But this is used only in phrases borrowed from French, *en route*, *entrain* etc are examples. Similarly in Marathi, the English word 'bus' has the plural 'buses' like English; no body applies Marathi grammar to it to form the plural *busa*. This shows that foreign words can be borrowed along with their grammatical formations, and the view that grammatical formations cannot be explained by borrowing is untenable.

The dogma that words for intimate family-relations and numbers will not be borrowed has been falsified by the English influence. The daddy-mummy culture is too well-known to be pointed out. As to numbers, even vegetable-sellers have begun to mention their prices in English.

There is some difficulty about pronouns. Pronouns have not yet been borrowed from English, and expressions like '**he gaya**' and '**she gayi**' are not yet heard. But then, the so called Indo-European languages also do not have the same pronouns. What are the analogues for he, she, it and they in Sanskrit? The corresponding Sanskrit pronouns are **sah**, **saa**, **tat**, and **te**, similarity of they and **te** is notable. But the other English and Sanskrit pronouns are unconnected. The presence of S in **saa** and 'she', and T in 'tat', and 'it', is too thin a basis for suggesting descent. Even 'they' is derived from 'he', through 'hi' and then 'thei'<sup>5</sup>.

If the common S in '**sa**' and '**she**' suffices to establish consanguinity between English and Sanskrit pronouns, the following similarity

between Tamil and Sanskrit pronouns also should establish their consanguinity. There is nasal common to Sanskrit 'aham' and 'Tamil' 'yan' and 'nan' 'y' and 'm' is common to Sanskrit 'vayam' and Tamil 'yam'.

### The Reconstruction of "Indo-European"

If the basic principle in the classification "Indo-European" is thus found to be untenable, no great effort is required to show that the attempt to reconstruct the original "Indo-European" on the basis of the known languages, which are classified under "Indo-European", is an exercise in futility. If a group of individuals is assigned to one family without basis, and then an attempt is made to infer the biological characteristics of their supposed common ancestor, one is bound to get an imaginary creature, and such imaginary creatures will be many, if the common characteristics, on the basis of which the individuals are supposed to have a common descent, are not genetic at all, or the laws of their genesis are not known.

A further difficulty in such a reconstruction is that there is no definite direction in which changes in languages take place. According to Max Muller, the process of change in the languages is cyclical; the agglutinating languages tend to be analytic and the analytic ones again tend to be agglutinating. Agglutinating languages are those in which the roots and the prefixes and suffixes are not clearly seen as independent elements; the analytic are the reverse of this. If language-change is cyclical, it is not even possible to know which is the earlier and which the later stage in a language. How can we then lay down a sequence of steps which can lead us to the original Indo-European?

It is therefore as certain as anything can be, that only borrowing can explain the similarity in the Indo-European languages.

That the common roots in the so-called Indo-European languages are due to borrowing, and not to a common ancestry, is corroborated by the following fact, pointed out by Burrow. Apart from the common roots and formations, the European languages are markedly different from each other, whereas the languages of North India are very closely similar. There could not be a clearer indication of the fact that the similarity in European languages is due to the influence of a foreign language, on languages which are genetically disparate, whereas the similarity in Indian languages is due to common descent.

The position of the European languages is comparable to the position of the languages in South-East Asia. The Thai and Indonesian abound in Sanskrit roots and formations. The Thai uses the words vidya, shilpa, doorshabda etc. and the Indonesian is called bhasha Indonesia. The word **Mardheka** is said to have been derived from the Sanskrit maharddhika meaning abounding in prosperity.

And yet Thai is classified in the Chinese language group, and Indonesian is regarded as a language group by itself. It is high time that we cease treating the European and Indian languages as belonging to one family.

The view that there is little justification for treating the Indo-European languages as belonging to one family and that the similarity in them can be explained by borrowing is not propounded here for the first time. World-famous linguists like Trubekoy,<sup>8</sup> Solta, Pissani and Allen have expressed the same view, but the Aryan-invasionists have just ignored it.

### Caldwell's unmerited Influence<sup>9</sup>

Not only have the Aryan-invasionists coupled North Indian languages with European languages without convincing reasons, they have with equal unreason forced the South Indian languages into another class: Dravidian, instead of subsuming them in the same class to which the North Indian languages belong. The separation of North and South Indian languages into different families is based on Caldwell's comparison of Tamil and Sanskrit seeking to prove that Tamil does not belong to the same family as Sanskrit. The differentia pointed out by him are given below with examples from English, Sanskrit and Marathi to show that they fail to differentiate Tamil from these languages.

#### I

There are no case endings in Tamil. In their place suffixes which can be separated from the words, are used. The difference between the singular and plural is that in the singular the suffix is added to the original word, while in the plural the suffix comes after the form which indicates the plural. After the plural indicator, all nouns, whatever their gender or number, take the same suffixes as the singular.

#### Sanskrit

Not applicable

#### Hindi

सेवक ने, सेवक को, सेवक से, सेवकों ने, सेवकों को, सेवकगण ने

#### Marathi

सेवकाने, सेवकाला, No Separate suffix for dative ;

सेवकांनी, सेवकांना, सेवकासारख्यांना, सेवकगणाने

#### English

There are no case endings. Cases are indicated by prepositions like in, on, etc.

#### II

कु, विक, and गे are used as dative suffixes in Tamil. Not applicable to Sanskrit, Marathi and English.

#### Hindi

कु, was used upto the 19th century. ग in place of क is heard in Gangasagar and Haryana.

#### III

- 1) Tamil uses suffixes for expressing the meaning of prefixes in Indo-European languages. These suffixes cannot be regarded as independent words. They merely express quality or relation, and are used as an aid to meaning.
- 2) Adverbs are either nouns or participles, and are used before the verb they qualify.

#### Sanskrit

- 1) सेवकस्य हेतोः, सेवकेन सह, सेवकस्य समीपम्
- 2) वेगेन गच्छ, पठितुं गच्छ, रात्रौ पठ

#### Hindi

- 1) सेवकके हेतु, सेवक के पास,
- 2) तेजी से पढ़ो, पढ़ने जाओ, रात में पढ़ो।

#### Marathi

- 1) सेवका (च्या) साठी, सेवका (च्या) सह, सेवका (च्या) जवळ
- 2) वेगाने जा, जेवायला ये, रात्री वाचा

#### English

Not applicable

## IV

- 1) In the Indo-European languages adjectives are declined like nouns and pronouns. They have gender, number and syntax indicators. In Tamil the adjectives are not declined.
- 2) Adjectives are used as nouns and are declined, but when they are placed before the qualificand, they are used in their original form in Tamil

## Examples

## Sanskrit

- 1) शूरेण
- 2) शूरसैनिकेन.

## Hindi

- 1) शूरोंने
- 2) शूर सैनिकों ने

## Marathi

- 1) शूरांनी
- 2) शूर सैनिकांनी

## English

- 1) By the brave
- 2) By the brave soldiers.

## V

- 1) In Tamil the participles are used as adjectives.
- 2) In effect, when adjectives are used, they also take the form of participles.
- 3) The participle forms have the features of both the verb and the adjective.

## Examples

## Sanskrit

- 1) हसन् वसन्तः, मृतः अश्वः
- 2) स्वल्पं धनम्, महती आशा.

## Hindi

- 1) हंसती दुनियाँ, सादा अन्न
- 2) थोड़ा पैसा, बड़ी शान
- 3) As in (1)

## English

- 1) Laughing gas, scented food
- 2) small arms, big game
- 3) As in (1)

## VI

In the first person plural, Tamil has two forms: one includes the listener; the other does not

## Examples

Sanskrit and English do not have such forms

## Hindi

- 1) हम
- 2) अप्पन

## Marathi

- 1) आम्ही
- 2) आपण

## VII

Tamil does not have passive and impersonal forms. In order to express passive and impersonal, a verb signifying constraint is used.

## Examples

## Sanskrit

In Sanskrit passive and impersonal forms are available, but alternatively verbs signifying constraint can be used to express their meaning

अहं भोजितः, सः गन्तुम, योद्धुं वशीकृतः

## Hindi

मुझे करना पड़ा, उसको जाना होगा और लड़ना पड़ेगा.

## Marathi

मला जावे लागेल, त्याला जावे लागेल व लढावे लागेल.

Passive and impersonal, though available, are rare

## English

Passive and impersonal are available, but so are the constraint verbal forms.

I had to go. He will have to go and fight

## VIII

Indeclinable past participles are more common than conjunctions in Tamil. Examples

## Sanskrit

स भुक्त्वा शालां गतः, स भुक्तवान् शालां गतः

## Hindi

वह भोजन करके दफ्तर गया, उसने भोजन किया और फिर वह दफ्तर गया.

## Marathi

तो जेवण उरकून शाळेत गेला.

## English

Having taken meals he went to office. He took meals and went to office.

## IX

In Tamil participles are preferred to pronouns. The Tamil बंदान्, जुझ बंदाळु जौझठबंददु जूझ means one who has come, बंदुविष्टान् or is going to come

## Examples

## Sanskrit

चरन् वै मधु विन्दति in place of यः चरति स मधु विन्दति

## Hindi

डूबता क्या न करता ? in place of जो डूबता है वह क्या नहीं करता?

## Marathi

बुडत्याला काडीचा आधार in place of जो बुडतो त्याला काडीचाही आधार असतो.

## English

The winning clap' is preferred to 'Those who win clap'.

## X

## In Tamil

- 1) The subject is placed in the beginning of the sentence and the verb at the end.

- 2) Adjective is placed before the qualifcand.
- 3) The adverb before the verb.
- 4) The object of the verb and all its adjectives are used before the verb
- 5) The adjectival participle is used before the qualifcand;
- 6) The negative is placed before the positive;
- 7) The word indicating the possessor is placed before the word indicating the possessed.
- 8) Suffixes instead of prefixes express syntax.

## Examples

## Sanskrit

रामः गच्छति, बुद्धिमान् बालकः, वेगेन धावति, तेन स्वादु, पौष्टिकम् अन्न भुक्तम्, तिष्ठन् गौः

न हि गच्छति, गृहस्य स्वामी

The case endings are everywhere placed after, and not before, the word.

## Hindi

The case endings follow and do not precede the word.

राम गया, होशियार बालक, तेजी से चलो, उसने अच्छा मीठा खाना खाया, दौड़ता घोड़ा, नहीं जाऊँगा, मकान का मालिक.

## Marathi

राम गेला, बुद्धिमान् बालक, वेगाने धावतो, त्याने स्वादिष्ट व पौष्टिक अन्न खाल्ले, उभी गाय, नाही जाणार, घराचा मालक.

## English

- 2) clever boy
- 4) He ate delicious and wholesome food
- 5) standing instructions
- 6) will not give
- 7) owner of the house.

There are no case-endings in English.

Only four out of the eight peculiarities are applicable to English.

It will be seen that many of the peculiarities of Tamil are mentioned as a preferred usage. A preferred usage is a matter of style, it is not a structural peculiarity of the language.

If we try to classify Sanskrit, Hindi, Marathi and English according to the above examples as Dravidian or non-Dravidian, we get the following chart:

Caldwell's so called Dravidian differentia and the Indo-European languages

Language	Number of differentia which wholly apply	Number of differentia which partially apply	Number of differentia which do not apply at all
Sanskrit	6	2	2
Hindi	All Ten	0	0
Marathi	8	1	1
English	3	3	4

Thus if Caldwell is right, Hindi is wholly a Dravidian Language and Sanskrit, and Marathi are in essence Dravidian languages too.

What then is left of the classification Indo-European *versus* Dravidian?

The language of the Avesta is regarded as a Indo-European language. But it has many similarities with the so called Dravidian languages. For example Telugu shortens the final vowel like Avesta, Sena becomes sen and pita becomes pit in Telugu.

A good deal is made of the natural genders in the "Dravidian" languages as against the arbitrary genders in Sanskrit. But at the same time this does not prevent the Aryan-invasionists from classifying English as Indo European inspite of its natural genders.

The transition from the arbitrary genders of Sanskrit to the natural genders of the Dravidian languages is seen in the Prakrits. These prakrits have not been classified as non-Indo European languages.

The prefixes apa; ava and nir were all changed into in the prakrits and we have to derive a "Dravidian" word from Sanskrit back through the prakrits by applying the phonetic laws operating in them. Observe the following:-

Sanskrit prati, prakrit pari or pai; Telugu pai or pai.

After eliminating the tatsama and tatbhava words in the "Dravidian" languages the remnant of the language will be rendered incapable of expressing the most commonplace ideas necessary for daily life.<sup>82</sup>

Caldwell has made much of the different numerals in the South Indian languages and Sanskrit. He has given their fanciful derivation from the Scythian languages. But the oka in Teu is directly derivable from the Sanskrit Eka. The form onu is derivable from the Sanskrit oona meaning one less. In any case the one of English is not a kin of the Sanskrit eka.

The young children and the illiterate among the Telugus use Donu for two. The is akin to the Sanskrit Dvandva.

In fact, the whole linguistic edifice built by European scholars for deducing the Aryan-Invasion Theory is a house of cards, which can be blown up even by a soft breath.

### III

## The Original Home of the Aryans: Five Linguistic Theories

**The original Home of the "Aryans" is sought to be inferred from words which are common to the languages, which are unjustifiably included in one class called Indo-European or Aryan. If we carry the reasoning to its logical conclusion, we have to suppose that the "Aryans" originally lived in a place where there was no air and no water, since there is no word (root) for air and water which is common to all the "Indo-European" languages.**

It is very often said that the Aryan invasion theory is based on unassailable linguistic evidence. It should be noted that this was not the view of the father of the theory Max Muller himself. He says that the original home of the Aryans was somewhere<sup>10</sup> in Asia. It is hazardous to say anything beyond this. This shows that linguistics has nothing weighty against regarding Aryans as migrating from rather than into India.

But strangely, these views of Max Muller are hardly known. Max Muller is famous only for the view that the Aryans migrated from the regions around Samarkand or the plateau of Pamir.

### The Central-Asia<sup>10</sup> Theory

The following are the arguments for this theory.

Two branches of Aryans starting from the neighbourhood of Samarkand would not have a common word for sea. And so it is. They have no common word for sea. But more than that. We should expect the various members of the North-Western branch to have the same word for sea. And again it is so. We have in Latin and Lithuanian mare,

in Gothic marei, in Irish muir. Greek only is wanting unless we appeal with Curtius to a son of Poseidon, called Amphimuros.

Again people starting from that centre ought to have little knowledge of fishes. Fish is matsya in Sanskrit, masya in Zend, but in Latin piscis, in Gothic fisk, in Irish fasc.

*"We have two streams of languages, one tending south-east to India, the other north-west to Europe. The point where these two streams naturally intersect points to Asia."*

### Mistakes Galore

It is clear that Max Muller has not even cared to look at the map in making the above statements. Iran and Afganistan (Gandhar) are to the South-west, and not to the south-east of Samarkanda, the place in Central Asia, which Max Muller suggests to be the original home of the Aryans; and yet he includes the Iranian language Zend in the south-eastern branch of the Aryan languages. Afghanistan has been traditionally regarded as a part of India. Again he asserts that the north-western branch has a common word for the sea, forgetting that the English words sea and ocean have nothing in common with the words, muir, mare etc. He himself has pointed out the exception of Greek without any explanation. Again the Caspian and the Ural seas are not farther from Samarkanda than the Arabian sea is from Kashmir; and yet no period in the ancient history of Kashmir can be pointed out when the people of Kashmir had no word for the sea.

Max Muller assumes two contradictory propositions: (1) The Aryans in Central Asia were so immobile that they had no knowledge of the sea, a few hundred miles away. In fact their ignorance was so colossal that they did not even have a word for the sea, (2) These Aryans were so mobile that they spread from Great Britain to the valley of the Krishna.

In asserting that the people living in the Samarkanda area had no knowledge of fish, Max Muller has not cared to consult an elementary book on Samarkanda Geography. The two varieties of fish viz Katala and Loch are found in this region<sup>11</sup>.

In short, Max Muller has made as many mistakes as is possible to make in one argument.

### The Cambridge<sup>74</sup> Theory

Western scholars were unhappy in regarding Asia as the origin of

the Aryans. So an attempt was made to drag the home nearer Europe. One of the attempts is that of the Cambridge History of India. The Cambridge argument in brief is as follows:

*"We know that the people who spoke the original Indo-European language were a white race. From the words preserved in their languages, particularly in the languages far separated, and in circumstances where there is little likelihood of borrowing from one language to the other, we may gather something as to the animals and plants they knew, and perhaps a very little about their industries. The close similarity between the various languages spoken by them would lead us to infer that they must have lived for long in a severely circumscribed area, so that their peculiarities developed for many generations in common. It is very doubtful whether they possessed a word for the sea at all. For the word mire, which in Latin means the sea, has its nearest relatives in other languages amongst words which mean moor or swamp. To their habitat we may assign with considerable certainty the oak, the beech, the willow and some coneiferous trees. The Birch seems to have been known to them and possibly the lime, less certainly the elm. The useful animals best known to them were the ox and the cow, the sheep, the horse, the dog, the pig, and possibly some species of deer. The ass, the camel, and the elephant were apparently unknown to them in early times, and the great variety of words for the goat would lead us to suppose that this animal also was of later introduction. They seem also to have been familiar with corn. Of birds, we may gather from the language that they knew the goose and the duck. The most familiar bird of prey was apparently the eagle. The wolf and the bear were known, but not the lion and the tiger".*

"If indeed these early men knew the beech, they must have lived to the west of a line drawn from Knoigsberg in Prussia to Crimea, and continued thence to Asia minor.

No country which had not much variety of geographical features could have been the habitat of both the horse and the cow.

Is there any part of Europe which combines pastoral and agricultural countries in close connection, which has in combination hot low-lying planes suitable for the growth of grain and rich upland pastures suitable

for flock and birds, and at the same time trees and birds of the character already described?

This is the area bound on its eastern side by the Carpathians, on its south by Balkans, on the western side by the Austrian Alps and the Bohmer Wald, and on the north by the Erzgebirge and the mountains which link them up with the Carpathians."

### Dandekar's<sup>8</sup> theory

Dr. R.N. Dandekar disagrees with the above. His view in brief is as follows.

The region which the Cambridge history describes as the original home of the Aryans is Hungary. Against this, many objections can be raised. Why should a settled agricultural community have at all migrated out of Hungary? Why is there no attestation in the early Indo-European speech of fish and fish-eating, which must have always been a prominent feature of life in the region? Further the archaeological finds in that locality do not show any traces of arrow-heads and other weapons which were clearly known to the Indo-European speakers. On the other hand, we find in the early Danubian culture, traces of the worship of the mother goddess, which was unknown to the Indo-Europeans. As a matter of fact, the agricultural population of Hungary does not in the least partake of the nomadic and warlike character of the Indo-Europeans. Moreover, it is not only Hungary which is suitable for grooming horses and other animals.

The argument that the ancient Indo-Europeans knew the beech, the beech is not found to the west of the line drawn from Konigsberg to Cremia and Asia-Minor, so the Indo-Europeans could not have lived originally in the east of this line is not correct, because it can be proved that the original Indo-Europeans did not know the beech.

After having thus refuted the view that the Aryans migrated from Hungary, Dandekar "proves" that they migrated from the North Kirgiz. The "proof" runs as follows.

There is first of all the influence from Mesopotamia. For example Indo-European words like *astar* and *peleku* show clear affinity with Akkadian *ishtar* and Assyrian *pilakku* respectively. The early Indo-European vocabulary is also seen to have been influenced by the inner Asiatic speech. This must have been possible only through the agency of the Altaic culture. To give an example, the Indo-European word *guos* (= cow) is not derived from the Sumerian *gi* (d), as was hitherto believed,



but from Altaic cuos. Equally significant is the influence of the Uro-Finic on the early Indo-European. It may therefore be reasonably assumed that the home of the early Indo-European speech was located in the region as would be directly contiguous to the Sumerian-Akkadian-Mesopotamian linguistic zone. The Indo-European speech, before it was divided into different linguistic groups, must have been subjected to this threefold influence. North Kirgiz is the proximate area where this threefold influence could have operated.

The taking over by the Indo-Europeans of the domesticated desert horse points unmistakably to the cultural contacts with the Altaic region.

The word cow is borrowed from the Altaic. The horse-sacrifice came to the Indo-Europeans through the same source. The wide use of goat and sheep by the Indo-Europeans would show that the original Indo-European tribes stretched from the steppes on the east to the hilly tracts in the West. The animals, which were presumably unknown to the Indo-Europeans such as the tiger, the leopard and the camel, also point to the Urheimat having been located in the Ural-Altaic region i.e. North Kirgiz.

The argument that the Indo-European word *medu* i.e. honey points against the urheimat being North Kirgiz is not correct, because the Indo-European *medu* does not mean honey, but a juice of some kind of berries.

The fact that the early Indo-Europeans did not possess any knowledge of agriculture would support the assumption of the Kirgiz urheimat. A consideration of such words as *Seri*, *melg*, *agros*, *mel* etc led Brandenstein to the conclusion that the proto-Indo-Europeans were not conversant with agriculture.

The method of the disposal of the dead practised by the Indo-Europeans was to bury the dead in single graves. Over such graves they used to throw a mound of earth dug out from a surrounding ditch. They seem to have been also in the habit of surrounding the mounds, with one or perhaps two timber fences. In the *Rigveda* we get attestation of a similar procedure, which fact may be regarded as a proof of its being widely in vogue even among the distant members of the Indo-European family. The Kirgiz steppes are widely dotted with such 'Kurgans' or mounds, several of which go back, according to Russian archaeologists to the neolithic times (i.e. about 2500 B.C.)

Earthenware decorated with incised designs, particularly bearing the impression of whipcord is believed to have been the speciality of the Indo-Europeans. Its origin too is to be traced to the northern steppes.

Studies of the site where stone-battle-axes are discovered lend further support to the Kirgiz region being the urheimat.

From Kirgiz, the Indo-Europeans moved to the Balkh region. In Balkh, one comes across a large number of graves with mounds, around which are placed one or more, mostly two, circular timber fences. A study of the meanings of certain words and roots in the original Indo-European speech on the one hand and the immediate ancestors of the Indo-European dialects on the other, clearly proves that the original meanings of the former were retained in the latter, while those roots and words had developed newer meanings in the European members of the Indo-European family. Therefore, the proto-Aryans must have migrated to a region, not radically different from the Indo-European urheimat. That region is the region round the Balkh.

The proto-Indo-Aryans migrating into north-western India were comparatively few in number, but they seem to have possessed tremendous power to diffuse their language and culture, so that instead of being absorbed by the indigenous population, they could superimpose their language and culture on that population. The Vedic language and culture soon became deeply and permanently rooted in Indian soil. As against this, the proto-Indo-Aryans who had made a detour in the direction of the near east and which must have lost many of the features of their proto-Indo-Aryan language and religious ideology, already in the long process of that detour, could influence the indigenous Hungarian population of that region, through their language and religion, only superficially and that too because they had manoeuvred to establish themselves as a ruling class within that population.

### One More Pretender

Dandekar's theory is an addition of one more pretender to the array of pretenders which constitute the theories in this field. Some of the howlers are these-

*'A consideration of some words in the Indo-European shows that the Indo-European speaking people were ignorant of agriculture'.*

How can we possibly know from any words in any language that the people speaking that language were ignorant of agriculture or anything else? From which words in the ancient Greek can we infer that the Greeks were ignorant of railway trains and motor cars?

Dandekar places the original Indo-Europeans near the Akkadian/

Sumerian/Mesopotamian linguistic region on the ground that these languages have influenced the Indo-European. He does not realize that before talking of such influence, he must prove that these languages are more ancient than the imaginary Indo-European and that they were located in the same region as now, even in those ancient times.

Dandekar admits that the proto-Aryans seem to have possessed tremendous power to diffuse their language and culture, so that instead of being absorbed by the indigenous population, they could super-impose their language and culture on that population. In spite of this their influence on the Hungarian population is minimal but very deep in India. Why? Dandekar has no answer, because the answer is simply that the Indian civilization is not influenced by the Aryan; it is itself the Aryan civilization, whereas outside India it is a superimposition on non-Aryan civilizations.

Dandekar's thesis contains many assertions without any attempt to point out their basis. For example: (1) the word *guos* is not derived from the Sumerian *gi(d)* but from Altaic *Kuos* (2) the Indo-Europeans took the horse sacrifice from the Altaics (3) the word *cow* is derived from Altaic and not from the Sanskrit *gau*. (4) the Indo-Europeans did not know the beech. Dandekar may escape by saying that these assertions are based on Linguistics, and he need not go about proving them. But there is almost nothing in linguistics which is accepted by all Linguists, and therefore it devolves on Dandekar to give reasons why he prefers the above opinions to others.

### The Mythical Indo-European

Max Muller argues on the basis of words in existing languages, but Dandekar bases his argument on a postulated Indo-European language and its postulated or imagined vocabulary. Such an Indo-European language is constructed by taking some existing Indo-European languages as the base, and going backwards by using the laws about change in language. Naturally, the result will differ according to the set of languages taken as the base. Logically, all the Indo-European languages should be taken as the base. But this is simply impossible. The number of such languages may be more than two scores and a Linguist, who has a good knowledge of them all, will be difficult to find. Secondly, it is by no means agreed, which languages are to be called Indo-European and which not. The Hittite<sup>4</sup> for example is regarded as Indo-European by some, but not by others. Kashinath Sharma<sup>9</sup> regards even Hindi as a Dravidian and not an Indo-European language. In

practice therefore, only a few languages arbitrarily chosen are taken to be the base.

The result<sup>7</sup> is that the Indo-European which we reach by this means is already split up into a series of varying dialects. Which of these dialects is supposed to be the original Indo-European? The system reconstructed largely by the comparison of Sanskrit and Greek at one time passed for primitive Indo-European. Stuart Mann based his Indo-European only on the basis of European members of the Indo-European family.

With this state of affairs, it is not surprising that the Linguists give mutually contradictory descriptions of the Aryans. Giles is sure that the Aryans burnt their dead, whereas Dandekar says that it has been proved that they buried them. Brandestein and Dandekar say that they were nomads, whereas Stuart Mann asserts that they practised agriculture. According to Giles, the beech was an unknown entity to them, whereas Dandekar maintains that "it can be shown" that they knew the beech.

### Outrage on Logic

Apart from disagreement on the fundamentals, the Linguists have in several places committed what can be described as an outrage on logic. Burro<sup>7</sup> asserts that ascertaining the nature of an un-differentiated Indo-European is not practicable. In spite of this, the Linguists claim not only to have accomplished this, but also to have obtained a complete dictionary of the language, so complete that from the absence of a word in it, one can infer a host of things which never entered the sphere of awareness of the Indo-Europeans. Equipped with this so called complete dictionary, the linguists assert that the Indo-Europeans did not know the beech, they were innocent of the existence of the sea, and never even dreamt of fish and salt.

It needs no genius to see that it is quite impossible to construct a dictionary of the original Indo-European, if any. The Philologists can at the most collect all the words current during their life-time; words which went out of use before their lifetime cannot be collected by them, unless they are found in ancient writings. But before paper and printing were invented, very little writing was done, and very little out of this has survived. Therefore, it is impossible to collect even all written words, say in Greek, of the time of Plato and Aristotle. Only quixotic heroism could claim to have listed all the written Greek words of those times.

It is therefore an outrage on common-sense to try to infer the

ignorance of Indo-Europeans from the absence of certain words in their languages.

If we concede that the Linguists are in possession of a complete dictionary of the language, inferences about the ignorance of Indo-Europeans are not illogical. But how can we possibly know, even from a complete dictionary, whether the Indo-Europeans were nomadic or agriculturists, or that they were white or black? Can we infer from the Oxford dictionary that the Englishmen are white? The Cambridge History asserts that we know that the Indo-Europeans were a white race. It does not explain how this was known.

Further, the imaginary dictionary of the Indo-European language must, of necessity, contain only words, without meaning. In order to ascertain the meanings of words, we need words used in a discourse, and not mere sounds. Nobody claims that any actual record of the original Indo-European is available; that language is purely imaginary. The meaning of the words of this language, therefore, like the words themselves, have to be imaginary.

But the Philologists claim that their imagination is not the imagination of a fairy-tale writer; it is scientific. This scientific imagination used by Brandestein for finding the meaning of the words of the Indo-European follows certain principles. One of the principles is that a word like pashu can come to mean wealth in course of time, but it cannot happen the other way round. In other words, a specific form of wealth viz cattle can be made to stand for wealth in general, but a general notion cannot be made to stand for the specific.

This rule is supposed to have been derived from an actual study of changes in the meanings of words in actual languages. But the study seems to be very meagre. There are examples of a general notion coming to stand for a specific. 'Life' is a general notion, 'water' is a particular substance essential for life. But the general notion 'life' has come to mean its special necessity viz. water in Sanskrit.

Burrow<sup>7</sup> uses a principle, quite the reverse of that of Brandestein. The Finno-Urgian word for fish has come to mean in the Indo-European languages a particular species of fish. Burrow suggests here that the language that restricts the meaning should be regarded as the borrower.

Thus Burrow accepts as a principle a process which Brandestein regards as scarcely possible. Linguistics is thus too much full of whims to be a reliable guide for historical inferences.

By following such arbitrary methods of fixing the meanings of words, almost any place in the world can be declared to be the original habitat of the Aryans. The Indo-European accepted by Dandekar has the word medu i.e. honey. But honey is not found in North Kirgiz, which region according to Dandekar was the urheimat of the Aryans, and Dandekar shares the view that no Indo-European word can refer to anything, which was not found in the Indo-European urheimat. This does not however deter Dandekar. Linguistics is flexible enough to accommodate contradictory views; medu according to Dandekar, does not mean honey, but the juice of a berry-like fruit. How he has come to know this is not revealed by him.

According to Hirst, the beech, which must have been known to the Indo-Europeans, does not grow to the east of the line drawn from Königsberg down to Crimea and Asia minor. The urheimat of the Indo-Europeans cannot accordingly be located to the east of that line. Against the suggestion that Pamir was the urheimat, Giles urges that the flora and fauna for which the Indo-European has words are not found on the plateau.

One may as well say, if such reasonings are to be entertained, that England could not have been the birth-place of the English language, because it has words for the desert and the camel, and Arabia's claim for being the birth-place of English are stronger. A corollary to this sort of argument is that a language cannot have names for other countries besides the one in which it is spoken.

The Cambridge historians may complain that this objection is unfair, since the urheimat of the Indo-Europeans, unlike England, was circumscribed and they did not have contact with the outside world. But this assumes that it is known on the basis of evidence independent of linguistics that the urheimat of the Indo-Europeans was circumscribed. The construction of the Indo-European by itself cannot afford any evidence on the point.

"The original Indo-European must have been subjected to the threefold influence viz. Sumerian, Akkadian, and the Mesopotamian; and therefore the birth-place of the Indo-European must be located near about these three regions", argues Dandekar. This argument implies that the Indo-European was not a primitive homogenous language to which the origin of other languages could be traced, but was itself a heterogeneous language, the outcome of several influences. If this is so, what is the point in regarding it as the mother of a family of languages? The languages which helped in the shaping of the Indo-European are

available for study even today, unlike the hypothetical Indo-European. To which family of languages do these languages belong? Since they are not the off-shoots of the Indo-European, they cannot be classified under Indo-European. But since they influenced the Indo-European, so much so that the original habitat of the Indo-European could be inferred from their present location, they must be regarded as even more ancient than the Indo-European, and, being its causative factors, are in a sense its ancestors. How then can we regard them as non-Indo-European? Dandekar's argument involves this self-contradictory position.

### Burrow's<sup>7</sup> "modern" Theory

Burrow accepts that constructing an original Indo-European and then inferring the urheimat of the Aryans is an exercise in futility. Alternatively he propounds his "modern" theory as follows.

"It is now generally held that the original home lay somewhere in Europe. The main argument for this is the simple and effective one, that it is in Europe, that the greatest number of Indo-European languages and the greatest diversity of them is to be found, and this from the earliest recorded times. At an ancient time, we find enormous stretches of Asia in the occupation of Indo-Iranian, a single member of the family, and yet little differentiated; in Europe, on the other hand, a concentration of many languages occupying comparatively restricted areas, and already markedly different from each other. It follows of necessity that the presence of Indo-European in the Indo-Iranian area is the result of later colonial expansion on a vast scale, while in Europe the existence of such great diversity at the earliest recorded period indicates the presence there of Indo-European from remote antiquity.

*"Since the earliest times, the distribution of languages in Asia-Minor was such that the non-Indo-European languages lay in the east and the Indo-European languages to the west; it becomes clear that the direction of the invasion must have been from the west to the east".*

### A Stunning Performance

Burrow's argument is indeed a stunning performance. One may as well argue that: "since the water-kettle has been kept on fire for the last fifteen minutes, the water must have been turned into ice, or that since Darasingh has been starved for the last one month, he must have now acquired the strength to emerge as a wrestling champion."

Surely, if the languages of Europe are heterogeneous it is reason for not including them in one Indo-European family, and if the languages of India from Iran to the valley of Krishna are homogeneous, it is proof that they have descended from one common language. If the European languages, though very much different from each other, show similarities with the Indian languages, that similarity is due to external influence and not to common descent. Burrow's argument supports the migration of the Sanskrit speaking people from India to Europe.

Burrow, like his illustrious predecessor Max Muller, has not cared to look at the map when he says that the non-Indo-European languages occupy the regions to the east of Asia-Minor. The area from Iran to the valley of Krishna is occupied by Indo-European languages and they are to the east of Asia-minor. Some languages belonging to this region are more ancient than any Indo-European language of Europe.

Burrow concedes that Iranian languages are more homogenous than the European languages, and the Indian languages are even more homogenous than the Iranian ones. He attributes this to geographical and other reasons. If geographical and other reasons also determine the similarity or otherwise in languages, the practice of Linguists to infer the genealogy of languages from their similarity is shown to be rash.

One can argue that the Indian languages have maintained their similarity over a long period, because they have descended from a common ancestor, and as you go west, the similarity is due to "geographical and other reasons", and not to descent.

P. Thiern<sup>83</sup> is not content with Europe as the home of the Aryans, he wants to restrict the home to Poland. He argues that the HG lachs, Anglosaxon leax, old Norse lax etc point to a common Indo-European origin. The word laks/Lakso in the HG stands for the Salmon fish. The Tokarian has a word laksi which means fish, and not particularly Salmon. This shows that the Tokarian speakers migrated from an area where the salmon was the fish par excellence. The Sanskrit laksha is derived from the Indo-European laks meaning salmon though in Sanskrit laksha does not stand for Salmon or even for fish. It stands for a number. This is easily explained by the fact that the Salmon were numerous.

### Hats off

The above clearly shows how the Aryan-Invasionists can not discriminate between the ridiculous and the reasonable. Before jumping to the derivation of the Sanskrit laksha from the HG lachs, they ought to

have proved that the Rigveda is later than in the HG. All evidence to the antiquity of the Rigveda points to a period before 3000 B.C. The word laksha in the Rigveda means seeing or denumerating not fish. If denumeration can be derived from the Salmon fish because it is numerous, the salmon fish can as well be derived from denumeration. Prof. Mehendale argues that the word laksha meaning red in Sanskrit can also be derived from the Salmon fish. I can similarly argue that the Salmon fish can be derived from the word red because it is red.

Like the cartman who wandered into fields all night in order to avoid the poll-post but found himself right before it in the morning, the Indo-European theory comes back full circle to India after indulging in heroic feats to avoid it. Prof. Satya Swarup Misra,<sup>84</sup> Professor and head of the Department of Linguistics Banaras Hindu University has come out with his book "The Aryan Problem" to prove that India was the home of the Indo-European speakers. This he does by using the Indo-European arguments. His thesis runs:-

"An analysis of Hermatta's discussion on Uralic borrowings of 5000 B.C. show that they are to be traced to Rigvedic Sanskrit. It shows that in the early Rigvedic stage there was no separate Iranian branch. The Iranian branch may be later than the late Rigvedic stage."

"From phonological point of view the Dravidian languages are nearer to Sanskrit than many of the Indo European languages like Avestan and Greek. There are many words which can be compared with Sanskrit. There are many deeply seated and radical affinities between the South Indian and the Aryan family of languages. The differences between Dravidian languages and the Aryan are not so great as between the Celtic and Sanskrit. The resemblances with Sanskrit are more frequently found in the uncultivated Dravidian dialects."

The western scholars have put the Rigveda after 1500 B.C. on linguistic grounds. On the same grounds Prof. Misra puts the Rigveda in 5000 B.C.

### Dates and Philology

In order to be able to say that language A influenced language B, it must have been known already that A is more ancient than B. The Linguists have not taken cognizance of this simple requirement consciously and clearly. Sometimes they use Linguistics itself to decide the date of a particular work. Macdonell<sup>13</sup> says on purely linguistic grounds that the Rigveda was composed 500 years earlier than the oldest

portions of the Avesta, whereas on the same Linguistic grounds Burrow asserts that the two were more or less contemporary. Purely on linguistic grounds Mirono regards Hittite as pre-Vedic, whereas Sturtevant derives the Vedic *tasmin* from Indo-Hittite *tosmi*.

The Cambridge History argues that: "the word *mire*, which in Latin means the sea, has its nearest relatives in other languages amongst words which mean moor or swamp. From this it is inferred that the Indo-Europeans did not have a word for sea. This argument can attain plausibility only if these other Indo-European languages are more ancient than Latin and nearer in time to the original Indo-European. It is only then that we can say that when the Latin Indo-Europeans saw the sea for the first time, they extended the meaning of the word, which originally did not stand for the sea, but for something which is much more modest like the moor or swamp. The Cambridge history has not cared to prove the essential premise for their argument viz that these 'other languages' were nearer in time than Latin to the original Indo-European.

In the absence of this premise we are not entitled to say that the word *mire* is a near relative of the words meaning swamp or moor. In order to assert that two words are casually related, their sound and sense must both be similar. The sense 'swamp' or 'moor' is too far from the sense 'sea', and the sounds of the words said to be related are also not closely similar. In the absence of other evidence, the word *mire* and these other words cannot be said to be related.

Burrow in some places seems to base his linguistic arguments on the known chronology of the languages. He says that Europe had the largest number of Indo-European languages from 'the earliest recorded times'. He infers the eastward migration of the Indo-Europeans from the distribution of languages in Asia Minor from 'ancient times.' This implies that he is inferring linguistic changes from the already known time-sequence of the languages independently of linguistics.

Once it is conceded that linguistic influence must be inferred from known time-sequence and not vice versa, the whole edifice of the Aryan invasion theory collapses, because the theory seeks to infer time-sequence on the basis of linguistics.

Max Muller<sup>6</sup> says that the changes in a language are cyclical. In other words, a sequence of change in one cycle is reversed in another cycle. If this is the case, we cannot even say that Linguistic form A is earlier than the linguistic form B, unless we know the number of the cycles in which these forms occur.

Burrow admits that Linguistics is a very unsure guide to history, when he refuses to accept the central Asian urheimat of the Aryans inferred from the antiquity of Sanskrit, on the ground that there is not the slightest evidence that the ancestors of the Germans, Celts, Greeks, and other European members of the Indo-European family were ever near central Asia. This objection amounts to conceding that mere philology is an unsafe guide for inferring the urheimat of any people, if no evidence independent of Philology is available, the inference from philology should be disregarded without compunction.

But Burrow is not prepared to abide by his own maxim in the case of India. He himself admits that there is no evidence for the Aryan invasion of India apart from the suicidal Linguistic argument he has advanced. He regards this mere Linguistic argument 'simple' and 'effective' for proving the Aryan invasion of India, but wants evidence independent of Linguistics for similar possible invasion of Europe.

Only five Linguistic theories about the Aryan urheimat have been considered here. But if we consider all, their number may easily come to ten, the supposed urheimat extending all the way from Scandinavia to Aryavarta. If the same method gives rise to ten different theories conflicting with each other, the validity of the method itself is suspect. We can therefore conclude that Linguistics has no plausible evidence for the Aryan-invasion of India.

## IV

### The Arctic Theory : Far Fetched and Fanciful

**Tilak has not succeeded in pointing out a single statement in the Vedic literature which would appear as a reference to the Arctic regions to any reader who is not already possessed by the Arctic theory.**

Those who assert that the Aryan invasion theory has no basis are often confronted with the name of Tilak and his 'Arctic Home in the Vedas'. There is an impression current that Tilak has proved that the remote forefathers of the Vedic people were living in the Arctic regions. Vedic scholars like C.V.Vaidya<sup>3,2</sup> and Pandit Chitrava<sup>14</sup> have accepted this theory. But it will not be far from the truth to say that nobody outside Maharashtra takes this work seriously, and in the world of Vedic scholars the theory generally goes unmentioned.

But recently the Russian Indologist<sup>16</sup> Levin has lent support to the view that there are references to the Arctic regions in Vedic literature, though he has not accepted that this suffices for supposing that the Aryans were living there.

Tilak's answer to this is that such references are always in the past tense indicating that this is what the Aryans observed in their ancient home. It is therefore necessary to examine the supposed references to the arctic region.

The arctic region is characterized by the following

(1) The observer in these regions does not see the heavenly bodies travelling from east to west, but around the observer with the horizon as their path.

(2) In the North Polar region proper, there is a day and night each

of six months' duration. Dawns etc are also therefore proportionately long.

(3) The Polar star is above the head of the observer.

### Levin's<sup>16</sup> Grounds

Levin gives the following references

The Mahabharata refers to the golden Meru. There is six month's day and six month's night on the Meru, and the Polar star is right above the head. Powerful winds blow there. All the heavenly bodies move round it. There is an ocean of milk to the north of Meru. The Ramayana also mentions a sea at the foot of the Meru.

The Avesta mentions Hara as the highest mountain. The sun, the moon and the stars move round it. Hara, like the Meru, is golden, and the river Adarvi flows from it. It is so high that one can use it for a close observation of the sun. The Greeks, the Parsis, and the Hindus have a tradition that all the rivers on this earth originate from the Rhip, the Hara or the Meru.

Like the Meru, Hara also extends from east to west, covering the whole earth. The Scythians have the same tradition. There is an ocean near the Rhip. Vorukash is also a sea with broad gulfs; near the Hara. There is severe winter there.

The Rigveda 3/5/5 not only refers to the Polar regions, but also uses the name Rhip for Meru, current among the Greeks.

The noble fire protects the peak of the Rhip, the favourite of the birds, the powerful one protects the feet of the sun. In the centre he protects the seven-headed one to the enjoyment of the gods.

The Rhip here is the Rhip of the Greeks. It is called the place of enjoyment of the gods. The Mahabharata and the epics describe how the gods, dwelling near the Meru, enjoy their soma-bouts. There is also a Zoroastrian tradition that Hara berejeti is a joy-house of the gods. The epics very often speak of the Meru as the centre of the seven islands i.e. the entire earth.

There is a common Hindu, Iranian and Greek tradition that the Meru is the abode of the birds. There is a Hindu and an Iranian tradition that the birds smuggled the soma from the Meru or the Hara.

The Indo-Iranian tradition maintained that nobody ever went to this far-off place without the help of the gods. Galava was taken there by the eagle. Narada could go to the white milky ocean, because Vishnu bestowed on him divine powers. Shuka travelled by the sky. Aristius could go there only because he had the power to separate his soul from the body and to reunite it at will.

Sanskrit literature refers to a unique animal called Sharabha which has eight feet and which can kill the lion. Sharabha can clear a valley with one jump. This Sharabha is not imaginary, it is the same as the loss in the Northern forests. The Ugrians have a story, according to which the loss used to have six feet, but this made him so boastful that the god cut off his two feet and made him a quadruped. The Ugrians call this animal Sarp or Shorp. Rigveda speaks of a Sharabha who was helpful in bringing soma. The Atharvaveda contains a hymn addressed to sharabha.

All these similarities lead to the inference that the Indo-Iranian tribes came in contact with the Fino-Ugrians and borrowed these polar traditions from them.

The Scythians, the Greeks, and the Romans believed that the terrestrial level becomes higher as you go north. The Indians, the Iranians, and the Scythians believed that all the rivers flow from the north.

The second century geographer Ptolemy wrote his Geography on the basis of information supplied by travellers coming from Sarmatia. He used the name Raha for Volga. The Avesta says that Hara or Meru is the source of the river Raha. So Ptolemy must have derived his information from the Iranian-speaking people living in south eastern Europe.

Dr. Garden Wassan identified soma with the mushroom fly-agarica growing in Siberia near the Arctic sea.<sup>19,2</sup> This soma was not available in India as is clear from the line: "those who mill the soma plant think that they are drinking soma. But the soma known to the Brahmins is not available to any one." (10/85/3) So the practice of drinking soma was a Siberian practice.

All these descriptions point to South Eastern Europe from Dniiper to ural as the original home of the Aryans. The rivers here flow from north to south. Their source is in the inaccessible north.

These descriptions also give a lie to Tilak's theory that the Arctic

region was the home of the Aryans, because all the descriptions point to an uninhabitable region, the abode of the gods with exceptional features, more imaginary than real.

In south eastern Europe, between the Dniپر and the Ural, was the original home of the Aryans; the Germans do not seem to be connected with it.

### The Unacceptability of Levin's Theory

One is stunned by such speculations, though they are the rule and not an exception in this field. All that Levin has shown is that there are references to the Polar regions in the ancient literature of the Indo-European languages. But how is this relevant to showing that the speakers of the original Indo-Europeans were living there? There are references to France in the letters of Nana Fadnis. Is one to infer from this that Nana was living in France?

The objection which Levin levels against Tilak is applicable to him also. The references to the Polar region pointed out by him are of a mythical nature, showing that people who had such notions about these regions were not living anywhere near it, an inference exactly the opposite of what Levin draws.

Dr. Wassan, whose writings prompted Tilak to search for references to the Arctic region in Vedic literature, holds that the ancestors of all the people, and not only those of Aryans, were living in the Arctic regions. This is a reductio ad absurdum of the argument of Tilak as well as Levin. One could use these references to hold that the original home of all the people, not only the Aryans, was the Polar region, and the references then cease to have any relevance to the theory of the Indo-European language and the specific home of its speakers.

As to the Mahabharata, there was an attempt to make it a compendium of all branches of knowledge, and as a part of this attempt it gives a geography of the world as known to its author. Thus, the Mahabharata contains references to many other regions besides the Meru. These references have nothing to do with the original home of the ancestors of the author.

Though the references cited by Levin and Tilak are irrelevant for determining the original home of the Aryans, the question whether the Vedic literature really contains references to the Arctic regions is worth discussing by itself.

### The Rhip of the Greeks

Ripa in the Rigveda may stand for the Rhip mountain, but Sayana<sup>18</sup> renders the word as enemy or earth. In the line quoted by Levin, he takes the word to mean earth and this yields a consistent meaning. None of the meanings, Rhip mountain, earth, or enemy, is applicable in all places.

In the present hymn, even if Ripa is translated as earth, Ripo agram means the peak of the earth. Sayana translates veh as 'of the revolving one'. The peak of the revolving earth unmistakably points to the pole.

But it is difficult to suppose that the rotation of the earth was not only conceived, but was also common knowledge in the Rigvedic period. So veh is better rendered as 'of the birds'. But the phrase "peak of the earth" then could mean the highest point on the earth viz the Himalayan peak. The Rigveda refers to the Himalaya thus: 'The snowy peaks, the sea and the earth, all the quarters are his arms. Which such god be served by us by offerings?'<sup>19.3</sup> (10/21/4)

It is possible to argue that the word Ripa is non-Indian. It occurs only in the Veda, but not in subsequent Sanskrit. It dates back to the period when the Vedic people had contacts with south east Europe. When this contact was lost for several centuries, the word became unknown to subsequent Sanskrit. It is therefore necessary to discuss the occurrence of this word in other places in the Rigveda.

#### 1

*"Let not the uncanny pricks of the mortal ripas harm us in any way. Let us not be affected by these impoverishers. Do not leave us. Know our devotion. We pray thee with pleasant<sup>19.4</sup> minds."* (2/32/2)

#### 2

*"The share of Indra excels like that of the one who wins wealth. The RIPAS can not harm Indra mounted on his horse. He gives power to those who drink soma in the sacrifice"<sup>19.5</sup>* (7/32/12)

#### 3

*"Let one who is disfavoured by Varuna give up worship at the altar by hymns, get Ripas. Let aryama keep us away from the haters. Oh, showerers, let the bountiful giver get the wide world."<sup>19.6</sup>* (7/60/9)



## 4

*"Stay, oh Maruts, let your desires be among the people. Catch and punish the demons. They become birds and swoop down by night. They make ripa for god and sacrifice."*<sup>19.7</sup> (7/104/18)

## 5

*"Like the child searching for the covered (breasts) of the mother, the fire is crawling over the earth, searching for the hidden roots of the creepers. He gets them like delicious cooked food within the thighs of ripa"*<sup>19.8</sup> (10/79/3)

Ripa can be taken as the Rhip mountain in 7/104/18 as well as in 3/5/5. "Within the thigh of rip" may mean underground as well as inside the Rhipa mountain. But it is applicable nowhere else. In 1 'let not the uncanny tricks of the Rhipa mountain harm us' in 2 the Rhipa mountain cannot kill Indra, and in 3 'the Rhipa mountain of Varuna makes no sense. The meaning 'earth' makes sense in more places, and Levin gives no reasons why this meaning should be abandoned in favour of his Rhip mountain.

There is a Sanskrit root *rip*<sup>20</sup> meaning "fight" as well as give". The word *rip* in the sense of enemy and earth could have been derived from this root, the older form of which was perhaps *rip*. This conjecture is strengthened by the fact that the English word *rip* meaning to tear open, is supposed to be connected with the Frisian root *rppe*, the Flemish *ripen*, and Norwegian *rippa*. The root in *shatru* also means 'to cut'.

### The Sharabha and the Soma

The mythical animal *sharbha* cannot be identified with the loss, or the shorp. The six legs of the loss are as mythical as the eight of the *sharabha*, and the zoologists of the Delhi zoo have not heard that the loss has the other powers of the *sharabha* viz jumping over valleys and killing the lion. Levin also does not claim any such powers for the loss. So Levin's contention that the *sharabha* was a real animal seen by the Aryans in their northern home has no legs to stand on.

On the other hand, if the *sharabha* was an actual animal seen by the ancient Aryans, how is it that the word occurs only in classical Sanskrit and not in the Rigveda? Levin seeks to meet this objection by alleging such a reference in the following verse-

*"Oh, Indra,<sup>19.9</sup> what you do for the sake of the squeezers of Soma is manifold. You uncovered immense hoarded wealth of Paravata for the sake of sharabha, the brother of a sage."* (8/100/6)

*Sharabha* to whom the wealth is uncovered is the brother of a sage. Taking the reference to the animal of that name is doing violence to the text. Levin may say that the brother is named after the animal, like the surname *Sinha* or the woman's name *Maina*. But the etymology of the word shows that the name was primarily used for men, not for animals. *Sharabha* means one who shines by arrows. Thus the animal was named after men and not vice versa.

That some myths about *sharabha* in India and about the loss in northern Asia are common only shows that ideas can travel from land to land without migration of populations.

Like the *sharabha*, *soma* is also said to be non-Indian by Levin and some others. R. Wassan identifies *soma* with *amanita*. 'Soma does not have leaves, fruits and roots; it has only a trunk and a cap. This cap looks like an eye. Soma looks like the red sun. It shines by the light of the sun during day, and has a silver lustre like the moon at night. Its juice is golden. No such plant is found in India. So the Soma drinking Aryans could not have been Indians.' So runs the argument.

It is difficult to check up this description, because no specific hymns of the Rigveda giving these descriptions have been cited.

Descriptions of the *soma*, different from the above, have been quoted by Pandit<sup>14</sup> Chitrav. These descriptions credit the *soma* plant with leaves. Its colour is reported to be tawny, black, reddish, or golden.

Levin or Wassan have not shown which non-Indian plant answers to the description reported by them. Fly Agarica and *Amanita*, with which the *soma* is identified, are known to be poisonous<sup>21</sup>, whereas no amount of *soma* is reported to have killed any one.

*Soma* is identified with *bharg*<sup>14</sup> Le hemp or cannabis by many students of Vedic literature. The Avesta uses the word *bhanga* along with the word *hauma*. This is a very strong basis for the above identification. *Soma* is said to be found in the Moojavat mountain, Sharyanavat lake, the arjikeeya region, and the banks of the rivers Sushoma, Pastyā, Sindhu etc. All these places are in the Himalayan range and the hilly tracts of the Punjab. The Phonetic similarity of hemp

with p silent with hauma, the Avestic for soma strengthens the identification of the soma with hemp.

Soma occurs in the Avesta twice with the word vamhush. Yasna 10/17 "*vamhush somo majdhato*" and *namo haoma vamhush haomo* (9/16). This is translated in the sacred books as "good". But obviously it is related to vamha in vendidad 15/14 and 19/41 where it refers to an intoxicating plant used in inducing abortion.

Inquiries among farmers have revealed that the seeds of hemp are used for causing abortion even now.

The Avestic *vamha* is the Sanskrit *Bhanga* meaning hemp. The following hymn mentions *bhanga* as one of the names of soma.

"The gods obtained the moon and the hemp Indu, the Indu which is well born i.e. of good breed, which flows with water or which energizes work, the Bhanga i.e. the Bhanga plant or the partial moon, processed by milk or by rays." (9/61/13)<sup>19.241</sup>

The hemp plant yields hashis and marijuana besides hemp. Marijuana is obtained from the dried flowers and hashis from the resin of the flowers of the plant. Marijuana and hashis are smoked. There are clear references to this in the Rgveda. For example:-

"That soma is processed by the fingers. The glowing skin is smoked. The encompassing sweet has three ingredients." (9/1/8)<sup>19.242</sup>

The crucial words are *dhamanti* and *drutim*. *Dhamanti* literally means to puff. This makes no sense without a reference to the act of smoking. *Druti* means skin. This becomes obvious by the reference in the Materia Medica and therapeutics edited by R.D. Ghosha. Hashis is the skin of the leaves in the sense of an outer cover.

A further reference to the smoking of soma is the following.

"The kindled lord of all, the flowing one, the showerer crackling and pleasing is glorying." (9/5/1)<sup>19.243</sup>

The adjective *samidha* i.e. kindled is hardly applicable to the juice and even when offered to the fire it can not be called 'kindled' because it can never burn. *Samidha* therefore must refer either to lighting of the resin or the powdered flowers of hemp for purposes of smoking.

The following verse is often quoted for inferring the migration of the soma drinking Aryans, from a place, where it was available, to India, where it was not-

"Those<sup>19.2</sup> who mill soma plant think that they are drinking soma. But the soma which was known to the Brahmins is not consumed by anyone (10/85/3)

This verse only says that soma was available in ancient times, but is not available now. This can happen if the demand fast outstrips the supply and efficient methods of cultivation to keep pace with the demand are not known. The verse may be referring to the quality of Soma available, and not merely to the species. We find people complaining that in their childhood pure milk and ghee were available, they are not even heard of now. Does this mean that the Indians of today were living somewhere else 60/70 years ago?

Sayana interprets the verse as follows

"The chemists who drink soma just for fun do not really drink the soma which the Brahmins drink in sacrifices performed with strict formalities of the ritual."

The distinction is the same as between marriage and fornication, the distinction between socially approved and disapproved practices even if biologically they may be the same.

The Shatapatha Brahmana recommends<sup>14</sup> pootique, a wild growth if soma is not available. Some people regard this as an indication of migration from soma growing into a non-soma-growing country. One may as well argue that since during the second world war people used jaggery in place of sugar, they had migrated to a non-sugar-producing country from a sugar-producing country.

## The Arctic Home: The Vedic Dawns

Tilak seems to have realized that a mere reference to any region gives no indication of the original home of any people. He therefore argues that if such references are in the past tense, they can be taken as references to the former home, since otherwise past tense makes no sense in referring to a region. His second argument is that some Vedic rituals are possible only in the Arctic regions. It is not necessary to examine every argument of Tilak given in his 469 page book. It will be enough to consider only the references which he regards as conclusive.

### Tilak

The days before sunrise were verily many. On these days,<sup>19.10</sup> oh, Dawn, you were seen as if serving a lover, not like one who forsakes." (7/76/3)

This verse states that the dawn was seen for many days before sunrise. This is possible only in the Polar regions.

### Refutation

There is no indication in the verse that the days which passed before sunrise, passed after the rise of the dawn. On the contrary it is said that the dawn was seen serving the sun (**paricharanti**) by hanging round him, so close is the dawn to the sun. The line 'the dawn does not forsake the sun' indicates that the unresponding lover, the sun, does fore-sake her.

The moment he sees her he drives her away, like a husband who spends most of his time outside the home (Sayana). This has happened for many days.

The word **udita** is taken by Sayana as **uditow** meaning at the rise'. But as it stands it is nominative and can be better taken as an adjective of the dawn. The verse then means the dawn every day rises before the sun, her husband, like a devoted wife to be ready to serve him. Many such days have passed.

The verse has thus nothing to do with the Polar dawn.

### Tilak

The dawn rose **shashwat** i.e. for a long time of yore."<sup>19.11</sup> (1/113/13) This shows that in ancient times in the days of the remote forefathers of the Vedic people, the dawn lasted for a long time.

### Refutation

The word **shashwat** means 'regularly, without fail'. The line clearly means that since times immemorial the dawn has risen without fail. When Kalidasa says in the Meghadoot: "the people give offerings to Shiva **shashwat** he does not mean that the act of offering lasts for a long time. It may take only five minutes, but this act is performed regularly without fail.

The regularity of natural phenomena is referred to as **rita**

'according to the order of nature' in the Vedas. This verse is of a piece with these references.

### Tilak

"Indra held the sky and the earth apart, as if by an axle"<sup>19.12</sup> (10/89/4) "Indra held the sky without a pole"<sup>19.195</sup> (4/56/3, 10/89/2) The sun moves like a wheel."<sup>19.13</sup>

These lines show that the composer of these lines saw the sky like a tent resting on a pole and the heavenly bodies moving round that pole like a merry-go-round, even though the pole was invisible. This pole is the axis of the earth, and the description fits the Polar regions only.

### Refutation

How the sun, the moon, and the stars do not fall down and remain suspended without support is a natural curiosity. The poet credits Indra with this feat. That he is referring only to their fixation in the sky and not to their movement is clear from the words **tastambha**, **astabhayat**. These words mean 'stabilized'.

The statement about the circular motion is applicable to the movement of the heavenly bodies from east to west also. S.B.<sup>22</sup> Dixit has quoted a verse from the Rigveda which shows that the hymn-makers knew that the sun is under the earth at night and thus describes a full circle in 24 hours. But even without this knowledge, the coming of the sun every day to the same place again and again suffices to describe its motion as cyclical. The seasons are described as cyclical even though they do not describe any cyclical path in space. Any orderly repetition is cyclical.

### Tilak

*"We have made this panegyric for you. Oh Ashvins; we have crossed this darkness. Come hither by the devyan-path. Let us get the desired family-circle, and easy gifts."* (1/183/6)<sup>19.14</sup>

*"I have seen the devyan path, inoffensive and refined by splendour."<sup>19.15</sup> The banner of the dawn*

*is seen in front and is ascending high places  
towards the west. (7/76/2)*

In these verses the word devyan means the northern course of the sun which starts either from the vernal equinox or the winter solstice. The statement that the dawn heralds the northern course of the sun is applicable to the Polar regions only.

### Refutation

The whole edifice rests on the meaning of 'northern course of the sun' imposed on the word devyan. The word only means the path of the gods i.e. the heavenly bodies. This path is none other than the sky. Kalidasa<sup>23</sup> says: "Narada came by the path of repeated sojourns of the sun", i.e. by the sky. He also uses the word **vyotishpath** or the path of the luminiscent bodies in the sense of sky. It should also be noted that even though Kalidasa was not living in the Arctic regions, he refers to the avrutti 'the cyclical motion' on the sun.

The second verse, far from supporting Tilak, gives a complete lie to his thesis. It clearly mentions that the banner of the dawn moves from east to west, not around the observer, as in the Arctic regions. Tilak may argue that **purastat** does not mean "in the east", but that it means 'in front'. But then the next phrase: **pratichya agat** the banner of the dawn came towards the observer' belies him. The dawn in the Polar regions does not come towards the observer.

### Tilak

The Southern course of the sun is supposed to be inauspicious. It is for this reason that Bhishma, who could choose his time of death, waited till the sun started on its northern course. The Avesta contains the same taboo. On being asked, "what is to be done in case death occurs in winter?" Ahur Mazda replied, the body should be buried for a night or two or even for a month. The birds will then begin to fly, floods will flow and the wind will suck the water on the earth." This shows that winter here means the polar night. The statement that the birds will begin to fly indicates the rise of the polar dawn at the end of the polar winter. In the Arctic regions the winter signified the long night of six months, and it was difficult to stir out of the house because of extreme cold and darkness. Death in the southern course of the sun was thus extremely inconvenient for the relatives and hence the taboo.

### Refutation

If the taboo was against dying in winter, why does not the Avesta expressly state that funerals should not take place in winter? Why does it talk of holding up the funeral for one or two nights only? Was the use of fire not known? was it not possible to burn the corpse inside the house?

If the reference to the flying of birds is taken to indicate the polar dawn, what about the reference to floods and the wind sucking the waters? Do these things occur at the polar dawn?

It is absurd to suppose that the people in the Arctic regions did not stir out of their homes for six months. This is clear from the habits of the people who are even now living near the Arctic regions.

The Vedic index cites references to show that both burial and cremation were accepted modes of funeral. The passage from the Avesta shows the burial was possible in winter. Memories of the Arctic region is therefore a very thin explanation of the prejudice against dying in the southern course of the sun.

### Tilak

The Aitareya Brahmana lays down a ritual. The time for this is after mid night, the period when light is taking the place of darkness."

Rigveda<sup>19,16</sup> 7/67/2 and 7/67/3<sup>19,17</sup> lay down the same. In this ritual 1000 verses have to be chanted. Apastamba says that if the sun does not rise even after chanting 1000 verses, all the ten mandalas of the Rigveda should be recited. It is only in the Arctic regions that such a long ritual can be performed within the period when light is taking the place of darkness

### Refutation

Tilak does not say that the Aitareya Brahmana which lays down this ritual was composed in the Arctic regions. How then can the Brahmana lay down a ritual which is physically impossible in the geographical surroundings in which it was written? It does not say that such a ritual was performed in the past, it is laying down a ritual for the present. Tilak cannot escape by saying that past practices survive even though they are inapplicable in the present circumstances. For such survival, the practice should be physically

possible. So Tilak's interpretation does not have even antecedent plausibility.

Tilak forces his interpretation on the text by simply ignoring the words 'after midnight'. The statement nowhere says that the ritual starts at dawn, it simply says that it can start any time after midnight, which can be considerably earlier than dawn. *prakashibhavyasya anuvishtambham* means till light is stabilized. The period from midnight to the stabilization of light is quite sufficient for chanting 1000 verses.

The provision in case the Sun is not seen even after chanting 1000 verses, all the ten mandalas of the Rigveda should be chanted, shows that the phenomenon referred to is some uncertain phenomenon like mist, and not a phenomenon like sunrise which occurs regularly.

The two verses referred to by Tilak are the following-

1) *"The kindled fire is burning for us. The end of darkness is seen. The banner of the dawn, the daughter of the heavens, is seen emerging in front for prosperity."* (7/67/2)<sup>19.16</sup>

2) *"Oh Ashvins, the invoker is praising you. Come by your erstwhile path in your heaven-knowing, opulent chariot'."* (7/67/3)<sup>19.17</sup>

There is not a word in these verses to suggest that the ritual consisting of 1000 stanzas is to be practised between the dawn and the sunrise.

### Tilak

The words 'to the dawn which has shone', 'to the dawn which will shine', 'to the dawn which is shining', refer to the long polar dawn. The dawn in the torrid zone is so short that it does not allow such fine sub-division.

### Refutation

The division clearly refers to the dawns of the previous days, the dawns of the coming days, and the dawn that is rising before the observer. There is nothing to indicate that the dawn before the observer itself is divided into these three phases.

### Tilak

Oh dawn, let there be morning, do not linger. "This refers to the long polar dawn, trying the patience of the observer.

### Refutation

The whole verse runs thus-

*"Shine, oh dawn do not delay; start activities. Let not the sun<sup>19.18</sup> heat you with its lustre, as if you are a thief or an enemy."* (5/7/9)

The meaning is exactly the opposite of what Tilak wants it to be. The poet is not asking the dawn to wind up, but to shine. The second line further prays that the dawn itself should continue for long, lest the troublesome heat of the sun should commence. Far from being a description of the polar dawn, this is the utterance of a poet troubled by the heat of the Indian sun.

### Tilak

The dawns that have come and the dawns that will come make a long time. The earlier dawns mix with the later ones". (1/113/10) Moore interprets this to mean that a long time elapses between the past and the future dawns. This is applicable only to the polar dawns. The earlier dawns mix with the later ones' shows that the dawns are not separate, but different phases of the same polar dawn.

### Refutation

In fact, the plural is more naturally applicable to the daily dawns of the torrid zone, than to the different phases of the single polar dawn. The simple meaning is that the past and the future dawns make an immeasurably long time.

The second line says 'The dawn hastily follows the earlier one; shining, it links the others'. Thus this is a statement of the present dawn being a link between the past and future ones; the poet is not talking of the phases of the same dawn.

### Tilak

Many dawns have not yet shone. Oh Varuna, ordain<sup>19.20</sup> that we may be alive when they shine." (2/28/9)

In the torrid zone, the sun is bound to rise after every dawn. So the description that 'many dawns have not shone at all' is not applicable.

But in the polar regions, there is no sunshine after every phase of the single long dawn. The prefix *vi* means fully; **vyushta** therefore means 'fully shone'. A fully shone dawn means sunrise.

### Refutation

The meaning is quite clear to those who are not possessed by the Arctic region. The reference to the unshone dawns is to the future dawns, which are infinite in number. The poet wants to live through them all. It is absurd to break up a single dawn and to call their phases separate dawns. It is further unlikely that the poet apprehends his death before these phases elapse, since at the most they take up a few days. The future dawns, on the contrary, make up innumerable years and the poet naturally thinks of his death before some of them appear.

The prefix *vi* does not necessarily mean 'fully'. The more usual meaning is 'specifically'. So *vyushta* means specifically or clearly shone. Even a fully shone dawn cannot be identified with sun-rise because the dawn disappears after Sunrise; it can no longer be called dawn. Describing sunrise as a fully shining dawn is as absurd as describing it as a fully shining moon or the stars.

### Tilak

The dawns do not quarrel even though they live together," says a hymn. The torrid zone dawns do not live together. It is only the phases of the single polar dawn that can be so described.

### Refutation

The hymn says

"The dawns associating in the common high understand each other<sup>19,21</sup> and do not act against each other. They do not transgress the laws of the gods, they go on unobstructively with their splendour." (7/76/5)

The description is clearly of a succession of dawns, rising in the same place with iron regularity, without any confusion among themselves, like a row of dancers in a group dance with complicated

formations, where the dancers occupy the same place at an appointed time without coming in each other's way.

On the other hand, the rotation of the polar dawn is like a single runner running round a circus, not requiring coordination with other runners. It cannot therefore be credited with not coming in the way of its mate. The hymn thus describes the torrid-zone-dawn and not the polar one.

Tilak may argue that the torrid-zone-dawns may be rising in the same place, but they are not united, **adhisangata**, 'in the same place'. But the same objection applies to the polar dawns. The polar dawn is only one dawn moving round the observer. There have to be more than one dawn for them to be described as united. How can one dawn be so described?

### Tilak

There is a statement in the **anuvak**, a division of the Rigveda, that the dawn is really one. This is applicable only to the polar dawn. The torrid-zone-dawns are many, a different one every day.

### Refutation

Even in the polar regions, there is a different dawn every year. If the statement were that there was only one dawn in a year, it could point to the polar regions. But there is no such statement.

Even the torrid-zone-dawn can be described to be one, in the sense in which the fire is said to be one in the line 'Just as one fire becomes many in many visible objects'; it cannot be inferred from this that fire is not lighted at different places at different times.

### Tilak

The dawns are not separate and they have no end. "The description is applicable only to the single and long polar dawn.

### Refutation

The sentence occurs in the **taittiriya brahmana** (II,5.6). Even according to Tilak, the **taittiriya brahmana** was not composed in the polar regions. The statement is in the present tense, so the refuge of regarding it as a lingering memory is not open.

The crucial words are **shashwat** and **avaprujyanti**. Shashwat

is applicable to a long-standing or permanent something, as well as to a frequent occurrence. The root in **prujyanti** is taken to mean mixing, the prefix *ava* means 'down' or 'away'. Thus **avaprujyanti** would mean 'mixing away', or 'mixing down something which is distinct' and **navprujyanti** would mean 'not mixing away or down something which is distinct'. According to an English idiom, this yields the meaning 'the dawns do not mix up' i.e. 'they remain separate', exactly the opposite of what Tilak makes it mean.

### Tilak

The flawless dawns,<sup>19,22</sup> similar today and tomorrow, take a round of thirty yojanas." (1/123/8)

Here the word yojanas means 'a distance to be covered in one march'. The root *yuj* means 'to yoke'. So a yojana means 'a distance which horses can cover after being yoked till they have to be unyoked. The yojana of the dawns is said to be thirty. In other words, the dawns completed their round of the sky in thirty units of 24 hours each.

### Refutation

A unit of 24 hours has a definite meaning in the torrid zone, because, it makes a day. In the polar regions, 24 hours has no such significance, and there is no reason why the poet should talk of such units.

Moreover, a meaning based on mere etymology, without reference to other contexts in which the word occurs, is undependable. Sayana's interpretations should not be abandoned, unless there are weighty considerations to the contrary. Sayana says that at a given time the sun is seen as rising within a distance of 30 yojanas. Tilak rejects this explanation on the ground that the sun becomes visible when he is 16 degrees below the horizon. One degree on the horizon is equal to 60 miles on the earth. Thus the sun is seen as rising within a distance of 960 miles, a distance far in excess of Sayana's 30 yojanas i.e. 240 miles.

This objection is unacceptable, because in order that a man here, and a man 960 miles away in the west, both call a time *x* as the time of sunrise, the period of sun-rise must be regarded as 59.76 minutes long, which is absurd. The man in the east sees the sun when it is 16

degrees below the horizon, but at that time the man 960 miles away in the west does not see it. He sees it only when it comes on the horizon of the man in the east. But this takes 1.06 hours, and surely the man in the east will not think that he is still seeing the sun as rising. So in order that two persons at a distance from each other in the east-west direction both regard the same time as the time of sunrise, the distance between them must be less than 960 miles. Sayana's 240 miles gives a time of 15.99 minutes. This is much more reasonable.

Tilak's laboriously extracted meaning of one march, attributed to the word *yojana*, turns against him. In Indian latitudes, the twilight of the dawn is seen for about half an hour. In other words, the dawn is seen half an hour before it comes on the horizon. During this time the earth rotates 450 to 500 miles. So the dawn is visible on the east-west line 450 miles in length.

According to **Bana**, a day's march is of 8 *krosas* i.e. 16 miles.

The army of **Harshavardhan**<sup>76</sup> prepared for a day's march, and the drum-man delivered 8 strokes on the drum to indicate the distance of 8 *krōshas* to be covered at a go. So if yojanas means a day's march, it is equal to 16 miles, and 30 yojanas are equal to 480 miles. Thus the statement that the range of the dawn is equal to 30 yojanas is applicable to Indian latitudes and not to the polar regions.

### Long Days and Nights

#### Tilak

The polar days and nights are much longer than those in the torrid zone. Tilak tries to show that the days and nights referred to in the Vedic literature, are these long days and nights, and do not together make 24 hours only.

Let not the long night delay us," "all rest in the night, whose end or a dividing line is not seen", "Oh long dark night, let us see your end", "Let us cross every night unscathed".

The **taittiriya** *sanhita* says that of yore the Brahmins were afraid that the night will not end at all.

These references could not point to the nights in the torrid zone because they last only for a few hours.

### Refutation

The verses concerned are the following: "I have come to the auspicious night, oh wholesome one, let us obtain the end." (A.V. XIX, 47,2) and "One whose end is not seen, one which does not distinguish, and one in which all the moving rest. let us, oh great wholesome one, full of darkness, reach the shore unscathed (Ibid XIX 50.3).

The darkness referred to is that through which one cannot see, and the distinction between things is lost. Kalidasa, has also said "the darkness has levelled<sup>64</sup> everything."

The line expressing the fear, that the long night may destroy the invoker runs thus." Oh Indra,<sup>19.23</sup> let us get the wide and fearless light; Let not long tamisras abhinash us. (2/27/14) The word Tamisra meaning night is in the plural, and does not stand for a single night. Similarly, the very abhinash can mean 'get lost' (Macdonell) and not necessarily 'destroyed'.

The whole tenor of the line however suggests that the light and darkness referred to are not physical light and darkness, but that it is only a figure of speech. The first line implores mitra and varuna to forgive the sins of the poet. The darkness that is going to abhinash him is a result of sin, and not a natural and unfailing phenomenon. There is nothing in this line to serve as a spring-board for jumping to the North Pole.

According to the **taittiriya sanhita**, only the Brahmins were afraid of the darkness. Why only the Brahmins? Were the nights long only for them?

Avinashchandra<sup>26</sup> Das has given a convincing answer to this. In the night sacrifices, Brahmins had to stay awake and recite the hymns non-stop, without food and drink and any relaxation. This got on their nerves, and they thought that the nights are endless.

Moreover, Tilak himself describes the polar nights as charming. Aurora Borealis and moonlight are available for 90 days, or 120 days according to some, out of the 180 days of darkness. It may be said that even the remaining two months may be unbearable due to the severe cold. But nobody prays for the end of a natural and regular phenomenon, whose hour of termination is definitely known.

### Tilak

The statement that the Brahmins were afraid of the night in ancient times shows that long nights were seen by the remote ancestors of the Vedic people who lived in the polar regions and were no longer seen when the Brahmins was composed.

### Refutation

The Buddhaharita says that Siddhartha Gautama became disenchanted of life by seeing an ill, an old, and a dead man. Does this mean that illness, old age, and death have ceased to be unwelcome now?

### Tilak

"Let the two ahas and the dawn and the night protect us." ahas means a day. The two ahas are the sunlit day and night. The dawn and the night convey the same meaning. Why then the repetition?

The repetition ceases to be so if the dawn and the night is taken to refer to the long dawn and night of the Arctic region, and the day and the ahani are taken to refer to the shorter days and nights, which are seen along with the long dawns and nights, as we come some distance away from the pole.

### Refutation

Tilak does not explain why the six-monthly day and night should be called dawn and night; the six-monthly day does not consist of dawn only any more than the torrid zone day.

The verse runs "we praise<sup>19.24</sup> the goddess Aditi and Sindhu, so that our ahas "the dawn and the night' protect us in our actions." (4/55/3)

Sayana renders **ahani** as 'sky and the earth' and quotes the Nirukta in support. This answers Tilak's objection that **ahani** and **ushasanakta** are repetitions. But sayana's interpretation is not necessary for meeting Tilak's objection. **ahani** could mean 'day without night', so to emphasize that the days consist of nights as well, the phrase **ushasankta** is used as a description of the ahas. Thus the days consist of ahas, consisting of dawns and night. Again, repetition is sought to be avoided in logic, not in poetry. In fact,



sometimes it serves to emphasize. So repetition is no objection which could require the North Pole for its resolution.

### Tilak

The **taittiriya aranyak** says that the black and the white are the left and the right halves of the year. This shows that only one day and one night made the year. This is possible only in the Arctic regions.

### Refutation

One may as well say that the statement 'a march consists of right and left steps' implies that there are only two steps in a march, or that "a man and a woman are equally important parts of the society" means that there is only one man and one woman.

### Tilak

"The sun released his chariot in the midst in the heavens. The **Arya** got a match to **das**. The forts of the wily asuras were dispersed by Indra, acting with **rujishwan**"<sup>19.25</sup> (10/138/3). This means that the sun unyoked the horses of his chariot, stayed in the sky, and would not leave it. This is a reference to the long Arctic day.

### Refutation

It is surprising that Tilak interprets the word 'released' as 'stopped' putting the words 'from the horse' after the word 'chariot' from his own imagination. One releases the horse from the chariot and not the chariot from the horse. One may as well say that the groom released the horse from the stable means that he stopped the horse.

Again, even in the polar regions, the sun is not seen as stationary. He moves on the horizon.

### Tilak

"Varuna made the sun rock in heaven"<sup>19.26</sup> (7/87/5). Rocking is to and fro. Therefore the word rock is applicable to the motion of the polar sun and not to the torrid zone sun.

### Refutation

Tilak's argument is self-refuting. A circular motion is never

called rocking. Nobody would describe the rotating fan as rocking. So the very word rocking, which Tilak wants to express the motion of the polar sun, shows that the poet does not refer to the polar sun. The torrid zone sun comes back to the east after going to the west, though its backward motion is not seen. This is more of a to-and-fro motion than that of a rotating fan.

### Tilak

Rigveda 3/58/1<sup>19.27</sup> describes the sun as the son of the south. This shows that the sun was rising in the south. The north is called **uttara**, because in the north pole, the north is overhead. Similarly, the south is called **adhara** as in Kalidasa's line: the sun saluted the Ursa Major by lowering his flag while traversing the path which was below them.

### Refutation

Kalidasa does<sup>65</sup> not use the term for 'below' in the verse quoted. There is no other reference showing that the word below ever meant the south. One does not have to go to the North Pole for understanding why the north is called **uttara**. It is the polar star which defines the north, and the polar star is many degrees above the horizon in north India. On the contrary, the East and West are defined by the sun, when it is right on the horizon. The South is called **Dakshin** because the **Dakshin** i.e. the right hand is towards the south, when one faces the rising sun. The right hand is called **Dakshin**, also because it is **Dakshin** i.e. dexterous. The East is **Poorva** because the sun is seen 'first' **Poorvam** in the east, and West is called **Pashchim** because the sun is seen in it **pashchat**.

All these names of directions except Uttar are inapplicable at the poles. In the non-polar regions; on the contrary, they are all meaningful.

**Dakshinayahpootrah** in 3/58/1 does not mean 'the son of the south', but the sun of the chivalrous one i.e. the dawn, as Sayana would have it. The dawn is called **Dakshina** also because **Dakshina** means effective. The dawn begins the day, in which all work is done after the actionless night, so it is **Dakshina**.

On the other hand, the sun does not merely rise in the south in the polar regions, it also sets there. Is it likely that it will be called 'the son of the south', by choosing only one of its relations to the

south, when it could be called 'the victim of the south' as well?

In referring to the map, the word down or below designates the south because of the practice of hanging the map on the wall with the north above and south below. The north is always above, because it is indicated by the Ursa major, which is above the horizon.

### Months and Seasons

#### Tilak

The Vedic literature mentions sacrifices lasting for nine or ten months. This refers to polar regions, where the day lasts for nine or ten months.

#### Refutation

Why should the sacrifice require only day-time? The Vedic people performed night sacrifices also. The ashwin shastra, mentioned by Tilak himself, begins at midnight. There could be other reasons for stopping the sacrifices for two or three months. Rains, or the summer, is one obvious reason. The academic session is of nine or ten months, and one does not infer that these sessions are therefore held in the Arctic regions with nine or ten months, day.

#### Tilak

The **Shatapath** Brahmana mentions the twelve Adityas 'the twelve months'. Similarly, seven Adityas must mean 'seven months'. Aditi had eight sons, but the eighth was undeveloped i.e. a still-born. This means that the eighth month marked the commencement of the polar darkness.

#### Refutation

The question arises: if the polar people could divide the period of day-light into seven months by taking the sun's round on the horizon as a 24 hour unit; could they not similarly divide the five months period of darkness, on the basis of the 24 hour round of the heavenly bodies into five months?

There is a notion that the polar people slept for the whole period of darkness extending over months, and therefore this period

constituted for them of only one indivisible night, not to be broken up into months, which is absurd. It is simply impossible for human beings to sleep for months together and live without food and water. Even the 7/8 hour's sleep, that we are accustomed to, is a cultivated habit. It is convenient to spend the period of darkness in sleep. The natural rhythm of sleep is much shorter than 7/8 hours.

#### Tilak

It is said that Indra killed Bala at the end of the year in a dark place. It is further said that Indra found the sun engulfed in darkness after ten months. The sages Navagva and Dashagva performed the sacrifice for nine and ten months and fed Indra on copious Soma. Thus strengthened, Indra fought Bala in the two month's night and killed him at its end. This clearly refers to the ten months' day and two months' night in the polar regions.

#### Refutation

The line in question is 'Oh Agirasa<sup>19,28</sup>, you obtained the cattle-wealth by smashing Bala with your rites at the end of the year.' (10/62/2)

The Vedics held year-long sacrifices, and believed that they brought prosperity by destroying the evil forces like Bala. What has this got to do with the polar regions?

The second reference is, "Oh Indra, with Navagvas as friends<sup>19,29</sup>, you followed the cows vigorously with brisk knees. Truly Dashagvas, you knew the sun engulfed in darkness". (3/39/5)

It will be seen that the word **dashabhih** goes with **dashgvaih** and thus means ten Dashgvas. Tilak brings in ten months from his own imagination. The verse is an obvious reference to the nefarious doings of panis, the atmospheric demons, who do not brook anybody's prosperity, and try to impoverish everybody by their mischiefs such as hiding the cows. The word 'cows' is a symbol for wealth. The panis hide this wealth in inaccessible and dark regions. Indra, with the help of his devotees, the sacrificers, finds this wealth by illuminating even the dark places by sunshine. This is indicated by the general belief that Indra is fed by the sacrifices and bestows prosperity. The verse has nothing to do with the polar regions.

Another strange idea that occurs in Tilak's writings again and

again is that several months' effort to ward off darkness is made when there is no darkness, i.e. during the polar day, when the darkness actually came the sages just sat quiet. This is like hospitalizing the patient when he has no ailment, and bringing him home, taking leave of all doctors, when he actually falls ill.

In riding his hobby-horse of the nine-month day, Tilak takes recourse to the legend that Dirghatmas became old in the tenth month. Those, who are prepared to concede that a yuga: 'age' stands for a month, will find it difficult to swallow that Dirghatmas or 'long darkness' was the name of the sun.

### Tilak

"We enjoyed many years and nights" (here) the year and the nights are mentioned separately, because in the polar regions, only the sunlit days were called the year, and the dark period was called night. So this is a reference to the polar conditions.

### Refutation

Where is the evidence that only the sunlit period is called the year in the polar regions?

The line runs "Overpowering<sup>19.30</sup> the enemies, like the luminiscent bodies over-powering the sky, we shall rejoice in the nights of the poorvi year". (4/16/19)

The word Poorva means, new as in Kalidasa's phrase tatpurvabhange (Raghu 2/42), where Mallinath translates the word as 'the very first' 'unprecedented'.

Nights are always chosen for rejoicing, and days for work. It is for this reason that night is called **kshanada** 'pleasure-giving', **kshana** is pleasure of celebration.

### Tilak

"All the worlds rest on the wheel of the sun with five spokes and one navel. The axle of the wheel never gets heated, nor does it break by the heavy weight".

"The eternal wheel of the Aditya driven by ten steeds moves by the same path. The eye of the sun, full of the watery cloud, moves with this wheel. The whole world is perched on it".

The five-spoked wheel means the five seasons of the polar regions. The ten steeds of Aditya are the ten sunlit months in the polar regions.

### Refutation

The verses in question are the following: "When the five-spoked wheel moves, all the worlds rest on it. Its axle does not get heated by the heavy burden. The ever-lasting one with a common navel, i.e. central hole, does not fade". (1/164/13)<sup>19.31</sup>

*"The aged wheel with a common rim<sup>19.32</sup> rotates.  
The ten-yoked ones carry it. The eye of the sun goes  
covered by rajas. All the worlds are given to it".  
(1/164/14)*

Only five instead of six seasons are mentioned. Tilak's explanation of this is that the ten sunlit months of the polar regions are divided into five seasons of two months each. But what about the remaining two months of darkness? Are they seasonless? So, Tilak's method of reducing the number of seasons is unacceptable.

The Brahmanical method, quoted by Tilak himself, of treating Hemant and Shishir as one, is more acceptable. In north India there is very little difference between these two.

The ten horses referred to may be the ten quarters.

### The Cows Walk and the Captive Waters

### Tilak

Many Vedic rites definitely point to geographical conditions of the polar regions. The **gavam ayana** lasts for ten months; the sunlit period of 300 days; the **dashratra** for ten nights i.e. 240 hours of darkness in the polar regions. No night-rite extends beyond 100 nights, because nowhere in the world is there a night of 24x100 hours; the longest is 24x95 hours. But the rite of 95 nights is called shataratra i.e. 100 nights, because there is very little difference between 95 & 100.

### Refutation

Tilak seems to have forgotten that he himself cites the severe cold and darkness of the polar nights as a reason for the cessation

of all rites in the polar regions. Again, if there is not much difference between 95 & 100, so that a 95 night can be called a 100 night, why is the difference between 10 & 12 so great, that a 10 month-sacrifice can not be called a 12 month-sacrifice?

### Tilak

The Tandaya Brahman says that prajapati first saw the atiratra sacrifice, and created the complete day and night out of it. This shows that the atiratra was performed at the end of such a night that the series of ordinary day and night began after it. So this must be the long polar night. Moreover, this sacrifice was performed in order to ward off the asuras. Warding off the asuras cannot be necessary only for one night out of the 360 torrid zone nights. So this is a special night of the Arctic regions.

### Refutation

If it is necessary to ward off the asuras every night, this is so in the Arctic regions also. It is not true that the necessity was particularly there in the long polar night. Almost in every sacrifice, the deities are implored to ward off evil powers.

The simple idea is that prajapati is the creator. Before creation all was dark, as is said in the nasdiya sookta 'Darkness was engulfed by darkness, prajapati then conceived and created the world with its cycle of day and night.

### Tilak

Indra defeated Vrtra and brought about four things simultaneously. The four things are: 1) release of the cows, 2) release of the waters, 3) rise of the dawn, and 4) rise of the sun. This can be explained only by the Arctic theory. The Rigveda mentions celestial waters, the river Sarasvati etc. It was mistakenly supposed so far that the celestial water is rain and that the Sarasvati is a real river of that name. The waters are not rain waters, because Vrtra is said to obstruct their upward movement. According to the Vedic notion, the whole universe is full of ethereal waters. When these waters are free, the heavenly bodies move through it. Vrtra makes these waters inert, and obstructs the heavenly bodies. This Vrtra is no other than the asura, who submerges the sun in the polar regions. Indra kills Vrtra and deinertiates the waters, makes it possible for the sun to move. The dawn heralds its rise. The release of the cows is the release of light.

Some may say that granting all this, it does not lead us to the Arctic regions; it is applicable to our daily sun-rise. Tilak's answer is that Indra kills Bala at the end of the year. The Arbuda who obstructed waters was killed by snow. This shows that sun-rise was an yearly phenomenon coming at the end of winter. The forts of Vrtra are said to be autumnal. This shows that Vrtra started his work of obstructing waters in autumn.

### Refutation

The verse in question runs thus "Oh Indra, you broke<sup>19.34</sup> the strongholds of the mountain, and distributed the waters in many streams. You became the king of the moving creatures, producing the sun, the sky and the dawn." (6/30/5)

The verse does not, as Tilak would have it, assert that four things were created simultaneously. Only the dawn, the sun and the sky are created simultaneously. The cows are not mentioned at all, and the release of the waters is not said to be **pari passu** with the creation of the three.

The notion that in the beginning of creation, all was water does not imply that the phrase **divya apah**-heavenly waters, does not refer to rain. Note the following verse: "The waters that are heavenly, or flowing, or dug out, or self-born, or those which flow to the sea are holy and purifying. Let these divine waters<sup>19.35</sup> protect me." (7/49/2)

It is impossible to say that the phrase **divya apah** does not refer to the rain.

Similarly, the reference to the upward movement of water does not make it ethereal. The Vedic poet knew that the earthly waters evaporate by the heat of the sun and go up. Note the following verse "The water that goes up and comes down with an interval of days is the same. The rains feed the earth, and the fire's heat feeds the sky"<sup>19.36</sup> (1/164/51)

This is a clear reference to the cycle of evaporation and rain-fall.

Just as Tilak transforms rain into the ether, he metamorphoses the seven Indian rivers as heavenly and so imaginary for removing the hurdles in his theory.

The statement, that Sarasvati extends over the wide earth and the heavens as well, shows according to Tilak, that it was not a terrestrial river. But if the reference to the heavenly flow of Sarasvati proves it to be non-terrestrial, the reference to the terrestrial flow should prove it to be non-heavenly. The epics speak of a heavenly Ganga, can it be inferred from this that Ganga is not an actual terrestrial river? In fact, it is terrestrial rivers that are imagined to be existing in the skies also, not vice versa.

The Sarasvati today is a meagre stream, and not the mighty river described in the Rigveda. The place where the Sarasvati disappears is called Vinashana or cessation. The tradition about the disappearance of Sarasvati is very ancient and now the Central Arid Zone Research Institute has endorsed the view that the Sarasvati as described in the Vedas really existed in ancient times.

According to Sayana, the sapta-sindhus are the seven rivers including Ganga. Tilak does not accept this on the ground that a list of the seven rivers is not given in the Rigveda. Max Muller includes Sindhu and Sarasvati, in place of Ganga and Yamuna of Sayana. The absence of an agreed list of the seven rivers is regarded as a sufficient reason by Tilak for denying that they are actual terrestrial rivers.

This is strange. The difference of opinion is not about the terrestrial or otherwise nature of the rivers, but only the inclusion of Ganga, Sindhu, Sarasvati, Kubha and Yamuna is disputed.

The statement that *arbuda* was killed by hima is so clear that no forced explanations are needed for interpreting it. *Arbuda* means cloud. It was killed by *hima* i.e. cold. It is cold that melts the steam in the cloud into water. Imposing the meaning 'darkness' on the word *arbuda* does not make it meaningful to say that it was destroyed by hima i.e. winter. Winter in the Arctic regions is a period of darkness, not of its destruction. The darkness there is destroyed by summer, not by winter.

Vrtra, the obstructor of water, and Indra, who released the waters by killing him, are more easily explained as the frozen waters of the Himalayas and the summer sun, who melts it. The snow-peaked mountains and the frozen lakes are called puras or strongholds. They are sharada, both because they are white, and also because their formation begins in autumn.

According to Tilak, 2/12/11, which<sup>19.37</sup> says that Indra found Shambar hiding in the mountain in the fortieth year, falsifies the

notion that the breaking of the sharada pura refers to the melting of the Himalayan snow, and supports the Arctic Theory.

Tilak supplies the word tithow, 'in the moon-phase' after the word **chatvarinshyam** to cull out the meaning "of the fortieth day of the autumn". It is on this day that the Arctic sun starts his battle with shambar i.e. darkness.

Thus, avoiding the difficulty of explaining the reference to forty years does not help only the Arctic theory; it helps the Himalayan Theory also, because it can be said that it is on this day that the process of freezing starts in the Himalayan regions. Shambar hiding in the fastnesses of mountains is the water frozen in inaccessible mountainous deeps.

The words **chatvarinshyam** sharadi are better translated as 'in the fortieth year' without supplying the word tithow with an express purpose of proving some preconceived theory. There are places in the Himalayas where the ice does not melt even in summer. This is clear from Bilhan's statement that the people of Kashmir use ice for relieving the heat of the summer. One should not infer from this that they knew the technique of making ice artificially. If that were so, not only the people of Kashmir, but people far away from the Himalayas could also have used ice.

The poet had not seen a summer severe enough to melt this ice for forty years. He saw it then, and records this in this verse by saying that Indra, in the form of the sun, killed Shambar, i.e. he melted the forty-year-freeze of water.

### Tilak

The **taittiriya sanhita** says that the sun has three phases. The spring is the morning, the summer is mid-day and autumn is the evening. Sayana in his commentary has quoted a Vedic statement to the effect that the seasons Hemanta and winter end when the sun sets. This shows that the seasons Hemanta and winter consisted of night only. This is a description of the polar conditions.

### Refutation

It is clear that the different parts of the day are figuratively named after the seasons in order to indicate the intensity of heat. The night is called winter because it is the coldest part of the day.

### Mythology and The Avesta

The arguments considered so far are regarded as direct evidence by Tilak. In addition to this direct evidence he maintains that there is also indirect evidence in mythology in the Avesta for his theory.

If however the direct evidence is found to have no substance, it is not necessary to consider the indirect evidence. But the Western scholars have adopted a strange attitude, in view of which such indirect evidence has also to be considered. This strange attitude consists of treating allegories as history, and history as allegories. The Indian tradition has regarded the Ramayana and the Mahabharata as history for thousands of years. Some western scholars explain them as allegories. On the contrary, the exploits of the Vedic gods, which Indian tradition has all along regarded as poetical descriptions of natural phenomena, have been regarded as parts of human history by them. This has been carried to such absurd lengths that it is necessary to discuss Tilak's indirect evidence also to show the worth of what passes for serious research.

#### Tilak

**Vaman** assumed the form of **trivikram** and covered three worlds in three steps. Two of these steps were observable, and one was unobservable. The two observable steps are the eight sunlit months in the Arctic region, and the unobservable step is the two months, night.

Another mythological story is that Vishnu sleeps on the shesha cobra for four months. This points to the four months of the polar night. The bed of Vishnu is the sea in the Southern hemisphere.

When the sun enters the southern hemisphere, there is night at the North Pole.

But according to the story, Vishnu sleeps, not in winter, but in the rainy season i.e. summer, as far as the sun's position is concerned. But this must be a mistaken notion of later times.

The **dashrajna** war in the Rigveda is also a metaphor suggesting polar conditions. The war was fought by sudas on one side and ten kings on the other. The ten kings are the ten sunlit polar months and sudas is the two months polar night. The dashrajna war is a fight between these two.

Similarly, the ten heads of Ravana stand for the ten sunlit polar months. The six months' sleep of **Kumbhakarna** is the six-months' polar night. That **Ravana** imprisoned all the gods means that after the ten sunlit polar months, everything becomes dark.

### Refutation

I hope at least some readers feel that all this does not deserve any refutation. But Tilak is by no means the only one, who writes in this strain. This type of research is fairly prevalent in the field of ancient history.

That Vishnu's sleep is in the rainy season is to be regarded as a mistaken notion of later times, simply because it does not fit in with the Arctic theory. In other words, the data on which the theory is based must be evaluated in terms of the theory, if it does not fit the theory, so much the worse for the data.

The sunlit polar period is divided into ten months in order to get correspondence with ten kings, but the two months night is not similarly divided into two, because such a division will affect the correspondence with one Sudas. Again in the **dashrajna** fights, it was Sudas who was victorious. So, if Tilak's allegory is to be accepted, the Vedic poet is eulogizing the victory of darkness over night.

In other places, Tilak credits them of singing about the victory of light over darkness. Regarding the ten sunlit months as the heads of **Ravana** transforms the eagerly awaited months of daylight into dreaded devils. Moreover, the sunlit months illuminate, they do not imprison. One may say that the disappearance of heavenly bodies by sunlight is spoken of as their imprisonment. But this is not what Tilak says.

By quoting Plutarch, he says that the gods were imprisoned by the victory of darkness over light.

#### Tilak

The Avesta contains references supporting the migration of the Aryans and the Arctic theory. Ahur Mazda first created the region Airanyavajo. Agramainyu then created severe cold and ice there. Then Ahur Mazda created sugada, so Agramainyu created cattle-biting flies there. Thus Ahur Mazda created sixteen regions, and Agramainyu created some trouble in all of them.

This story indicates the migration of Aryans from one region to another. The 15th region is Hapta Hindu i.e. the sapta-sindhu of the Rigveda. The Rangha, the tributary of the Sindhu is called Rasa in Sanskrit.

### Refutation

The innumerable loose ends in the above argument are obvious. The Avesta does not mention any migration, and the troubles created by Agramainyu are not so severe as to force the population to migrate. Again, it is said that the Aryans left the Sapta-sindhu to escape from heat. Nobody is now thinking of leaving it for this reason. Again Rangha, where they sought refuge from this heat, was troubled by severe cold and earth-quake. But the Aryans do not seem to have left it, as this was their final habitat according to Tilak.

The Avestic description of severe cold without severe summer is not applicable to the Indus region, where Tilak would have the Aryans migrate. Finally, if the creation of the worlds is interpreted as a story of Aryan migration, the Aryan migration took place from the saptasindhu to the Rangha, and Rangha, according to Avestic scholars is the Caspian sea-shore or Mesopotamia.

Moreover, Airanvajo cannot be identified with the polar regions, simply because there was ten-months winter there. There is ten-months' winter even in Simla.

Ahur Mazda ordered Yim to create an enclosure called Vara, as an escape from the deluge. In this enclosure, the sun, the moon and the stars rise but once in a year, and the year is like a day. This makes Tilak identify Vara with the Arctic regions. But he forgets that this is contrary to his theory that the Arctic region was the original home of the Aryans, not a temporary refuge like vara. The description of the sun rising but once in a year is applicable to Vara, not to the Airanvajo, which is said to be the original home.

The Vedic literature talks of water-deluge, not of ice-deluge which is said to have occurred in the Arctic regions. In order to escape from this difficulty, Tilak falls back on the word praleya meaning ice, and derives it from pralaya or deluge. This, Tilak thinks, is a reference to the ice-deluge.

But the word praleya is derived from the root li 'to melt' with the prefix pra. Ice is called praleya because it melts, it has nothing to do with the ice deluge.

### Tilak

The Aryans were nomadic before they settled in India. The nomadic period was the most ancient in Aryan history. This ancient period is called the krita age. It is for this reason that the **Aitareya** Brahman says that the krita age was the age of wandering.

### Refutation

The whole verse runs: "**kali** is the age of sleep, the **dvapar** is the age of rolling, the **treta** of standing, the **krut** of wandering". (Aitareya Brahman 7/15)

The meaning is quite clear. Krita is supposed to be a vigorous age and **kali** of depression and lethargy. The other ages were a transition from vigour to lethargy. If one is to take the verse literally, the Aryans walked in **Krita**, stood up in **treta**, rolled in **dvapar** and slept in **kali**.

It will by now be clear to the readers to what length Tilak is prepared to go for supporting his theory.

Why this obstinacy? The reason lies in Tilak's keenness to put the Vedas at the beginning of all human history by pushing their date as far back as possible. Wassan, who influenced him, put the origin of all human beings in the Arctic regions. Tilak wants to prove that the origin of the Aryans was the same as the origin of the human race. If the early composers of the Vedic hymns are proved to be living in the polar regions, they could have done so, according to Tilak, only around 14000 B.C, because the polar regions ceased to be habitable later. So Tilak seized upon the polar regions as a means of proving the extreme antiquity of the Vedas.

But he has committed one simple mistake in doing this. He did not take account of the fact that the polar phenomena, alleged by him to have been referred to in the Vedas, could have been observed in Alaska, Greenland, Iceland etc, which are inhabited even today. He makes no attempt to prove that only the polar point is required for observing the phenomena mentioned by him. So, even if his interpretations are accepted, they are of no use in proving his much desired objective.

## V

## The Rigveda and the Aryan Invasion

Even if the Dasas, Dasyus and the Panis, the enemies of Vedics are regarded as human beings, the Aryan-Invasion Theory receives no support because it is quite justifiable to hold that the Dasas, Dasyus and Panis were non Indian enemies of the Indian Vedics and the Vedics made expeditions outside India from time to time to liquidate them. But this is not the view advocated in this chapter because there are unmistakable descriptions in the Rigveda to show that the Dasas, Dasyus and Panis were super human evil powers and the battles with them were waged by the gods, not by the Vedics, though as a result of their invocations.

It is frequently asserted that the Rigveda contains abundant references to the Aryan-non-Aryan conflict.

### How far is this true?

In order to answer this question, it is necessary to inquire what the word Arya occurring in the Rigveda means.

This word occurs in the Rigveda 36 times. Very often it is used as an adjective. In the places where it can be taken as a noun, it can-not be shown to refer to any group of people.

In the following places it is used as an adjective-

1

*"These white and Aryan Somas, by their stream of*

*order,*<sup>19.38</sup> *rta, shower wealth in the form of cows."*  
(9/63/14)

Sayana takes **ARYAH** which is nominative as **ARYANAM** i.e. possessive and **YAJAMANANAM** or of the sacrificer as understood. But this imposes too many changes in the text. There is nothing to prevent **ARYA** being nominative as it stands as an adjective of Soma.

2

*"Indra*<sup>19.25</sup> *befriended Rjishva and plunged his chariot in the sky. Indra, the Arya, found an equal to the Dasa. He dispersed the puras of the deceptive asura Pipru (10/138/3).*

*Here arya is an adjective of god Indra.*

3

*"Arya vows*<sup>19.39</sup> *are bountiful. They spread in the world, elevate the sun, in the sky and create cows, land, horses, vegetation, mountains and water."*  
(10/65/11)

*Here arya is an adjective of vows.*

*In some cases the adjective arya is applied to the gods.*

4

*"Fire, wind and*<sup>19.40</sup> *sun sprinkle semen in the three worlds. From that three Arya progenies came forth, the first being light. All three unite with the dawn. The Vasisthas know them all."* (7/33/7)

Here one of the Arya progenies is light or Aditya, according to Sayana.

### The meaning of Varna

Let us now consider the word used as a noun. Those who maintain that the Aryan race is mentioned in the Rigveda bank on the following hymn-

*"Indra slayed the*<sup>19.41</sup> *dasyus and protected the arya varna. He then gave horses, the sun, cows which are the sources of money, other enjoyments and land."*  
(3/34/9)



Here the word **VARNA** is translated<sup>33</sup> as race, and the verse construed as referring to a victory of the Aryans over non-Aryans. But this construction is rendered absurd by the clear statement that the release of the sun was one of the results of this conflict. Is the sun a tennis-ball which the non-Aryans could steal and conceal in their pocket?

The word Varna occurs in other places also and since the word usually means colour, it makes the western scholars shout eureka. They take the word to refer to the colour of the skin and see a white-black conflict in the Rigveda. It is therefore necessary to discuss the meaning of the word in detail.

Sayana derives it from the root vr "to choose" with the suffix n according to the Unadi rule 290. Similar formations are Karna from kr 'to do', jarna for 'an old man' or 'an age-worn tree' from jr to age, sena i.e. 'army' from si 'to tie', drona i.e. container from dru 'to flow', panna i.e. praise from pan 'to praise', anna i.e. 'food' from an 'to breathe' or that which-enables one to breathe, and svapna i.e. 'dream' from svapa 'to sleep'.

In many of these formations, the suffix n indicates agent. According to Sayana, in the word varna, it indicates causal agent. So the word varna comes to mean that which causes to choose. In the hymn 1/104/2 the word is used as an adjective of Indra, because Indra causes others to choose him by his remarkable qualities.

So varna means "distinguisher", a quality that marks out. The Brahmana varna, the kshatriya varna, therefore mean castes with distinct functions. So arya varna means the group of people performing the distinct functions like sacrifice etc. According to **Max Muller** the word Arya is derived from the root ar 'to till the soil'. In the Rigveda the people in general are called **KRISHTEEH** i.e. farmers. So the word arya seems to refer to the people whose means of livelihood was agriculture. The **ARYA VARNA** therefore means those whose occupation and distinguishing mark is agriculture.

Instead of banking on etymology, if we refer to dictionaries the word **VARNA** is not found to indicate race. Amara's lexicon mentions the words meaning race and makes it clear that the word **VARNA** is not one of them by mentioning it separately. The additional meanings of the word are given as follows-colour, praise, letter, seat-cover on an elephant (maheshvari Teeka). The elephant-owning rich must be making special efforts to make this cover distinctive of themselves, and for this reason it was called **VARNA**.

The lexicon Medini mentions **VARNA** to mean-Brahmana, Kshatriya etc, colour, fame, qualities, narration, praise, distinction, form letter and writing. The meaning 'race' is conspicuous by its absence in both these dictionaries. Moreover, all the meanings given by these dictionaries can be consistently derived by the etymology given by the Sootra quoted. The colours white etc distinguish themselves from other colours, praise, the praised from those who are not praised, a letter from other letters. Fame and quality are similarly distinguishers. The meaning **KATHA**-narration is derived from the form **VARNANA** 'description' of the root **VR**. The word **KATHAVARNANA** i.e. description in the form of a narration, is in use. This meaning is also thus derived from the meaning distinguisher.

### "Varna" not connected with race

All the meanings of the word **VARNA** given in the ancient dictionaries fit in with its use to distinguish the primary castes. The white colour characterizes the Brahmana, because it stands for knowledge and purity, the red characterizes the Kshatriya because it stands for blood, and signifies prowess in warfare. So even if the word **VARNA** is taken to mean colour, it does not follow that it is the colour of the skin. If it is taken to mean praise, the Brahmana **VARNA** means "one whose praise is Brahmana" after the Hindi idiom, where the word **TAREEF** 'praise' stands for a persons bio-data. If it is taken to mean letter Brahman Varna means one whose letter i.e. caste name is Brahman. The other meanings viz. fame, quality, narration etc similarly convey a consistent meaning in the phrase Brahmana Varna. It is certain that the word Varna is not used in the sense of race even in a far-fetched way, anywhere in Sanskrit literature.

Apte's dictionary gives "species", "race" as one of the meanings of **VARNA**, and mentions **SAVARNA** as applied to a letter in support. But, a similar letter is called **SAVARNA**, because a letter is called **VARNA**, not because the word **VARNA** means "species". Apte is only echoing the western scholars in rendering **VARNA** as race and not faithfully following Sanskrit usage.

One of the notions circulated by Western scholars is that the **VARNAS** were originally four distinct races with distinct complexions, and they came together to form the four **VARNAS**. The idea of four societies distinct in both race and occupation coming together to form one society is as ridiculous as the conception that the different limbs, hands, feet etc were joined together to form the human body.

The word Varna occurs in the Rigveda in the following places

## 1

*"Agastya,<sup>19.42</sup> desirous of progeny and power, nurtured both the Varnas and fulfilled godly blessings." (1/179/6)*

Sayana suggests that desire and penance are the two Varnas referred to here. But he has not given any ancient tradition in support of this meaning.

Chitrava,<sup>14</sup> echoing the Western scholars construes the two VARNAS as black and white. But the hymn has nothing to suggest this. On the contrary it says that Agastya worked for the welfare of both the VARNAS, who, according to the Western scholars, were at daggers drawn.

Here also, the word VARNA has to be construed to refer to groups of people engaged in certain occupations.

How is it that here the VARNAS are said to be two only, when in fact they are known to be four? The word used is "both"-"UBHA" and NOT TWO, thus leaving no doubt that the VARNAS were two and two only.

Which were these two VARNAS? Most probably the priests, philosophers etc. whose calling was concerned with the other world formed one VARNA and the rest who performed mundane activities formed the other. The second VARNA was further subdivided into kshatriya, vaishya etc.

The tendency to club together all the VARNAS excepting Brahmins is seen in the later maxim that in the kali age there are only two VARNAS the Brahmin and the shoodra.

*"This powerful,<sup>19.43</sup> soma, roaring like a killer is displaying its enlivening 'ASURYA colour'. Clearing oneself by the filter, he dispels the aging of the drinker." (9/71/2)*

Here the complexion of the soma is described as ASURYA. Sayana takes this to mean "detrimental to the Asuras". But the suffix ya in ASURYA usually conveys a meaning directly the opposite. The Rigveda in many places, uses the word ASURA as a compliment. In the context of the exhilaration induced by soma, the word can be simply derived from the word ASU meaning life, and the suffix RA, as in MADHURA from

MADHU. ASURA therefore means enlivening. The very colour of soma is enlivening because one feels exhilarated at the very sight of soma. The word VARNA here has thus nothing to do with the colour of the skin.

The whole phrase ARYA VARNA cannot therefore be stretched to serve the theory of the Aryan Race.

Nor can the word Arya be used for indicating any group of people marked by linguistic or other cultural characteristics, if we stick to ancient usage. All the occurrences of the word where it refers to groups of human beings convey the straightforward meaning: civilized.

### The Colour of the Dasas

Though the word VARNA does not mean race, it does mean colour and on this basis the Western scholars render the phrase ARYA VARNA as Aryan colour i.e. 'white colour' and thus bring back the idea that the Aryans were a white race. But no ancient literature states that the men to whom the word Arya is applied as an adjective were white in complexion. Escape is found from this difficulty in the colour of the Dasas which in some places is described as black and by implication, taking the colour of the Aryas to be white.

The following hymns are quoted in support of the view that the dasas, were black men.

*"Indra protects the Arya sacrificer<sup>19.44</sup> in battles SVAR-MEEDHA. For the sake of the humans, he punishes those who do not abide by VRATAS. He flays the black skin. He kills all the killers." (1/130/8)*

Here the word SVARMEEDHA is important. MEEDHA means 'sprinkled'. SVARMEEDHA battles are therefore battles which are sprinkled in heaven. So these battles are fought in heaven, not on this earth. Sayana suggests the meaning sprinklers of heaven i.e. heaven-giving. But MEEDHA is a past principle, and rendering it as a noun signifying agent is a circumlocution. One could render the phrase as sprinkled for the sake of heaven. But even this involves some stretching. Battles are fought for winning, not for going to heaven. No doubt, it was supposed that those who are killed in battle go to heaven. But only the losers will describe their battles as heaven-going, not the victors. The composers of this hymn are victors, and not losers.

The SVARMEEDHAJI means 'battle fought in heaven' is also clear from the immediately following statement that the AVRATAS were

punished for the benefit of the entire mankind 'MANAVE', and not for the benefit of the white alone, and that Indra burns all, not only the non Aryans.

That Indra killed the Krishna does not indicate that Krishna was a black non-Aryan. The following statement makes this clear:-

*"Krishna took refuge along with the 10000 in the Amshumati,<sup>19.45</sup> the resplendant. The manly Indra seized the breathing one, and made him unstuck" (8/96/13)*

Two facts are crucial (1) Krishna was breathing inside water and (2) he was called Drapsa or drops a la Sayana. The 10000 others who took refuge with him were also obviously drops. Thus Krishna is clearly

clouds and NOT the cities of the black, since the cosmic deeds of Indra are spoken of.

### Not a Human Skin

That black skin in the Rigveda refers quite often to the colour of the cloud or the night and not of human beings can be seen by various examples.

*"The rays of the<sup>19.46</sup> moon: burning the ritualless, pure in lustre, fill heaven and earth like a note and peel the black skin of the night." (9/73/5)*

son of Svashva was involved in hostilities against the sage Etash. Etash then prayed to Indra for protection. Thereupon Indra saved Etash.

Sayana construes the meaning of the hymn thus:

*"Indra actuated the wheel-weapon of the sun. He restrained Etash who rushed for battle. The black cloud moving in serpentine ways protected Indra in the abode of water".*

This interpretation is incongruous with the allusion given by Sayana himself. Indra who is said to have answered the prayer of Etash has restrained him instead of leading him to victory. After restraining Etash, from whom did the cloud protect Indra? It is strange that the almighty Indra, to whom the hymn-makers look for protection, was himself protected by the cloud, when there was no calamity befalling him. Moreover, no cloud is mentioned in the hymn. Where from has Sayana brought it? Sayana's interpretation therefore cannot be accepted.

The hymn makes the following straightforward sense:

*"This Indra actuated the wheel of the sun. He restrained the let loose Etash, this black one, moving in the skin-base which is the birth place of this region, bring s rain."*

The word TVAK 'skin' in this hymn is important. Sayana translates it as light, without quoting any basis. BUDHNA means base. RAJAS stands for region i.e. heaven, earth etc. YONI is source. So the skin-base is the source of the region(s). The skin, which is the source of the heaven and earth, can only be space. The KRISHNA has pacified the Etash in the source of the regions. Etash is the horse of the sun. Indra does not allow it to run amok. This KRISHNA is the Indra in the form of the cloud. It is not the cloud that protected Indra; it is Indra in the form of the cloud who controlled the intractable horse of the sun and brought rain. The reference is clearly to the black clouds, which engulf the sun.

Indra was a god and therefore he is credited with activating the wheel of the sun. He restrained the horse of the sun, means that he restrained the growing heat of the summer sun and brought rain. This is the description of the advent of the rainy season.

The use of the word TVAK in this verse is significant. Western scholars cannot think of TVAK in any other sense besides human skin, and if the word KRISHNA 'black' is used along with it, their joy overflows. But this hymn is undoubtedly talking of cosmic events, not events in

human history, and the agent of the cosmic events viz Indra is called KRISHNA or 'black'. The skin base is said to be the source of the regions. In other words, the source of the regions is space, since regions must rest in space, their substratum.

I do not expect that all the readers will go the whole way with me in this interpretation. But the following is indisputable:

- (1) the word TVAK is not used in the sense of human skin, and
- (2) the word KRISHNA is used in a laudatory sense.

### The Black Aryans

The word Krishna is used in a laudatory sense in the Rigveda in other places also.

*"This auspicious<sup>19.49</sup> fire has come with the auspicious dawn. The brother is following the sister or the lover is following his beloved dawn. He presents himself with clear and lustrous colours to the ABHIRAMA."*  
(10/3/3)

According to Sayana, ABHIRAMA refers to the dark colour of the night. RAMA means pleasing. This is reminiscent of the taste of the Ramayana and the Mahabharata describing Rama, Krishna and Draupadi as emblems of black beauty. This is diametrically opposite to the hatred of the black race, which western scholars try to foist on the Rigveda.

Some may charge Sayana of inserting the word black, when the text, as it stands, only uses ABHIRAMA which does not mean black. But this charge does not stand. The last verse describes fire as peripatating between the two ladies: the sky and the earth. This can only refer to the sun. The sun came with the auspicious dawn and by and by dispelled the darkness" is what the hymn is saying. If the word ABHIRAMA is not translated as darkness, the hymn makes no sense.

That the hymn-makers were not haters of the black race is proved by the fact that many of them were themselves black. 1/117/7 <sup>19.50</sup> states that the Ashvins restored the son of Krishna named Vishvaka. So the propitators of the Vedic deities were fathered by the blacks.

In 10/31/11 <sup>19.51</sup> Kanva is called the son of NRSHADA. "He, the dark SHYAMA, obtained wealth from the fire. The fire bestowed the lustrous RTA on the black Kanva".

Here the word **SHYAMA** i.e. 'dark; and the word **KRISHNA** i.e. black are used for Kanva in a laudatory sense.

There is one Krishna Angiras among the hymn-makers. 8/85/87 and 10/42/43 are composed by him. If Krishnasura is inferred to be black from his name, Krishna Angirasa also should be taken to be black. Aitareya Brahmana 3/34 states that the Angirasas were born of coal.

1/116/23 and 117/7 mention a hymn maker Krishniya i.e. son of Krishna.

The Vasisthas are described as white. If all the hymn-makers were white, there was no point in sigling out Vasistha as white. This description makes it clear that the hymn-makers were of a mixed complexion, like the present day Indians.

Not only were the hymn-makers not white; the white complexion held no fascination for them. "With the blessings<sup>19.52</sup> of Tvashtu, let our offspring be tawny" says 2/3/9. The word **PISHANGA** is translated as tawny in English. Tawny is yellowish brown like wheat or reddish brown like snuff. The Maheshvari on the Amarakosha gives the meaning 'red mixed with black', which is the same as reddish brown. In any case **PISHANGA** is brown, the complexion of the majority of Indians today. The reason for praying for this complexion is that many of the Vedics like Vashistha were white and others like Kanva were black, without a tinge of red. These types were not sought after.

It should be specially noted that the equation of beauty with white complexion is not found in Indian literature before the last 400 years. Draupadi the beauty queen was black; so was Mohini, the woman form of Vishnu. It is the dominance of the white man in all fields, established in the last 400 years that has given prestige to the white complexion. Any painter will tell you that all colours are beautiful, it is their combination which may sometimes be enjoyable and sometimes not. A coloured surface is characterized by hue, saturation and brightness. A bright surface is preferred to the dull and a smooth one to the rough, a smooth and bright skin looks beautiful whatever its colour. This is evident in the case of animals other than man, no one says that the black Spanial is not beautiful or would look more beautiful if it were white.

### The "Aryan" Nose

Like white complexion, a sharp, straight nose is regarded as a mark of the Aryan race. In order to prove, by implication that the Vedics were

sharp-nosed, it is contended that the non Aryans were snub-nosed, and the following verse is cited in support-

*"Oh Indra, you carried one wheel of the sun, and left the<sup>19.53</sup> other to Kutsa for gaining prosperity. You killed the ANAS Dasyus and slew the MRDHRAVACHAS in battle." (5/29/10)*

Here the word **ANAS**, applied to Dasyus, the enemies of the Vedics, is taken in the sense of snub-nosed, indicating that the "Aryans" were sharp-nosed.

Sayana construes **ANAS** as **ASYARAHITAN** mouthless i.e. bereft of the power of speech. This meaning is elaborated by the adjective **MRDHRAVACHAH** i.e. 'of impaired speech'. By mouthless, sayana thus does not mean not having a mouth even for eating. Dasyus according to this interpretation were non human evil powers, without speech. The calamities like drought do their work without speaking. It is the speechless Dasyus who brought these calamities.

If Dasyus are regarded as humans the meaning snubnosed fits in better than the meaning mouthless. We must therefore discuss the likely meanings of **ANAS** when applied to humans.

Girishchandra<sup>31</sup> Avasthi derives the word from the root **AS** 'to sit'. **ANAS** thus meaning 'not sitting' i.e. 'always on the run'. This meaning is more likely than 'snubnosed', because the Sanskrit words for snubnosed are **AVATEETI**, **AVANATI** and **AVABHRATI**. Leaving these ready-made words and using **ANAS** for 'snubnosed' is like using the word 'earless' for 'deaf', a very unlikely use.

That the above quoted words for snubnosed belong to Paninian Sanskrit and not to Vedic Sanskrit is not sustainable, because the whole of Paninian Sanskrit is permissible in Vedic language, though the reverse is not the case. The commentary **SUBODHINI** on the **SIDDHANTAKAUMUDI** discusses the view that the Vedic words are not non-Paninian and concludes that the Paninian words are current words in addition to those which have gone out of use. So the argument that the Paninian words for snubnosed were not current in Vedic times requires some independent basis other than the desire to foist the meaning snubnosed on **ANAS**.

That the hymn-maker did not intend to describe the nose of the Dasyus accurately, and calls them noseless to ridicule the not too pleasing

appearance of their nose, is not a permissible escape. The phrase **ANUDARA DARAH** means 'a woman of slender waist', 'not a woman without a waist', so **ANAS** would mean "of small nose", not noseless. A small nose is not necessarily an aesthetic defect.

The meaning 'non-sitting' suggested by Avasthi fits in, whether the Dasyus are recognised as humans or non-humans. As non-humans, the dasyus then become migrating tribes, and Aryan's a settled people, diametrically opposite of the Aryan-invasion-theory. As non-humans the Dasyus were the harbingers of drought. Since this calamity is unpredictable, the Dasyus are described as powers moving in clandestine ways.

That the Rigveda does not use the word Arya to designate a race can be seen in many other places:

## 1

*"Oh Indra,<sup>19.54</sup> give us unbeatable, big and transferable welfare for overcoming the foes. By means of these you make the Das calamities Arya and destroy the human ones." (6/22/10)*

The verse is crucial in two ways. The word **DASA** is used in juxtaposition with **MANUSHA** i.e. human, thus emphasizing that the Dasas were not human. Secondly, by saying that what is **DASA** can be made Arya, the view that the Arya is a designation of a race is entirely ruled out.

The dasa calamities like drought and fire are such that they can be turned into blessings if they come at the opportune time and place in proper proportion. The verse thus makes a consistent sense. The meaning of the word Arya here is obviously **SADHU** i.e. wholesome.

## 2

*"Oh Indra,<sup>19.55</sup> know who is Arya and who is dasa. Destroying the vowless, destroy the dasyus for the sake of the sacrificers. Powerful, you become the inspirer of our host. We aspire for such deeds of yours in exhilarated company," (1/51/8)*

That even the divine Indra required special efforts to know who was Arya and who was dasa shows that they were not easily recognizable groups, racially or otherwise.

Interpreting this verse in the context of 8/22/10 leads to the assumption that the Aryas and Dasyus mentioned here were not human beings. "Light etc is a threefold Arya progeny" makes clear that the word Arya is not always used in connection with human beings. It is only the prowesses of Indra which can ensure that rain does not result in floods or wet famine, but serves to satisfy thirst and hunger, and fire does not destroy, but is used for constructive purposes like cooking. Indra is therefore invoked to distinguish between these two aspects, Arya and Dasa, of the same elements.

## 3

*"These water-stimulating<sup>19.56</sup> somas, destroying the non-givers, strengthening Indra make the world Arya" (9/63/5)*

Here it is absurd to read the destruction of the non-Aryan race and filling the world with only one race viz the Aryan. The verse yields a clear meaning in the context of the sacrifice. Indra becomes pleased by the copious offers of soma in the sacrifice and destroys the nongivers i.e. the non-raining clouds, gives rain and makes the world arya i.e. troublefree. (sadhu)

## 4

*Indra says "I examine and separate the dasa and the arya. I am always mindful of my patient host and drink the soma offered by him." (10/86/19)<sup>19.57</sup>*

Here also no less a power than that of Indra is needed for distinguishing and keeping apart the **DASA** and the **ARYA**, i.e. the evil and the beneficial aspects of the elements fire and water.

### A Linguistic Race

Most Aryan-invasionists now realize that it is impossible to find evidence for the existence of an Aryan race. Some of them therefore contend that the Vedics were linguistically and not genetically distinct from the non-Aryans and this is indicated by the term **MRDHRAVACHAH** 'of impaired speech' designating the **DASAS**.

In fact, the very term: impaired speech, signifies that the speech of the **DASA/DASYUS** was the same as that of the Vedics, albeit in an impaired form. The English will not describe the Germans or the Russians as men of impaired speech, because the German and the Russian are independent languages, not impaired forms of English.

Subsequent literature makes it clear that the **ASURAS** who are said to be the enemies of the Aryas, spoke Sanskrit, though incorrectly. The Mahabhashya narrates how the **ASURAS** were defeated, because they pronounced the word **ARAYAH** as **ALAYAH**. Shatpatha Brahmana narrates the same story by mentioning **ALAVAH** in place of **ALAYAH**. Not only the Asuras,<sup>32</sup> even some sages mispronounced **YADVANASTARVANA** as **YARVANASTARVANA**. But they scrupulously avoided such errors while performing sacrifices. The **ASURAS** however did not always take this precaution. One of them prayed "Grow, oh Indrashatru." By the phrase **INDRASHATRU**, he intended to describe himself 'as the slayer of Indra'. But in order to yield this meaning the second word viz. **SHATRU** i.e. 'slayer' has to be accented. Instead he, accented 'the first word viz Indra. The phrase then meant "one whose slayer is Indra" As a result Indra really became his slayer.

All these ancient stories show that the enemies of the hymn-makers spoke the same language as theirs, and the Vedic literature does not afford any basis for regarding the Aryas even as a linguistic group.

### Dasa, Dasyu and Pani

Not in a single case can the *arya* be said to refer to a group of people, whether linguistic or racial. Max Muller is reported to have derived the word *Arya* from the root **AR** 'to till the soil'. I could not find this in Max Muller's original works. In any case this derivation militates against Max Muller's own theory that the Aryans were a linguistic group. Tillers of the soil need not be a linguistic group. Nor are they known to be a migrating group. Agriculture is practised by a well-settled people. So if *Arya* meant agriculturist, the meaning does not make sense for the Aryan-invasion-theory. Secondly, the root **AR** is not found in the dictionary of roots<sup>20</sup>. In some of the hymns of the Rigveda, construing **ARYA** as tiller may give a reasonable meaning; but nowhere is this meaning necessary. Taking the word *Arya* as an adjective, not used to designate a group of people fits all the occurrences of the word in the Rigveda.

When the Aryans as a people are themselves untraceable in the Rigveda, searching for the Aryan-non-Aryan conflict in the Rigveda is like searching a black cat in a dark room, when it is not there.

This difficulty is often met by saying that the **DASAS**, **DASYUS** and **PANIS** mentioned as the enemies the Aryas i.e. the Vedics is sufficient evidence of the **ARYA**-Non-Arya conflict. It is therefore necessary to examine the references to **DASA**, **DASYUS** and **PANIS**.

The Rigveda uses the word **DASYU** about 86 times. In 8/70/81, the **DASYUS** are called **ANYAVRATA**, **AMANUSHA**, **AYAJVAN** and **ADEVAYU**. The epithet **AMANUSHA** should suffice to indicate that the **DASYUS** were not human. That the word **AMANUSHA** is not used figuratively for cruel etc. is shown by dozens of other references to the literally non-human character of the **DASYUS**.

**ANYAVRATA** means observing alien i.e. non vedic or observing no rites. **ADEVAYU** means godless. **Ayajvanah** means 'non-sacrificers'. 10/22/8 uses the adjectives **AKARMANAH** 4/16/9 uses the adjective **ABRAHMA** 'not knowing' or using the Vedic Mantras.

It could be argued that all the above adjectives are applicable to human beings and the argument could have been cogent if the Rigveda had not contained umpteen clear descriptions of **DASYUS** as non-human. In the light of these descriptions the above adjectives have to be interpreted as applied to super-human evil powers. The **DASYUS** were godless etc in the sense in which the devil is godless, unworshipping etc. He is the rival of god himself, not because he is an ordinary mortal believing in alien gods or a downright atheist.

### Dasyus were superhuman

The references to the non human character of the Dasyus are as follows-

1/33/7 states<sup>19.60</sup> that the Indra-**DASYU** conflict took place **RAJASH PARE** i.e. beyond the earthly regions and Indra burnt the **DASYUS** in heaven. 1/100/18 says<sup>19.62</sup> that water and the sun were released as a result of the killing of the **DASYUS**. 9/92/5 makes<sup>19.64</sup> a similar assertion. 10/170/2 juxtaposes<sup>19.65</sup> the destruction of the **DASYUS** with the production of light. These statements make no sense unless the **DASYUS** are regarded as evil powers obstructing light and water.

4/16/12 talks<sup>19.66</sup> of Indra breaking the wheel of the sun in killing the **DASYUS**. So **DASYU**-killing was a cosmic event, **not** a human battle, like the breaking of the wheel of the sun. Those who are inclined to dismiss this as a hyperbolic description of a human event, may even similarly construe the Biblical account of god creating the world in seven days.

8/50/8 says<sup>19.67</sup> "oh, Indra, your undying steeds supply power to the wind. With their help you killed the **DASYUS** of men and strolled in the heavens." Here the phrase "**DASYUS** of men" means "harassers of

human beings" a clear assertion that the **DASYUS** were the enemies of mankind at large, not only of the particular people called the Aryans.

8/76/11/ says:<sup>19.68</sup> "Oh, Indra, let the sky and the earth imitate you the **DASUTU-SLAYER**". One would hardly say." Oh Shivaji, let the sky and earth imitate you, the slayer of Afzal Khan."

10/73/5 says<sup>19.69</sup> that Indra came to the **DASYUS** with the Maruts i.e. winds, and curbed over-rain and darkness" This is a clear description of a natural event, having nothing to do with Aryan-non-Aryan conflict.

5/14/4 says<sup>19.70</sup> that the "fire attacked the **DASYUS**" a clear indication that the **DASYUS** were not men.

So far the discussion is based only on the commonly accepted meaning. But to my mind there is an important mention of **DASYUS** as non-human in 1/104/5. But it is necessary to depart from the commonly accepted meaning in order to bring it out.

*"We have seen <sup>19.72</sup> the path which goes to the house of the **DASYUS**. Knowing full well where it is going. Oh Maghavan, do not leave us like the wealth of a sucker, as a result of our deeds."*

Sayana here construes **CHARKRTAT** as "from the deeds of the asuras" But the verse does not contain any reference to the asuras, and **CHARKRTA** refers to the doings of the hymn-maker himself, not those of the asuras. If Indra leaves him, being displeased with his doings, he will go straight to the path of the **DASYUS**. The expression **NAHCHAR KRTAT** specifically means our deeds; the second **NAH** stands for "us" in "do not leave us". If the first **NAH** is not taken with **CHARKRTAT**, this second **NAH** becomes redundant.

The meaning is now clear. "Oh Indra, if you disapprove of our actions and leave us; we shall go straight the way of **DASYUS** i.e. to downfall. The word **DASYU** is thus clearly used in the sense of downfall.

Most of the Vedic scholars viz Keith, Macdonell etc agree that the **DASYUS** were not human beings. But they soon come to their hobby-horse by saying that "later on" the epithet was applied to the Indian aborigines. They have not given a single instance where the word is used in the sense of aborigines or natives. Later literature can at best be said to have used the word **DASYU** to designate 'thief', but nowhere does it stand for "natives". The Shatapatha Brahmana says that 500 of the offspring of Vishvamitra were **DASYUS**. The offspring of Vishvamitra, can by no stretch of imagination be described as non-Aryan

## Gajendra Moksha and Dasyudha

Some suggest that in places where Indra is said to kill the **DASYUS** for the sake of some devotee, it should be supposed that, the devotee killed the **DASYU** with the blessings of Indra. Indra did not do so himself. These places are then said to refer to the human foes of the Aryans. But this argument has no force, in the story of Gajendra-moksha, it is Vishnu who slays the crocodile, answering the prayers of the Gajendra. Nobody construes this to mean that Gajendra himself slew the crocodile, and that the crocodile was a human being. There is no reason to depart from the direct statement that Indra killed in order to favour his devotee.

1/33/4/ describes<sup>19.73</sup> the Dasyu as **DHANI** i.e. wealthy. This has given rise to the calumny<sup>33</sup> that the Aryans plundered their wealthy enemies. But here also Indra performs his feat with the help of the Maruts i.e. the winds, which clearly favours a naturalistic interpretation. Sayana takes Dasyu as an adjective of **VRTRA**, who is said to have cornered all light, the sciences, the offerings and even the gods. This is obviously not a description of a human grabber.

1/33/4 says "Oh Ashvins,<sup>19.73</sup> killing the Dasyus with the help of soma drops, we shall fulfill our desires." Here it is the human invoker who kills the Dasyus. But that itself does not indicate any historical conflict." "With the help of soma drops" means with the help of sacrifices in which soma is offered. It is these sacrifices which were believed to destroy the superhuman enemies of the sacrificers.

5/30/9: "**DASA** sent<sup>19.75</sup> a female army against Indra. Indra said, "what can these women do to me?" He put two of the prominent women in his harem and came forward to fight with the dasyus. Some may see here a reference to a human dasyu who sends a female army. But on these lines the stories about Indra sending the **APSARAS** to seduce those who threatened his position could be regarded as historical. The Vedic gods, though natural, are described in a personified form. For thousands of years, they never conveyed to the listeners any historical significance and even today nobody who is not determined to see history in these stories can have even a scent of history in them.

Like Dasyu, the word **DASA** in the Rigveda has also given rise to much speculation. In many places it is indicated that the **DASAS** were the same as **DASYUS**. 5/30/9 talks of **DASA**<sup>19.75</sup> sending his army against Indra, and the very next line asserts that Indra counter attacked the army of the **DASYUS**. 10/22/8 first<sup>19.59</sup> line gives the adjectives of the **DASYUS**



and the very next line states "of that **DASA**", thus implying that the **DASYUS** and the **DASAS** were identical. So the **DASAS** like the **DASYUS** were non-human.

### The Ancestry of the Dasas

In some places **VRTRA** and **AHI** are called **DASAS**. 1/32/11 talks of the release of waters obstructed by the **DASAS** and **AHIS** by the killing of **VRTRA**. Etymologically, **VRTRA** means 'coverer'. According to Max Muller, the word **AHI** is derived from a root meaning freezing. So **VRTRA**, **AHI** and **DASA** were powers obstructing water and light. Thus, like the **DASYUS**, the **DASAS** were non-human. In 4/30/14 Shambara is called a **DASA**. Even Macdonell accepts that Shambara in the Rigveda is non-human. In 5/30/7, Namuchi, the asura is called **DASA**. 10/49/6 uses the phrase "the **DASA**-like **VRTRA**"<sup>19.79</sup> This implies that **VRTRA** was a **DASA**. Alternatively, **DASA** meaning trouble-maker is used as an adjective of **VRTRA**. In any case **VRTRA** could be called a **DASA**. **VRTRA** and **AHI** are called atmospheric demoms by Macdonell.

That the **DASAS** were 'non-human' is clearly indicated by the adjective **AMANUSHA** 'non-human'. Use of this word in a figurative sense is ruled out by 10/99/6 which<sup>19.80</sup> talks of a **DASA** with three heads and six eyes.

The third pointer to the non-human-ness of the **DASAS** is that the **DASA/NAMUCHI** is said to have been killed for the sake of human beings, and a path leading to the gods was made. 2/20/6<sup>19.81</sup> describes Indra as a worthy sight for the human beings in connection with his feat of killing the **DASYUS**. 2/20/7 also speaks of killing the **DASYUS** in the interest of human beings.<sup>19.82</sup>

Some may persist in arguing that the British were talking of defeating Hitler for the good of mankind and this does not mean that Hitler was not a man. To bury this persistence we must point to the results achieved by the killing of the **DASYUS**. The results were creation of water and earth (2/20/7) and<sup>19.82</sup> the release of waters (1/32/11,<sup>19.76</sup> 5/30/5,<sup>19.83</sup> 8/98/18,<sup>19.88</sup> 8/32/2).<sup>19.84</sup> These things could hardly have been promised as the results of destroying Hitler.

There are other descriptions which point unmistakably to the fact that the "destructions of the **DASYUS**" were not battles in human history. 2/11/4 prays<sup>19.85</sup> "Make the places and progeny of the **DASYUS** bearable to us, by means of the sun" So the sun was the antidote to the **DASAS**,

who like the **DASYUS**, were light-obstructing powers. 5/33/4 speaks of<sup>19.86</sup> wiping out the name of the **DASA** in the abode of the sun, in order to bring rain. The abode of the sun is obviously the sky, in which the **DASAS** in the form of the rain-obstructing powers have to be destroyed.

6/26/5 talks of<sup>19.87</sup> killing shambara by throwing him from a mountaintop. This refers to the melting of the snowpeaks. Shambara means water. 2/12/11<sup>19.37</sup> also speaks of Shambara hiding in the mountains, a reference to the freezing of waters in hills and dales.

10/34/1 talks of the frightened sky and the earth, invoking Indra, who kills the **DASA** and protects the gods. The **DASA** who could frighten the sky and the earth, and could even pose a danger to the gods, could not have been a human being. 10/138/3 says,<sup>19.25</sup> "When the Arya Indra found a way to tackle the **DASA**, the sun released his steeds in the sky. Here the **DASA** is the halo which was supposed to bind the sun, the dark non-raining clouds, or the eclipse.

8/40/6 says "Let us share<sup>19.90</sup> with Indra the hoarded wealth of the **DASA**." There could be a temptation here to regard **DASA** as a wealthy non-Aryan whom the Aryans looted. But consistent with other references, here also this hoarded wealth is obstructed rain. The release of rain brings beautiful crops and this wealth is shared with Indra in the form of offerings in the sacrifices.

10/38/3 says "give<sup>19.91</sup> us the power to resist **DASA** or Arya, whoever challenges us in battle." Here it is the devotee and not Indra who is to fight the **DASA**. Even so, the **DASA** need not be a human enemy. God's blessings are sought even for fighting non-human enemies or calamities.

Even if '**DASA**' is here-taken to refer to human beings, since it is juxtaposed with "arya" referring to humans, it does not stand for a group of people of a distinct race or language. The words **DASA** and **DASYU** are used to refer to servants and robbers in later literature. That may be the sense here. The word Arya used side by side therefore means non-robbers, and non servants, non-robbers and yet inimical to the hymn-maker.

7/19/2 names two **DASAS**<sup>19.92</sup> viz. **SHUSHNA** and **KUYAVA**. If **DASA** simply means a troublemaking water-obstructing power, how is it that it has been mentioned by two proper names?

This difficulty is not serious. Diseases like Malaria have different names for their different types. Shushna means drier, and **KUYAVA** derived

from the root YU meaning mixing or tying may mean pollutor or obstructor. The above mentioned names are not strictly proper names, since they are descriptive. It is well known that the Rigveda personifies natural phenomena.

Macdonell says that the word<sup>30</sup> **ILEEBISH**, which has no Sanskrit derivation, must be the name of a non-Aryan **DASA**. But the Rigveda nowhere says that **ILEEBISH** was a **DASA**. Sayana takes the word **ILEE** as a variation of **ILA** just as a girl named **SHEELA** is called **SHEL**. **ILA** means earth. **BI** is then taken as a curtailment of **BILA** i.e. hole, the remaining **SHA** to indicate resting, and the whole word is made to mean one who hides deep in the holes of the earth. Dropping the letter **LA** in **BILASHA** could be justified on the analogy of dropping the letter **YA** in **HIRANYAMAYA** to form the word **HIRANMAYA**. This interpretation appears forced, but Sayana may have some traditional basis for it, since it gives a plausible explanation of the statement that Indra tracked down **ILEEBISH** ultimately, though he could not be easily found. May this be referring to the frozen water in deep and narrow wells? This water melted, i.e. Indra in the form of the sun penetrated to this **ILEEBISH** hiding in the depths.

Dandekar, following the footsteps of western scholars, says: "The word **DASA** is derived from **dahe**, an anti-Aryan tribe in west Asia. Gradually the word came to mean enemy. This change in the meaning of the word **DASA** proves the migration of the Aryans from West to East."

These statements are typical of a good deal of writing in this field which seems to be guided by the maxim that making assertions amounts to proving them. **DASA** in Sanskrit literature nowhere means enemy. No evidence beyond similarity of sound is given to show that **DASA** is derived from **dahe**. Further, it is not considered necessary to prove that **Dahe** is more ancient than **DASA** in order to maintain that the latter is derived from the former. **DASA** in the Rigveda nowhere refers to any tribe. Macdonell regards the non human connotations of **DASA** older than the human ones. If therefore the migrating Aryans named their **dahe** opponents as **DASA** on the basis of the older usage of the term which was current in the Sapta-Sindhu region, it indicates a migration from east to west.

### Dasa and Dasyus as Humans

It is not suggested that the word **DASA** never refers to human beings in the Rigveda. 8/56/3 tells<sup>19.93</sup> us that Pautakrata gifted 100 **DASAS**. "Oh, dawn, let us get **DASA** ful wealth" says 1/92/8.<sup>19.94</sup> Here **DASA**

means servant, or perhaps slave. But, if this were to suffice for inferring any Aryan-non-Aryan conflict, all ancient societies must be said to have a history of such a conflict, since all ancient societies had slaves and servants.

8/46/32 says<sup>19.95</sup> "the talented got hundreds when there was the saviour **DASA** Balbootha. Chitrav<sup>14</sup> takes Balbootha as the name of the **YAJAMANA** or the host who gives the gifts. So, the **DASA** here is not a trouble-maker, but a giver. The word **DASA** here seems to be derived from the root **DA** 'to give'. This explains how later literature used the word **DASA** in the sense of servant. The servant "gives" or 'renders service'.

The word **DASYU**, on the other hand, is derived from the root **DAS** 'to trouble' only and not from **DA** to give. It was therefore not possible to use the word **DASYU** in the sense of servant and was used to designate a thief.

The word **dasa** can be derived, both from **DAS** 'to trouble' and **DA** 'to give'. To harmonize the two resultant meanings, Sayana in 1/92/8, makes **DASA** to mean those who trouble the enemies i.e. soldiers. The soldiers are both servants and trouble-makers, service to the master and trouble to the enemies. If this is correct, the word **DASA** in the sense of servant originally referred only to those who served as soldiers, and was later extended to those who rendered any form of service.

### The Panis, Trade and Cows

Along with **DASYU** and **DASA**, **PANIS** are mentioned by the hymn-makers as their enemies. Let us see whether the **PANIS** can be said to be non-Aryan human foes.

The main hymn mentioning the **PANIS** is 10/108. Here **Sarama**, a bitch, comes as an emissary of Indra in search of the cows stolen by the **PANIS**. The **PANIS** try to win her over by offering temptations. But she does not budge.

The region where **SARAMA** came in search of the cows was beyond **RASA**. Some writers take **RASA** to be a tributary of the Indus. But this is not convincing because the **PANIS** ask **SARAMA** "how could you cross the waters of the **RASA**?" Crossing a tributary of the Indus is not such a great feat as to surprise the **PANIS**. Sayana therefore rightly takes the **RASA** as a heavenly river, construing the name **RASA** from the root **RAS** 'to sound'. **RASA** is therefore the river of thundering clouds. This shows

that the abode of the **PANIS** was beyond the thundering clouds, and the **PANIS** were not human beings.

That the river **RASA** crossed by **SARAMA** was a river of clouds gives a clue to the identity of **SARAMA**. **SARAMA** means a bitch. Since this bitch went beyond the clouds, it seems that **SARAMA** refers to some star. The Greeks named two stars after dogs, the *Canis Major*, and the *Canis Minor*. In Indian astronomy these stars are called hunters and not dogs. But hunting dogs are also hunters, and therefore one may say that **SARAMA** denotes these two stars. They are high above the clouds and were supposed to be sent by Indra to search for the cows i.e. the water which was so concealed by the **PANIS** that even a river of clouds was unable to give rain.

Who were then the **PANIS**? Sayana takes **PANI** to mean a miserly trader. The root **PAN** means 'to transact business' or 'to gamble'. Trade, like gamble depends on luck. It is not uncommon to charge the traders of miserliness.

The second adjective of the **PANIS** is **BEKANAT**. Sayana derives this to mean those who make others dance by deceptive calculations two, one etc.

The third adjective is **GRATHINS**. Sayana takes this to mean talkers. But another adjective of the **PANIS** viz **MRDHRAVACHA** is taken by him to refer to people of impaired speech. It is inconsistent to describe people of impaired speech as talkers. The word **GRATHI**, therefore should be derived from the root **GRANTHA** 'to deceive' or 'to bind'. In some forms of the root **GRANTH** the **N** is dropped, as in the past participle **GRATHITA**. **GRATHI** may be a similar alternative form of **GRANTH** meaning deceiver or ensnarer.

**AKRATU** and **AYAJVAN** i.e. non-sacrificers, **ASHRADDHA** i.e. 'non believing' etc, are the other adjectives of the **PANIS**. These are the same as those applied to **DASAS** and **DASYUS**.

All these adjectives are applicable to human beings and may create the impression that the **PANIS** were humans, mainly traders. But there are umpteen unequivocal reference to the **PANIS** as non-human. 1/151/9 says "Oh, Mitra-Varuna, the **PANIS** did not attain your divinity." This could not have been possibly said of miserly traders, because nobody expects them to attain divinity and vie with the **MITRAVARUNAS**. The powers of the **PANIS** were superhuman and therefore they could have attained divinity, but for the evil purpose for which the **PANIS** employed

them. 1/182/3 requests the Ashvini Kumaras to make light for the sake of the **VIPRAS** or the intelligent by killing the **PANIS**. It is strange to expect that light will be created by killing miserly traders. It is clear that obstructing light was one of the functions of the **PANIS** like that of the **DASYUS**. 4/58/4<sup>19.97</sup> says "the **PANIS** concealed three types of Ghee in the cows, so that the human beings should not get it. But then Indra released the milk, the sun the curd and the fire Ghee. The meaning is quite clear. The cows became dry as a result of starvation. Indra brought rain and gave ample fodder to the cows. As a result they became rich in milk. The sun helps the milk ferment into curd, fire transforms butter into ghee. **PANI** is therefore the drought, the miser-villain.

6/13/3<sup>19.96</sup> says, oh fire, whomsoever you send, coupled with the lightning-fire, kills **VRTRA**, and takes away the wealth and power of the **PANIS**. The fire here is **RTAJATA** i.e. kindled in sacrifice. It was believed that the sacrifice brings rain. The fire kindled in the sacrifice was believed to kill **VRTRA**, the obstructor of water and the resulting rain destroys the scarcity-producing power of the **PANIS**, and bestows prosperity.

10/67/6 says<sup>19.98</sup> "Indra killed **BALA** who confined the cows, by sound alone. He befriended the Maruts, made the **PANIS** cry and wrested the cows. Nobody says that **BALA** was a man. The Maruts are winds, not human beings. The principal actors in the drama, Indra **BALA** and Maruts are all non-human. Why should **PANIS** alone be taken as human? The meaning is obvious. Indra, the god of rain, killed **BALA**, the rain-obstructing demon, by thunder; with the help of the winds he brought the clouds to the proper place by overcoming the Panis who had grabbed them, and made **PANIS** cry, and released the cows.

It is not only humans who can be charged of miserliness. 1/33/3<sup>19.99</sup> requests Indra himself that he should not be a **PANI** i.e. a miser where the devotees are concerned. 8/45/14 calls<sup>19.00</sup> Indra a **PANI**.

This cannot fail to remind us of Namadeva, a Maharashtrian Saint who calls his god a miser.

### Robbing the Cows

It is by now beyond doubt that the **PANIS** were not human beings. The main misdeed of the **PANIS** was robbing the cows. The word *gow* usually meaning cow in later Sanskrit, is not used in that sense in the above context. 9/108/6 talks<sup>19.101</sup> of releasing the cows entombed under a rock. 10/68/10 is<sup>19.102</sup> in a similar strain. The

cows which have to be released from under a rock are not obviously the milch quadrupeds. The cows are called **APYAS** i.e. watery. So the cow here is the water released from the black cloud, or from the well dug by breaking hard rocks.

But the word cow cannot always be interpreted as water in connection with the **PANIS** since 1/32/11 says<sup>19.76</sup> that the **DASA** and the **AHI** obstructed water, just as the **PANIS** had concealed the cows. Since the concealment of the cows is used as a simile here for the obstruction of water, the two phenomena are supposed to be different though similar.

Overall, it seems that gau stands for wealth in general. The cows were used as currency in Vedic times. 4/24/10 asks<sup>19.103</sup> "who will buy my idol of Indra for 10 cows?" So cow means money or prosperity. The Vedic society was mainly agricultural. The people in general are called **KRSHTIS** 'tillers'. The principal deity of the people is Indra, the god of rain. Drought and over-rain are the two principal enemies of the agriculturist. So Indra is constantly requested to ward these off. Enemies like the **PANIS** create these calamities and thus create scarcity. They take away the cows and conceal them. When a good crop is expected, the rain unexpectedly gives a go-by or the crop is eaten away by pests. When a good milk-yield is expected, suddenly a disease may spread among the cattle, some cows may die, some go dry. This is the doing of the **PANIS**. They take away the cows, i.e. they take away prosperity. Like a miserly trader, they so wangle the accounts that we always get less than what is our due.

That the cows stolen by the **PANIS** were not really cows and that the **PANIS** were not human beings is unmistakable from most of the hymns mentioning them. 10/108 says: "Let the<sup>19.104</sup> hidden cows whom Brahanspati, Soma, the grindstone that grinds soma, Brahmins and sages obtained, come out in the course of nature.' Brhmanaspati etc are all partakers in a sacrifice. It was believed that the performance of a sacrifice wards off the scarcity-producing **PANIS** and bring prosperity. If the result of a sacrifice was a victory over human foes, called **PANIS**, in battle and getting of milch animals, there was no point in saying that the soma and the grinding stone got these animals.

The first line hoping that the cows should come out by **RTA**, i.e. in the course of nature, is important. Timely rain and freedom

from disease brings prosperity, because nature is allowed to take its course. The sacrifice is called **RTA**, because it wards off disease and rain-obstruting powers which do not allow nature to run its course. Recovering the cows by overpowering a human foe can hardly be described as a process in the course of nature.

Macdonell<sup>34</sup> concedes that the **PANIS** were atmospheric demons. But even though vanquished, he argues still by saying that later on the word was applied to non-Aryan human foes. He has not specified where these later references are to be found. We must therefore ourselves see whether such references can be found.

### Panis as human

Says 10/60/6 "Oh, king Asamati,<sup>19.105</sup> for the sake of the relatives of Agastya, yoke the tawny steeds to your chariot and attack the non-giving **PANI**." Here the non-giver may be construed as not giving offerings in sacrifice, and then regard the **PANIS** as non-sacrificing non-Aryans, whom Asamati is beseeched to attack. Such an interpretation does not fit the context at all, for after hearing the prayer, Asamati did not start on an expedition against any non-Aryan, he resurrected Subandhu by propitiating the fire. So the **PANI**, whom Asamati is beseeched to attack is untimely death, a work of **PANIS**, who make scarce all the good things of life including longevity.

Brhaddevata narrates the following story as alluded to by this hymn. The hymn is addressed by the sister of Agastya and the mother of Subandhu. After the above sixth verse, verses 7 to 11 describe how fire resurrected Subandhu. This fire appeared as a result of the invocations of Subandhu.

Sayana comments on 10/57 "There was an **IKSHVAKU** king named Asamati. He had four priests. Bandhu, Subandhu, Shritabandhu and Viprabandhu. Asamati dispensed with their services, and appointed others skilled in magic. The four dismissed priests got angry and subjected the king to withcraft. When the new priests, the **ASURAS** came to know this, they killed Subandhu. Subandhu's brother then sang this hymn.

Chitrav says<sup>14</sup> in commenting on 10/57: "According to the Brhaddevata, the two asuras Kirat and Akuli poisoned the mind of king Asamati and got his priest Subandhu killed, and banished the

younger brothers, Shrutabandhu etc. The brothers thereupon sang 10/57 and brought Subandhu to life.

The above version of the allusion indicates that Asamati was hostile to Subandhu. So it looks incongruous that he brought Subandhu to life and that his mother should address her prayers to Asamati, for bringing him to life. The sixth verse can be most properly taken to have been addressed to Indra and not to Asamati. If Sayana has to be accepted one could say that the prayer was addressed to Asamati, because he was very powerful, he took pity on the bereaved mother and answered her prayers. Even so, the defeat of the Panis does not refer to the defeat of any human foes, but of death.

Another factor to note is that unlike the words **DASA** and **DASYU**, the word **PANI** has not been used to refer to human beings even in later Sanskrit. Kalidasa uses the word **VIPANI** for market, but **PANI** is not found to have been used for a trader or any other human being. Shukla Yajurveda describes the **PANIS** as **DEVAPEEYUS**. Both Maheedhara and Uvvata translate this as deity-haters. The English-Sanskrit dictionary of Monier Williams does not give **pani** as an equivalent of miser or trader. The dictionary of Apte does give miser as an equivalent of **PANI**, but, as in the case of other words, does not give any reference where that word is used in this sense.

Just as modern speculations couple **DASA** with the **DAHE** of West Asia, they equate the **PANIS** with the Phoenicians. Beyond similarity of sound, there is no warrant for this equation in the Vedic description of the Panis.

### The Sacrifice and the Battle

In order to grasp what the **DASA**, **DASYUS** and **PANIS** were, and what sort of battles were fought with them by the Vedic people, it is necessary to bear in mind the ancient tradition that the Vedic hymns are mainly prayers addressed to gods in the sacrifices. In other words these sacrifices were themselves the battles fought against these enemies. Sayana on 3/29/9 says that the word **YAJNA**<sup>19.106</sup> is very often used in the sense of battle in the Vedas. 10/27/24 is decisive in this respect. The deity Aditya is your life. Know it. Do not conceal it so much in the **SAMARYA**; Aditya reveals the heavens, but the **PANI** covers it. The going of that pure one never ceases." Here it will be difficult to render **SAMARYA** as **SAMARA** or battle. How can one hide the deity **ADITYA** in a battle? By the dust raised by the

moving armies? It is strange to beseech the soldiers: "do not fight, because the dust, raised by you, hides the sun. Try to know the sun," as if of all the evils of war, the worst is that the dust raised by the armies obscures the sun.

What the poet intends to say is quite clear. Mere ritualistic allegiance to the **ADITYA** does not enable one to know his real nature. It can become a way to obscure it. Mechanical modes of worship cannot take the place of devotion and knowledge.

That the word battle very often refers to the sacrifice which was a battle against evil powers, is crucial in the understanding of the Rigveda. A preconceived notion of the Aryan invasion coupled with the ignorance about the use of the word battle in the sense of Yajna, makes the scholars see numerous battles of the Aryans and the non-Aryans in the Rigveda.

That the word battle refers to **YAJNA** is not based on a stray occurrence. The usage is frequent in the Rigved. 10/87/4<sup>19.107</sup> says; "Oh fire, make your arrows sharp by our hymns and sacrifices, and strike the hearts of the demons".

In sum there is not a letter in the **RIGVEDA** to suggest that the **DASAS**, **DASYUS** and the **PANIS**, the enemies of the Vedic people were human beings. This coupled with the traditional view that "battle" often refers to the sacrifice, proves beyond doubt that the notion that the Rigveda refers to the Aryan-non-Aryan conflict is baseless.

### The Ancestry of Indra

Another fact supporting this conclusion is that the killing of the **DASAS**, **DASYUS** and the **PANIS** is mostly done by Indra. Sometimes the task is assigned to fire, the Ashvinikumaras etc. So these are the deeds of the gods, not events in human history. No researcher has dared call fire and the Ashvins as humans. No important research-worker regards Indra as human. Macdonell includes Indra among the atmospheric gods, and this view can be regarded as a consensus view.

But the Aryan-invasionists are prepared to go to any absurd lengths seeing that regarding Indra as an atmospheric god is fatal to the Aryan-invasion-theory. Perry has come out with the idea that Indra was a human being. R.N. Dandekar<sup>8</sup> and P.R. Deshmukh<sup>33</sup> have followed suit. Dandekar concedes the following-

Indra is associated with thunder and rain. The scimitar of Indra is very often identified as lightening. The rainbow in later literature is called the bow of Indra. The Maruts or the strong winds are his associates. Indra is said to be so great that the earth, even tenfold could not encompass him. He placed the sun in the heavens, and stabilized the mountains which used to fly before. The sky and the earth were sticking together, it is Indra who separated them, kept them apart like the axle of the chariot which keeps the two wheels apart and made room for the living. He breaks the chariot of dawn.

Even after conceding this Perry and Dandekar persist in saying that "originally" Indra was a human being. This is based on the description of Indra's birth in 3/48 and 4/18. The first says that Indra killed Tvashta, the moment he was born, he drank soma and never milk. These are surely no descriptions of a human being. The fourth verse in the second hymn says that Aditi bore Indra in her womb for a thousand years. Aditi was a deity and a deity alone could perform such a feat, no mortal woman. The fifth verse says that the moment Indra was born, he filled the sky and earth by his light. The tenth verse says that Indra was born as a grown up. He was never an infant.

8/45/4 narrates<sup>19.110</sup> how Indra took an arrow in his hand, the moment he was born and asked "who is known as **UGRA** or terrible?" 10/113/4 talks<sup>19.111</sup> of Indra stopping the heavens the moment he was born. 8/79/15<sup>19.112</sup> reports that even when he was an infant Indra sat in a chariot and "cooled" the **MAHISHMRGA** for the sake of mother and father. According to Sayana this Mahishmrnga is the cloud and Indra "cooled" it means made it rain. To regard all these descriptions as descriptions of the birth of a human being is ridiculous. Those who so argue may even say that the phrase "birth of nationalism" refers to the birth of a human being called nationalism.

Dandekar says that Indra's fondness for soma is the greatest proof of his being a man. Says Perry: "10/119 describes the condition of Indra on drinking soma so graphically that it is impossible not to regard him as a human being." Perry and Dandekar may even regard Shiva and Ganesha as men because their fondness for **DHOTARA** and **MODAKAS** are so realistically described. In the very hymn quoted by Perry, Indra says about himself "I will defeat even the heaven and the earth; they are not equal even to my armpit. One wing of

mine is in heaven and one on the earth. I am the fire who conveys the offerings to the gods." 5/29/7 reports<sup>19.113</sup> that Indra drank three lakes of soma. Dandekar dismisses this as an exaggeration, because no human being can drink three lakes of soma. But which other description is not an exaggeration? Is "the heaven and earth not being equal to my armpit" a photographically accurate description of a human being's armpit? In fact, a man in intoxication is prone to incoherent talk. This is what the hymn describes. The description of drunkenness even in a god will contain features which are associated with drunkenness.

According to the **BRHADDEVATA**, Indra in the guise of the sage Lava was surprised while drinking soma by other sages. At this Lava gave the above harangue. This explains the whole situation. The Sage Lava was possessed by Indra or at least he was so posing. So the realism of the description is due to the fact that the description relates to the intoxicated state of a real human being. The fictitious aspect of the description is due to the fact that the speech is the speech of a man possessed by Indra, as conceived by Lava. When a woman is possessed of Kali, she tries to behave like Kali, as commonly understood. The reality in her behaviour is due to the fact that however much she poses, she cannot escape from her own personality. What is one to say about anyone who rushes to the conclusion that Kali herself is human?

If Dandekar's arguments are taken seriously, Shiva has to be regarded as a man living with his wife Parvati in the Himalayas, because his family life, complete with two sons, is very realistically described, and Laxmi and Sarasvati are not personified goddesses, but real women, because their womanly charms and jealousy are vividly described.

A doubt has to be answered here. Rama and Krishna are regarded as historical human beings, but they are also described as performing super-human deeds like bringing the sea to submission by threatening it with arrows, resurrecting the dead and lifting the Govardhana mountain. Why should we then not suppose that the originally human Indra was credited with super-human deeds later on?

Those who have read the Ramayana and the Mahabharata need no answer to this objection. Both Rama and Krishna though human beings, are described as incarnations of god. The god, whose

incarnations they were, is separately and expressly mentioned. Thus the text itself makes it clear that Rama and Krishna were not gods themselves. Their super-human deeds are explained by their being incarnations, though human. The Ramayan and the Mahabharata narrate the life-story of Rama and Krishna from birth to death describing their childhood, youth and advanced age. The super human deeds ascribed to them are few and far between, and even these are done in the course of human acts, whereas in the case of Indra, not a single purely human act is ascribed to him. The Ramayana and Mahabharat themselves state that Rama and Krishna were human beings. On the contrary, the Rigveda nowhere states that Indra was a human being.

A tradition going back to thousands of years regards Rama and Krishna as human beings. All their deeds were performed on this earth. The places associated with their deeds are found throughout the country, and their antiquity reaches beyond the limits of known history.

On the contrary, thousands of years of tradition regard Indra as a god only, like Shiva; he never descended in the form of an incarnation, and all his deeds are associated with natural phenomena, particularly rain. Nowhere is there even an attempt to narrate his biography from birth to death. In the teeth of this tradition and clear descriptions of the Rigveda, it is impossible to regard Indra as a human being, merely on the basis of unrestrained speculations motivated towards finding some support for the Aryan-invasion-theory.

Even so, these speculations, yield results which are by no means welcome to the Aryan-invasionists. E Siegg says that **VYANSA DAS** was a father of Indra. The Vrtra, whom Indra slays repeatedly, was the son of Tvasht, a Vedic god. In other words Indra, the Arya par excellence and Vrtra, the anarya par excellence were nephew and uncle. So the much advertised Arya-non-Arya conflict was an internecine conflict between uncle and nephew, like that of Kamsa and Krishna and that too not of earthly human beings, but of deities.

For, like Indra, the father of his principal adversary Vrtra was a Vedic god. 1/142/10 says 'let the **TVSHTR** nurture us.' According to Yaska, the word Tvasht is derived from the root meaning 'to occupy' or 'to grow'. 1/186/6 requests<sup>19.115</sup> Tvasht to come to the sacrifice. 1/188/9<sup>19.116</sup> calls Tvasht the lord of all forms and the manifest of all animals. 2/3/9<sup>19.52</sup> requests Tvasht to come to the sacrifice. 2/23/17<sup>19.117</sup> credits

Tvasht with the creation of Brahmanaspati. This gave rise to the notion that Tvashta was a Brahmin and Indra incurred the sin of killing a Brahmin. 2/31/4<sup>19.118</sup> requests "Let Tvasht activate our chariot." 3/55/19<sup>19.119</sup> describes Tvasht as the cosmic **SAVITA** 'generator' or sun; he nurtured and protected the people in all ways. 5/46/4<sup>19.120</sup> includes **SAVITA** among the Vedic gods, Vishnu, Vayu, Soma, Rbhu and Ashvinkumaras.

There is thus no doubt that Tvasht was a Vedic god. He seems to be a competitor of Indra. In 10/49/10<sup>19.121</sup> Indra says "I have done what Tvasht could not do." Like the Shiva-Vishnu rivalry of later days, there is Indra-Tvasht rivalry in the Vedas. 3/48/4<sup>19.108</sup> says "Indra defeated **TVASHTA** by his very birth and drank the soma in his chamasa i.e. cup. This Indra-Tvasht rivalry is continued in the second generation by Indra's conflict with Vrtra, Tvasht's son.

The enemies of Indra were not only non-human, they were even godly. Superhuman powers, even when harmful, are regarded as godly. One prays to them in order to protect oneself or postulate a god more powerful than them, and then seek refuge in him. The reason why the words **SURA** and **ASURA** are often confused is that both the benefactor and harmful superhuman powers are the subjects of prayer.

In sum, the so called Aryan-non-Aryan conflicts in the Rigveda were superhuman or naturalistic phenomena, some times described by personifying them. Nobody who reads the Rigveda without any preconceived notions will suspect any reference to human history in them.

### Phallus-Worship and Purandar Indra

That the Rigveda does not contain any reference to two human groups: Aryan and Non-Aryan, either linguistic or racial, will be clear from the explanations so far. Now let us see whether Aryan-non-Aryan as in-group and out-group, like native and foreigner, co-religionists and unbelievers etc are found in the Rigveda.

It is very often said that the "Aryas" were sacrificers and opponents of idol-worship, and that they specifically hated phallus-worship, these phallus and idol-worshippers were non-Aryan.

There is not a letter to support the idea that the Rigveda abhors idol-worship. 4/24/10<sup>19.103</sup> asks "who will buy my Indra for ten

cows? Who will return him to me when he kills Vritra?" 8/1/5 says "Oh, Indra, I will not sell you for any price, neither for a thousand nor for ten thousand."<sup>19.200</sup>

It is only the idol of Indra that can be sold, not Indra himself. The first verse exemplifies the practice of pressurizing the god by threats.

The poet threatens to sell Indra, because he does not answer his prayers, but he is beset with doubts about the advisability of the act, he hopes that Indra may yield after being sold, and answer his prayers. He therefore wants him back also.

Rigveda is thus a composition of idol-worshippers, but some say that it was nevertheless against phallus-worship. 7/21/5<sup>19.122</sup> is often quoted in support of this view, because it says. "Let not the SHISNADEVAS come in our sacrifice." 10/9/13<sup>19.123</sup> is another verse which says that Indra snatches away the wealth hidden in a hundred-doored castle of the enemies and kills the SHISNADEVAS. The word SHISNADEVA has to be translated as phallus-worshipper in order to take these verses as condemnatory of phallus-worship.

But Sayana interprets the word to refer to those who play with the penis i.e. those given to sexual practices regarded as perverse. The meaning is grammatically and contextually befitting.

"But", it may be asked, "the meaning phallus-worshipper is also befitting. Why then must it be rejected?" The following considerations are congruent in answering this question.

Why were the SHISNADEVAS coming in the sacrifice? To participate in it or to destroy it like Maricha and Subahu in the Ramayana? If they came to participate, it means that in addition to being SHISNADEVAS, they also practised the Vedic modes of worship. But if so, why is the divine Indra needed to prevent them? Did they hide the fact that they worshipped the phallus, so that only the divine Indra could detect them? Phallus-worshippers are not known to disown their mode of worship. On the other hand, those who take to perverse sexual practices want to keep them secret, and there is no means of knowing by appearance or other cues who indulges in such practices. The help of Indra is therefore necessary to detect such people, so that they do not violate the sanctity of the sacrifice. The prefix API in APIGUH 'transgress' suggests that the mere presence of the SHISNADEVAS amounted to trespass or transgression

of the holy sacrifice, though they were not expected to attack the sacrifice in any way.

The word APIGUH cannot be properly translated as attack; the correct expression indicating attack would have been ABHIGUH. One may however insist that transgression itself can be a result of attack. But if the hymn-maker wants to convey that the SHISNADEVAS attack the sacrifice, it sounds strange that Indra is beseeched only to bar their entry into the sacrifice. Indra pursued Shambara for forty years, hunted him out of his hiding place and killed him. He was not satisfied by mere defensive warfare. 10/99/3<sup>19.123</sup> speaks of Indra destroying the SHISNADEVAS by actively invading their PURA. So the poet could not have been satisfied by merely preventing the entry of the SHISNADEVAS.

The battle mentioned in 10/99/3 is also a sacrifice, as is clear from the word SVARSHATA 'heaven leading' battle. The sacrifice was believed to take the sacrificer to heaven. Indra came to this battle ANARVA i.e. without a horse. This again indicates that the battle referred to is the sacrifice, where cavalry is not used. In the phrase SHATADURASYA VEDO, Veda is better translated as knowledge concealed by a hundred doors. This, knowledge is the same as is referred to in 7/21/5 i.e. the knowledge as to who is SHISNADEVA. Indra obtained this knowledge and destroyed the SHISNADEVAS, so that they could not defile the sacrifices by their unholy presence. 10/99/3 has therefore essentially the same meaning as 7/21/5.

In 10/99/3 Sayana translates SHISNADEVA as non-celebrates. This yields the absurd meaning that Indra went on killing all married men. The word therefore is better translated here also as masturbaters.

The above interpretation shows that the word SHISNADEVA need not be translated as phallus-worshipper, but it does not show that it can not be so translated. In order to show this, Vidhushekhara Bhattacharya says that the words MATRUDEVA, PITRIUDEVA, STREEDEVA etc do not refer to those who regard the mother, woman etc. as gods. It refers to those who venerate them. But the difference between the object of veneration and the object of worship is not unbridgeable. So the meaning phallus-worshipper cannot be ruled out.

What rules it out is that those who worship the phallus are never described as those who regard the phallus as god, just as the



idol worshipper is never described as one who regards the idol as god. The idol-worshipper never regards the idol as god; it is for him only a symbol of god.

Some readers may not be satisfied even with this and the supicion that **SHISNADEVA** refers to the phallus-worshipper may linger. But even if the word is so translated, it does not suggest any Aryan-non-Aryan-conflict. There is nothing to rule out the possibility that among the Vedic people themselves, there was a cult of phallus-worship, which was disliked by other Vedics. The religion which is polytheistic and idol-worshipping could very well have comprised a sect whose idol was the phallus.

### Phallus-Worship and Vishnu

The view that the phallus-worshippers were the non-Aryan opponents of the sacrifice is thus baseless. In fact the Rigveda itself contains references showing that the Vedics themselves practised phallus-worship. Says 7/100/6<sup>19.124</sup> "Oh, Vishnu, you say you are **SHIPIVISHTA**. Is this something to be flaunted? In battle you took another form. Do not hide this other form from us."

In ancient times, Vishnu gave up his form, assumed another, and helped Vasistha in battle. 7/100/6 refers to this. Nirukta says that **SHIPIVISHTA** and Vishnu are the two names of Vishnu. **AUPAMANYAVAS** say that "the name **SHIPVISHTA** is older and it refers to the genital male organ '**SHEPA**.'" The older name was given up because it was regarded as obscene.

But some linguists see even in the new name, the old meaning by deriving the word **VISHNU** from the root **VISH** to enter. In any case there are enough indications that Vishnu was conceived and perhaps worshipped in the form of a phallus.

The hymn-maker however does not like that Vishnu should call himself **SHIPVISHTA** and he is requesting Vishnu to suppress that aspect of himself and flaunt the aspect which appears in battle. This aspect is supposed to be different from **SHIPVISHTA**.

This is clear from the battle cry **HARA HARA MAHADEVA**. This is the warrior form of Shiva and this form is different from the phallus form.

The Puranic Shiva had a warrior form and a phallus form. So did the Vedic Vishnu. The Vedics themselves had a cult of phallus-

worship, though a section among them despised it. So even if the word **SHISNDEVA** is translated as phallus-worshipper, and the hymn containing it is interpreted as displaying hatred of phallus-worship, no support for the Aryan-non-Aryan conflict can be found. The cleavage was an internal cleavage within the Vedic fold itself.

The Shatarudriya calls Rudra 'the king of thieves'. Later literature calls Rudra a sharer of leavings **UCHCCHISHTABHAK**, because Rudra is given only what is left after all the other gods have had their share. In popular practice, only rice-balls are offered to Rudra. In the **AGNIHOTRA** after the second offering to Prajapati, the Adhvaryu used to send off Rudra by a peculiar movement of the ladle. Dandekar<sup>8</sup> infers from all this that Rudra was originally the god of the non-Aryans.

This inference is uncalled for. 2/33/5<sup>19.127</sup> says clearly that Rudra is invoked to accept offerings. 1/114/3<sup>19.125</sup> says "we obtain your goodwill by sacrifices; we offer to you our offerings". All these statements show that Rudra was a Vedic god like any other god. When the Rigveda itself venerates Rudra as a god, it is strange that any one should quote later literature to charge that he was non-Vedic.

Even later literature does not prove anything of the kind. That Rudra eats only after all the gods are fed does not necessarily mean that he was inferior to them, it may even show that he was the guardian of them all, and like the captain of the ship, he thinks of his own safety only after everybody else on the ship is saved. The Vedic Rudra is conceived as irascible. 2/33/11 prays,<sup>19.126</sup> "Oh Rudra, do not be offended by our mistakes. Let your arrows slay somebody other than ourselves." An irascible god uses thieves, diseases etc as his army of harassment. So Rudra is called a king of thieves. Sending off Rudra is not dishonour to him. A god is installed for a specific period and then sent off as Ganesh and Durga after their festival period is over.

Though there is no basis for supposing that phallus-worship is non-Vedic, the Rigveda shows that there was a section of the Vedic people who did not like it. There have always been different attitudes about the openness which is permissible about the genital organs. These different attitudes do not justify the postulation of an Aryan-non-Aryan cleavage. The novel "Lady Chatterly's lover" was regarded as obscene and postal services were denied for its

circulation. But a judge held that it has literary merit. The same English society pronounced such extreme judgements on the novel. Nobody infers from this that D.H. Lawrence did not belong to the same ethnic group as those who declared his novel obscene. The conflict between phallus-worshippers and their opponents cannot therefore be taken as a Aryan-non Aryan conflict. Even modern Hindu society contains opponents of phallus-worship. Ghule's<sup>36</sup> repugnance of phalluse-worship goes to the extent of denying that it ever existed; he regarded the so called phallus-symbol as a representation of fire, clear statements of the Mahabharata to the contrary notwithstanding.

Like phallus-worship, the sacrifice also had its opponents. The Upanishads say that the sacrifice is like a boat with holes. But nobody sees the hand of non Aryans in the Upanishads. Later, Buddha, a more radical opponent of sacrifice, called his philosophy "Aryan Truths". Even the Vedics never called him non-Aryan. The same is true of Mahaveera, another prominent opponent of the Vedic ritual. **DASA**, **DASYU** and **PANI** were called non-Aryans, not because they did not perform sacrifices, but because they performed no other worship; they were super-human powers, who could vie with the gods themselves. The Rigveda does not provide evidence to show that mere non-sacrificers were called non-Aryans.

If the word **SHISNAVEVA** is used to maintain that the Rigveda was opposed to Shaivism, one could quote the following verse to show that it advocates Shaivism.

"Indra kills by his speech alone,<sup>19.128</sup> the **ASHIVAS**, who are of foul and impaired speech." (10/23/5). Here the word **ASHIVAS** could be interpreted as non-worshippers of Shiva who are reviled by the Rigveda.

In fact Shiva is as much a Vedic god as Vishnu. The name Shiva as also Ishana applied to Rudra occurs in the Vedas.<sup>13</sup>

Far from being a rival of Vishnu, he is addressed along with him in one hymn (5/3/3) It runs-

*"Oh, Rudra the winds clean<sup>19.201</sup> our birth-place which is beautiful and varied. It lies like the PADA of Vishnu. By its means you protect the secret name of the cows."*

Cows here means water according to Sayana, the reference is to the sky which is the birth-place of Rudra. It is also the **PADA** of Vishnu, **PADA** means place. This word meaning place is later on confused with Pada meaning 'foot' and Ganga is said to take birth in the foot of Vishnu.

### Purandar Indra and The Arya-Non Conflict

After the discovery of the Indus-civilization, the Aryan-invasionists have started saying that the epithet **PURANDARA** 'wall breaker' is bestowed on Indra, because he broke the walls of the city of the non-Aryans. Some occurrences of the word **PURANDAR** will be discussed in discussing the Indus-valley-civilization. But some could be discussed here.

*"Oh, Indra, men know your valour. With it you broke<sup>19.130</sup> the Sharada Puras perforce and punished the non-sacrificing mortals. You wrested the great earth and water.' (1/131/4)*

Sayana interprets **SHARADIYA PURA** as yearly fortification. But it is not likely that anybody would construct fortifications which can last only for an year. In such a case every year the city would be vulnerable during the period when the fortifications are being constructed. Again what sense does it make to say that the great earth and water were wrested by breaking the fortifications? So Macdonell's rendering of **SHARADA** as 'autumnal'<sup>30</sup> is more acceptable. Water begins to freeze in the Himalayan regions in autumn. These rocks of frozen water are the autumnal forts. They are called **SHARADA** also because they are white. Indra in the form of the sun melts these forts, releases the water and clears the blocked routes, thus wresting the water and earth.

Those who regard Indra as the god of white Aryans destroying the blacks, can be confronted with this verse, interpreting **SHARADYA PURA** as the cities of white men destroyed by Indra.

1/174/2<sup>19.131</sup> says: "You broke the seven **SHARADA PURAS**, of the **VISHAS** or speechless people. For the sake of the young Purukutsa, you killed Vrtra and made the flawless water flow."

Here Macdonell renders **VISHA** as places. The obstruction of water is bringing calamities silently, speechlessly. The places of

Vrtra are the frozen rocks of water. They are white as well as autumnal. Indra in the form of the sun melted them and made the waters flow.

6/20/3<sup>19.132</sup> says: "When Indra was praised, he became lethal, vigorous, strong among the strong and of growing lustre. He got the scimitar, which could break the puras. So he became the king of the honyed Soma."

The hymn presents no difficulty, when it is remembered that Indra was a god of rain. Indra got the **PURA** breaking **VAJRA** i.e. the cloud-breaking lightning. These clouds were drained and the autumnal sky shed its Soma honey i.e. moonlight, unhindered. Somaful honey also suggests the blossoming of vegetation such as soma.

6/20/7<sup>19.133</sup> says: "Oh powerful Indra, you broke the strong **PURAS** of Pipru, magic-powered like the Ahi. Oh bountious one, you gave un snatchable wealth to Rjishvan."

Here Pipru whose pura is broken is called magic-powered, an adjective generally applied to **ASURAS** and **RAKSHASAS**, not to men. Secondly, the wealth which Indra bestowed on **RJISHVAN** was un snatchable. Thus the wealth was no material possession which can be snatched away. The non-material nature of the wealth bestowed and the non-human character of the enemy Pipru, who was smashed, indicate that no historical conflict between two human groups is referred to.

6/20/10<sup>19.134</sup> says: "Oh Indra, you broke the seven **SHARADA PURAS** of the **DASAS** for the benefit of purukutsa."

Sayana interprets **SHARADIYA** as belonging to an asura named Sharat. But the usual meaning "autumnal" fits in quite well here. Moreover **SAPTA** need not be translated as seven. It may mean "many" or "crawling". Sayana has interpreted the word in the latter sense elsewhere. The rocks of frozen water i.e. avalanches, some times fall unexpectedly and make movement unsafe. Indra in the form of the sun melts them and makes traffic safe.

It is to be noted that, like the rain, avalanches are an uncertain phenomenon and therefore the credit for ensuring safety from them is given to the prayers to Indra.

In any case the epithet **SHARADIYA** used of the **PURAS** rules out the breaking of any forts. Forts could not be autumnal, nor could they be described as white, unless we suppose that the brick walls of these forts were white-washed by lime. This is very unlikely in Vedic times. The walls in Mohenjodaro do not seem to be white-washed.

2/20/8<sup>19.135</sup> says: "the gods offered Indra strengthening offerings, continuously for obtaining water. They gave him the scimitar with which he smashed the strong forts of the enemies."

Here again the battle is for obtaining water. The gods themselves give offerings to Indra. This indicates that the so-called battle was the sacrifice, not a battle in literal human sense. Indra answered the prayers and smashed the strong forts with the scimitar i.e. drained the clouds with the stroke of the lightning or melted the rocks of frozen water by the stroke of rays.

4/30/13<sup>19.136</sup> runs- "Oh, snatcher, when you smashed the **PURAS** of Shushna, you made all his wealth **PRAMUKSHITA**. Here Sayana renders **PURA** as city and **PRAMUKSHITA** as damaged. But since **SHUSHNA** means 'drier', here also **PURA** can be taken to refer to the clouds, whom the evil Shushna does not allow to rain. The word **PRAMUKSHITA** is also better rendered as collected. Thus the meaning that Indra made the recalcitrant clouds rain, thoroughly fits in with the idea that he was a god of rain.

4/30/20<sup>19.137</sup> calls the **PURAS** stone-made. Such stone-made **PURAS** were dispersed by Indra. The black clouds look like rocks and can be called stone-made Puras. The frozen waters in the Himalayan regions could also be called stone-made **PURAS**. Indra smashed these **PURAS** for the sake of Divodas, released the waters and facilitated the traffic.

### Hariyooپیya

The Rigveda refers to a battle that took place in Hariyooپیya. Some 5000 year-old relics have been found in Harappa. Relying on the similarity of sound, some writers take Hariyooپیya as Harappa, and relate the relics at Harappa with the battle in Hariyooپیya. The name Hariyooپیya occurs in<sup>19.138</sup> 6/27/5. The very next<sup>19</sup> verse uses the name **YAVYAVATI**. According to Sayana, Yavyavati is another name of Hariyooپیya. Those who maintain that Harappa is Hariyooپیya

have not shown that Harappa was ever called Yavyavati. Harappa is situated on the bank of the dried bed of Sarasvati. There is no indication in the verse that Hariyooopia was so located.

Now let us see what happened in Hariyooopia, and whether it has anything to do with the Aryan-non-Aryan conflict.

6/27/5<sup>19.138</sup> says—"the **SHESHAS** of Varashikha were killed by Indra for the sake of Abhyavarti Chayamana. In the first half of Hariyooopia, he killed Vrcheevan, the other was smashed by sheer fright."

Here it is Indra who does the killing, not Abhyavarti Chayamana. Moreover, it is nowhere mentioned that Abhyavarti Chayamana was Arya and an invader, and Vrcheevan was a non-Arya and a "native".

6/27/8<sup>19.139</sup> says that Abhyavarti Chayamana was a Parthava. This suffices<sup>14</sup> for Chitrav to say that he was the king of Persia. The line in question runs thus-

"Abhyavarti Chayamana gives this indestructible fee of the **PARTHAVAS**." Sayana says that Abhayavarti Chayamana was a descendant of the Prthus and therefore the fee given by him is the fee of the Parthavas. There is a king Prthu in the epics. So even if Parthav is taken as referring to Abhyavarti Chayamana, Abhyavarti Chayamana cannot be said to be a Persian.

The overall context does not favour taking Parthava as an epithet of Abhyavarti Chayamana. The straight meaning is that the fee of Parthava is indestructible. Parthava refers to immovable property like land, which is not destructible like moveable property.

Elsewhere Abhyavarti Chayamana is called Parshu. Chitrav makes this mean Persian. Sayana says that Abhyavarti Chayamana belonged to the Devavata family. Is there any evidence to show that any Persian king belonged to the Devavata family?

The following references help in interpreting the word Parshu. 1/105 is based on the following allusion: Ekata, Dvita and Trita were three brothers. They were once travelling in a desert. They found a well. Trita entered the well, drank water, and brought it for his brothers as well. But the ungrateful brothers pushed him into the well and closed the well by the wheel of a chariot lest he should come out.

Trita then prayed to the gods. This prayer is contained in 1/105/8. In the eighth verse Trita says. "The Parshus i.e the bones of my back are troubling me like co-wives."<sup>19.245</sup>

In 10/33/2<sup>19.140</sup> again Kavasha says that the Parshus are troubling me like co-wives. Sayana interprets this to mean that poverty denies wholesome food and comfortable bed resulting in backaches.

It is not understood why Chitrav regards **PARSHU** as referring to a people. In the first place, Kavasha has come to the king Kushashravana for gifts after travelling a long distance." Those who lead the people have led me. I have god Pushan in my heart. It was dinned that the mal-administrator has come." Where are the Parshu people in all this context?

In 10/86/23<sup>19.141</sup> Vrshakapi, bidding farewell to Indra, says: "the human female **PARSHU** gave birth to twenty in a go. Oh Indra, the one whose womb could hold so many, is blessed indeed. Indra is the greatest of all."

Sayana says that Parshu was the name of a female deer. She is called **MANAVI**, because she was the daughter of Manu. But even if we regard this prolific female as human, the word Parshu itself does not provide any ground beyond similarity of sound, to suppose that this female was Persian.

8/6/46<sup>19.142</sup> says: "I take the wealth of the Yadvas, hundred in the Tirinder king, and thousand in the Parshus." According to Chitrav<sup>14</sup>, this means that king Tirindar of the Parshu family gave wealth in hundreds and thousands to the hymn-maker of the Yadu family. 7/83/1<sup>19.202</sup> says: "The big Parshus went east in search." Dandekar takes the name Parshu as referring to a people of the name and regards this as evidence of the migration of Aryas from west to east!

Ghule<sup>36</sup> takes **PARSHU** to mean 'axe', **PRUTHUPARSHVAH** would then mean 'armed with big axes'. This is a much more reasonable interpretation than taking **PRTHUPARSHAVAH** as 'big Persians'. Since the line does not contain any Persians "going east" it does not imply going towards Inda; it can be going east within India.

Some have declared Parashurama to be a Persian, merely on the basis of similarity of sound. Such arguments cut both ways.

One may as well say that Persia is so called, because the Indian Parushurama conquered it.

In 7/83/1<sup>19.202</sup> Sayana interprets Parshu, as bones of the back, on the basis of the Taittireeya Brahmana, which says that the bones of the back of a horse were used for cutting grass. The bones are curved like a sword and some amount of sharpening could make them useful for cutting grass. It seems that the **DARBHAS**-auspicious grass needed for religious rites' was cut by the bones of a horse, and always from the east of the place of the ritual. Bones in place of metal sickles were used, not because no metal was known, but because this was part of the rite. Even now the fire in the sacrifices is kindled by striking the **ARANI** woods and not by matches or lighters. Even though electric lights are in use, gods's altar is still lighted by candles.

That the eastward movement was a part of a ritual and not a migration is made clear by the first half of the line which says that it was undertaken for obtaining the favour of Indra and Varuna. According to Dandekar Indra himself led the Aryas in their eastward march; he himself could not be seeking his own favour.

There is thus no basis for supposing that Abhyavarti Chayamana was a non-Indian. Now let us see whether his enemies can be called non-Aryans in any sense. In 6/27/6 Sayana takes Vrcheevantah as sons of Varashikha. He repeats this in commenting on the next verse. The root Vrch stands for "selecting", and the name Vrcheevan can be derived from it. The father of these Vrcheevans bears a down right Sanskrit name viz. Varashikha. So the enemies of Abhyavarti Chayamana have as much claim to being sons of the Indian soil as he himself. Abhyavarti is a downright Sanskrit word meaning 'headed to' and Chayamana also can be derived from the root **CHI** 'to select'. Thus both the contestants bear a Sanskrit name derived from roots having the same meaning. This is hardly evidence of Aryan-non-Aryan conflict.

The phrase **PATRA-BHINDANA** an adjective of Vrcheevanas in 6/27/6, is rendered as 'breakers of the sacrificial pots' or 'the wherewithals of sacrifice', by Sayana. This may tempt some to infer that the Vrcheevanas were anti-sacrifice and therefore non-Aryans. Extending the meaning of pots or wherewithals is stretching it, and taking it to mean simply 'pots' yields the queer meaning that the Vrcheevanas were fond of breaking the pots of the sacrifice.

Interpreting 'Patra Bhindana' as 'broken pots' after Chitrav yields a more sensible meaning viz that the Vrcheevanas were rendered useless like broken pots.

The inference that the Vrcheevanas were smashed by the Aryan god Indra and this indicates that they were non-Aryan is a non-sequitor. One may as well say that the brothers of Aurangzeb were non-Muslims since Aurangzeb credited allah with their destruction.

One difficulty about the hymn is in the last verse. Bharadvaja acknowledges that Chayamana gave him gifts. This indicates that Bharadvaja was a contemporary of Chayamana. But the hymn does not describe the exploits of Chayamana. Only in one verse, Indra is said to have killed the sons of Varashikha for the sake of Chayamana. In other verses even this proxy-work is not mentioned. It is Indra's exploits, and not those of Chayamana, that form the subject of this hymn. So the fee was given for services other than singing of the deeds of Chayamana, such as composing eulogies of Indra or performing religious rites. If the deeds of Indra are the subject of the hymn, it cannot be interpreted as referring to any human warfare. It refers to the battles of Indra against superhuman enemies.

### The Dasharajna War

The references to the **DASHARAJNA** war, which is sometimes interpreted as an Aryan-non-Aryan war are the following-

"O Indra-Varuna<sup>19.143</sup>, the ten non-sacrificing kings, united could not fight Sudas. The sacrificial hymn of the sages fructified. The gods came on their invitation." (7/83/7)

Since the enemies of Sudas are called non-sacrificers, this is taken as a reference to the Aryan-non-Aryan conflict.

Who were these ten kings? 7/83/4<sup>19.144</sup> says: "Oh Indra-Varunas, you protected Sudas before the armed Bheda could come near him. In the **HAVEEMAN** you answered the prayers of Trtsu and his priest-hood became true.

Here Sayana renders **HAVEEMAN** i.e. calls, as battle in which the warriors utter challenging calls to each other. But the word stands for a sacrifice in a more straightforward sense, since it consists of calling the gods by means of hymns. Bheda, the enemy of Sudas, does not seem to be a human being, since the hymn refers to sacrifice and not to battle, and Bheda is killed by Indra-Varuna, not by Sudas.

7/18/5 reports<sup>19.145</sup>: 'Indra made the rising water shallow and fordable for Sudas. The praise-worthy Indra made the growing and SHIMYU curse of the rivers ASHASTA for the hymn-maker'.

Sayana does not take SHIMYU as a proper name but as an adjective meaning 'damaging'. The whole verse then ceases to refer to any battle. The reference is most probably to a flood-controlling operation. Chitrav<sup>14</sup> and Ghule<sup>36</sup> take Shimyu as a proper name of an enemy of Sudas, who was drowned in the river. But the verse does not yield such a meaning. The root SHAS stands for killing or harming. So ASHASTEERH would mean harmless, and the line would mean that Shimyu was saved, NOT drowned. Sayana avoids this by taking A in ASHASTI stand for ABHI, but he does not give any reason why the patently negative A should be made positive by transforming it into ABHI.

7/18/9<sup>19.146</sup> mentions the enemies of Sudas, but does not name them. They are called SUTUKA 'having good sons' and VADHRIVAK 'talkative', according to Sayana. These enemies were killed MANUSHE i.e. in the human world or for the sake of human beings. If we take the first meaning, we have to suppose that these enemies existed outside the human world also.

Elsewhere, Sayana makes Sutuka mean 'lethal' and VADHRIVAK 'of impaired speech'. These meanings fit in better here also. These enemies were the lethal powers without the power of speech. They were killed MANUSHE i.e. for the sake of human beings. If the SH in MANUSH is taken as a vowelless consonant, MANUSHE as dative can easily yield the meaning "for the sake of" Even if it is taken as vowelless SHA, MANUSHE is locative, and locative can indicate purpose as in the example "the elephant is killed in i.e. for the sake of ivory."

According to some 7/18/15 mentions TRTSU as an enemy of Sudas.

It runs-

*"The Trtsus VEVISHANA<sup>19.147</sup> by Indra ran like water flowing down. Those having bad friends, the ignorant, and the battered left many enjoyable goods for Sudas."*

Here the word VEVISHANA is translated as ganging up and the

word for fighting is supplied to 'Indrena-with Indra'. But Ghule takes Indrena Vevishana to mean 'supported by Indra'. In this interpretation, no word has to be supplied. It is thus more acceptable. The Trutsus were rushing to battle and were not running away from it. The adjectives in the second line are not meant for Trutsus but for the enemies of Indra, who were defeated.

This interpretation is supported by other references. 7/83/4<sup>19.144</sup> says that the priesthood of Trutsus became blessed. 7/18/19 says that Trutsu and the Yamuna avat i.e. 'pleased' according to Sayana, or 'backed Indra'. 7/83/8<sup>19.149</sup> says: "Indra and Varuna helped Sudas, when he was summoned in the DASHARAJNA battle. Here the whitish, matted, and intelligent Trutsus served by heart-felt salutations."

Here if the second line is to be made to refer to the surrender of the Trutsus after their defeat, the Aryan enthusiasts will find themselves in trouble, because the Trutsus are described as whitish. The verse however contains nothing to indicate that the Trutsus were the enemies of Sudas.

7/33/6<sup>19.150</sup> says that the progeny of Trutsus prospered by the priesthood of Vasishtha.

Since in all these places Trutsus are said to be the favourites of Indra, in 7/18/15<sup>19.147</sup> also they should be regarded as so referred in acceptance of the interpretation of Ghule.

3/53/11<sup>19.151</sup> says-"Oh Kushikas, come hither. Release and enthuse the horse of Sudas for obtaining wealth. Let that king perform sacrifices in esteemed places of this earth killing Vritra in east, west, north etc."

Here the enemy of Sudas is Vrtra, who was not a human being, as shown before. Again, the enemy is in the west also, not only in the east as the Aryan-invasionists would have it.

So the enemies of Sudas were non-humans killed by Indra, or even if humans, belonged to the same stock as Sudas.

The PAKTHA, ALINDA and SHIVA mentioned in 7/18/7 were non Aryans according to Dandekar. The verse runs as follows:-

*"The PAKTHAS<sup>19.203</sup>, BHALANASAS, ALINAS. VISHANINS and Shivas sang hymns. As a result, the*

*cofighter of the Aryas gave the men cattle, wealth,  
to or from, Trutsu by fighting."*

Here **TRUTSUBHYAH** can be construed as "from", as well as "to" the Trtsus. Keeping with the consistent description of the Trutsus as the favourites of Indra, it is reasonable to suppose that Indra gave the wealth to the Trutsus, and did not snatch it away from them.

Thus interpreted, the tribes mentioned in the first line become the allies of Trutsu, because Trtsu obtained the wealth as a result of their prayers. But whether **TRUTSUBHYAH** is interpreted as above or not, there is no basis for supposing that the tribes mentioned in the first line were non-Aryan. The names of these tribes are Sanskrit. Sayana derives the **PAKTHA** from the root **PACH** 'to cook'. **PAKTHA** therefore means "cooked", or matured by the experience of life. Bhalanas is interpreted by him as "of auspicious faces", one name of Shiva is Bhalla, and the Hindi Bhala carries the meaning "good". Alina is, "immature in penance". Vishanins were those who used black horns to scratch or state ordained. Even if Vishanin is taken to mean those who wore horns on their head, the word does not refer to non-Aryans, because some Vedic gods are described as three-horned, **TRISHRNGA**.

According to Abdul Gafar Khan, there is a tradition among the Pathans that the Pakthas are the same as the modern **PAKHTOONS**. The Anthropologists do not subsume the Pakhtoons among the non-Aryans.

If there is not a shred of evidence to suppose that the enemies of Sudas were non-Aryans, why are they called **AYAJVANAS** or non-sacrificers?

It should be remembered that anti-sacrifice utterances are found in the Upanishads also, but nobody regards the composers of the Upanishads as non-Aryans. There is not a word in the references to the **DASHARAJNA** war that Sudas came from outside India and the non-sacrificing kings were natives of India.

### The Keekatas

Sometimes the reference to Keekata as a non-sacrificing country is cited as evidence of the Aryan-non-Aryan conflict. 3/53/14 says "What<sup>19.152</sup> is the use of cows in Keekata? They do not give milk which

is mixed in Soma. The Keekatas do not heat the sacrificial pot. Give us the wealth of Pramaganda as well as Naichashakha." Sayana and Yaska say that Keekata was a country of non-sacrificers. Pramaganda is taken as **PANI**, and Naichashakha is taken to refer to those who procreate in the low castes.

Here Chitrav<sup>14</sup>, following western scholars suggests that it was the name of Magadha, where the sacrificing Aryans had not penetrated at the time of the Rigveda. But the geography of the Rigveda extends from Kubha in Afghanistan to the Ganga and the Bay of Bengal. The following verse should be noted in this connection:

"The sage, prompted<sup>19.204</sup> by the Deva, the friend of the wind, and the horse of the flowing one, goes to both the seas, the eastern and the western." (10/136/5)

So there is no basis in the text of the Rigveda for the view that the Vedic civilization had not penetrated to Magadha. In fact the view that the Rigveda contains indications of Aryan movement from east to west within Northern India has no foundation. The reference to the western sea cannot be regarded as of a later date simply because it occurs in the 10th Mandala. Mareecha Kashyapa is said to be the earliest hymn-maker, and yet his hymn occurs in the 10th Manala.

Even if we take Keekata as standing for Magadha at the time of Sayana, it is easily explained by the fact that Magadha was the birth-place of the anti-sacrificial cults like Buddhism and Jainism. There is no evidence that in the days of the Rigveda Magadha was called Keekata.

In short, not a letter of the Rigveda lends support to the view that there are references to the Aryan-non-Aryan conflict in the sense of conflict between Aryans inguistically, or racially different from the natives of India, and coming as invaders from some country outside India.

## VI

### Vedic Literature and The Indus Valley Civilization

**The Indus-Valley-Civilization-excavations indicate, as far as excavations could indicate, that the Indus Valley Civilization was a continuation of the Vedic Civilization.**

It is frequently asserted that the Vedic literature, read in the context of the excavations of the Indus-valley-civilization provides evidence of the Aryan-Invasion of India.

#### How far is this true?

The Indus-valley-civilization is so called because the first excavations of the civilization were made in the Indus valley. But subsequent excavations have revealed that the civilization was not confined to the Indus-valley. It extended from the Oxus to the North West, to the Yamuna in the east and the Narmada in the South<sup>38</sup> Nevertheless I prefer to stick to the name "Indus-valley-civilization, first because it is current, and secondly, though not secondarily because the Hindu civilization which has characterized India for thousands of years, itself derives its name from the Indus. The word Indus-valley-civilization has therefore an appropriate suggestiveness.

The most striking feature of the Indus-valley civilization is town-planning. A town of five kilometers perimeter has been found at Mohenjodaro<sup>11</sup>.

It is surrounded by a wall built on brick-plinth. The remains of bastions made of fire-baked bricks have also been found. Nine-meter wide roads, underground drainage, public baths, pillared assembly halls and labour-lines are some other features of these excavations.

#### The Wall breaker Indra

One may wonder what all this has to do with the Aryan invasion. But the western scholars hold that these cities seem to have been deliberately destroyed and the description of Indra as wall-breaker 'PURANDARA' in the Vedas indicates that they have been destroyed by the invading Aryans.

Now, ancient relics unearthed by excavations are necessarily in a battered and defunct state, whether they are found in India or any where else. Why should then only the Indian relics be blamed on the destruction by Indra? Why should Indra not be charged of destroying all the ancient cities in the world and the Aryans emanating from India be said to have conquered the world?

Examining the references to the wall-breaking by Indra we find the following-

#### 1

*"Oh Ashvins,<sup>19.153</sup> let us enjoy your protection. With your grace Saptavadhri broke the captive box which dragged and confined him, as if within walls." (8/73/18)*

This hymn uses the phrase **KRSHNAYA VISHA**. The word **KRISHNA** often means 'black', and therefore the western scholars feel that they have found their hearthrob here. But the phrase **KRSHNAYA VISHA** does not refer to any black people here. The allusion is to the story where the **ASURAS** shut up the sage **ATREYA SAPTAVADHRI** in a box, which like a python, used to drag and swallow its prey. The adjective **KRSHNAYA/VISHA** describes this power of the box. Atreya Saptavadhri, in this predicament invoked the Ashvins for his release. The Ashvins thereupon enabled him to break open the box and come out.

Here the word **PURA** meaning wall is used as a simlie for the wall of the box. It has nothing to do with the castles of the non-Aryans.

#### 2

*"Brhaspati, at the back of the Pura pulled up from<sup>19.154</sup> the ocean, the dawn, the sun and the waters. He found the speech which could resound the heavens." (10/67/5)*



It is very difficult to be sure what the poet wants to say, but for our limited purpose this is not necessary. The hymn definitely talks about cosmic events like pulling out the dawn etc. It is therefore futile to read in it any historical events like attacks on the non-Aryan forts.

## 3

*"Oh Indra,<sup>19.155</sup> in battle after battle, you destroyed the Puras. With your respected associates you subdued Namuchi, who had magic powers, in a far off land." (1/53/7)*

Here the adjective MAYI i.e. 'having magic powers' indicates that Namuchi was not a man since this adjective is generally used for demons. The subduing of Namuchi took place in a far off locale PARAVATI and not in the Saptasindhu country, and in remote times. This suggests that it is a mythological and not a historical event.

## 4

*"Oh Indra,<sup>19.156</sup> you killed Parnaya and Karanja with the lustrous power of Atithigva. You broke the hundred Puras of Vanguda when they were besieged by Rjishvan." (1/53/8)"*

Indra was a rain-god. All his deeds are super-human and some of them may have been referred to in this hymn. But since the words as they stand do not necessarily indicate anything superhuman, the temptation to read historical events in them cannot be ruled out as baseless. Even so, there is nothing in the hymn which can be considered as an allusion to the Aryan invasion. The hymn does not say that Karanja, Parnaya, and Vanguda were Indian natives whereas Rjishvan and Atithigva were foreign invaders. There is nothing against supposing that the war between Rjishvan and Atithigva on the one hand and Karanja, Parnaya and Vanguda on the other was an internecine war. That Aurangzeb was a devotee of Allah does not imply that his brothers, who were also contenders for the Mughal throne, were not.

## 5

*"Oh Indra,<sup>19.129</sup> you battered the moving Pura of Shushna. This added to your lustre and you became even more invokable." (8/1/28)*

Here the PURA battered by Indra is said to be moving and therefore is not obviously a non-Aryan fort. Shushna means dried or sucker. The non-raining cloud is as if a fort of the sucker who does not allow even a drop of it to ooze out. It is this moving fort of Shushna which Indra batters and brings rain.

### The Puras were Vedic not non-Aryan

Dozens of references in the Rigved clearly indicate that the PURAS were built by the Vedic people for their own protection. They were NOT the forts of their enemies. "This fire illuminates the<sup>19.157</sup> Narminipura, i.e. the PURA of ease and comfort, NARMA-He is far-seeing and far-moving. He is lustrous like the sun and assumes many forms." (1/149/3). Sayana explains that the PURA here is Uttarvedi Kurukshetra. Kurukshetra was the heart land of Vedic civilization. "The fire illuminated Narminipura, means that it was kindled there in several sacrifices. Those who construe this to mean that the Aryans burnt Narminipura-a city of the non-Aryans-may as well say that 'Divali lamps illuminated the whole country' means that Divali burnt the whole country!"

That Narminipura was illuminated by sacrificial fires unmistakably shows that it was a Vedic city and not a city of the non-Aryans.

This is confirmed by the following

'Oh fire, those who<sup>19.205</sup> kindle you with offerings protect their manhood. They enter a strong PURA" (5/19/2). The word PANTI in this hymn clearly shows that the entry into the PURA is for one's own protection and not for destroying it. Sayana quotes the line: 'Protect us by a hundred strong PURAS" in order to emphasize this meaning.

*"Oh Indra, satisfy our desires<sup>19.158</sup> for sons and cattle, who are like Puras (R 8/6/23). Being exhilarated by Soma, you give cows and horses which are like protective<sup>19.169</sup> PURAS i.e. walls. (8/32/5). "Oh children and sacrificers, offer worship to the confident and brave Indra who is a protector like a Pura.<sup>19.160</sup> (8/69/8). "Oh Apam-Napat, let not a foreigner<sup>19.161</sup> non-giver, and untruth force-our Pura - fortifications of raw bricks." (2/35/6)*

Here the word **PURA** is used figuratively to indicate a power that protects from the enemy, greed and evil traits.

Examining all the references to **PURAS** leaves no doubt that the **PURAS** were primarily designed for the protection of the Vedic people. Most of the references to the breaking of the **PURAS** are in connection with non-human deeds, and there the word **PURA** is used figuratively. There is not a letter to indicate that the breakers of the **PURAS** were non-Indians.

### A Few More Pieces of "Evidence"

It is said that<sup>33</sup> the excavations reveal the following two pieces of evidence indicating that the Indus civilization was wilfully destroyed-

(1) *"Burnt wheat and palm-seeds have been found in some places. Similarly no doors have been found anywhere. This shows that the doors, like the wheat and palm-seeds were burnt by invaders."*

Fire breaks out in almost every city quite frequently and burnt wheat or seeds can be found almost anywhere. No doors are found even in the red forts of Delhi and Agra. But it is known that these forts were never wilfully destroyed by anybody. It is too much to expect that wooden doors of an uninhabited and buried building will remain intact for five thousand years, specially if they have been washed away by floods. According to one view, some of the Indus-civilization cities have been destroyed by floods. A big river like the Indus changes its course frequently and swallows big cities. Another cause of the defunctness of these cities is the drying up of the Sarasvati. Some of the cities of the Indus-civilization have been found on the bank of the Sarasvati. These cities were abandoned, when the Sarasvati waters became grossly insufficient. Abandoned cities are bound to be found only as historical relics.

(2) *"The skeleton of a delimbed woman has been found on a staircase. On the ground some skeletons of children and women wearing ornaments have also been recovered. This shows that these persons were massacred in battle. Had they been massacred by decoits, the ornaments would have been taken away."*

The notion that only decoits take away ornaments and soldiers never do so is naive in the extreme. Many school books on history

contain a picture of a British soldier snatching away the necklace of Tipu Sultan.

Moreover, there is no firm basis to suppose that the skeletons found are those of persons killed by weapons. That some skeletons are not intact proves nothing. The skeletons are not those of bodies carefully laid in coffins, they are of persons running for life. The probability that they will remain intact is remote.

It is reasonable to suppose that the skeletons are of people trying to run away from sudden floods. Even if it is conceded that some of them are of people killed by weapons, there is nothing to indicate that this was the work of the invading Aryans. The Indus civilization extended over thousands of miles. It is not likely that the people were knit by a single government, and there were no internecine wars among them.

### The Indus Civilization Still Exists

In fact, it cannot be maintained that the Indus civilization itself, as distinct from a few of its cities, has ceased to exist. The difference between the Hindu civilization and the Indus civilization is easily explicable by the lapse of 5000 years. The Hindu civilization today is a continuation of the Vedic civilization, and so was the Indus civilization, as will be clear in the sequel. One does not expect that scientific and ideological developments and contact with other civilizations will leave the Vedic civilization as it was in the days of the Rigveda. The gap between the Vedic and the Indus/Vedic Civilizations is not so wide as to make it necessary to postulate a foreign occupation in between them.

The main feature of the Indus civilization, viz town-planning, is so deeply ingrained in the Hindu mind that it shows itself even after the cataclysmic Turk/Afgan/Mughal invasions. The Mughals built Taj Mahal, but their towns remained a stuffy conglomeration of lanes and gullies. Delhi and Agra cannot vie with Vijayanagar and Jayapur as examples of town-planning.

That the Indians of today are the direct descendants of the Indus civilization people is proved by the 325 human skeletons found in the excavations. These skeletons have been examined by Anthropologists. They conclude that the skeletons do not belong to any of the postulated racial types. Says A. Ghosh, "Cephalic index shows that the skeletons found in Mohenjodaro are like those of

modern Sindhis and those found in Lothal are like those<sup>38</sup> of modern Gujaratis. "If people supposed to be of a different race, had invaded and supplanted the civilization, this could have hardly happened.

The notion, that there are references to the Aryan invasion of the Indus civilization in the Rigved assumes that the Indus civilization is older than the Rigved. This assumption was initially supported by the absence of the skeleton of a horse in the excavations, whereas the horse figures prominently in the Vedas. But the subsequent unearthing of a horse-skeleton<sup>38</sup> has knocked out whatever plausibility this argument had.

According to some western scholars, script is not known to the Rigveda. It is true that script and writing are nowhere clearly mentioned in the Rigveda. On the other hand, pieces of writing have been found in the Indus excavations. It is reasonable to suppose that a period which knows writing must be posterior to a period which does not. It therefore follows that the Rigveda must be anterior to the Indus civilization.

In the face of this, Burrow<sup>7</sup> says that the Indians knew the art of writing at the time of the Indus civilization, but they forgot it by the time the Rigveda came to be composed!

### The Vedic and Indus civilizations

It has thus far been shown that the Vedic literature does not and can not contain any references to the destruction of the Indus civilization.

Now, let us see whether there are any grounds to suppose that the civilizations appearing in the Vedic literature and the excavation are different. In doing this, only the identifications accepted in the reports of the excavations have been used. I have not suggested any identifications on my own.

### Modes of Worship

#### Excavations

The excavations have unearthed some figurines, which are regarded as those of the deities worshipped in the Indus civilization. These figurines are on clay seals. The figures are nude and some of them have horns on their heads. One deity has three horns. A one-horned figure has also been found<sup>39</sup>.

Ox, rivers, the pipal tree and the elephant are some of the objects of worship. Phallus and ring-shaped objects have also been found.

There is a figure of a woman standing on her head, a tree emanating from her vagina. In one figure, a woman is standing with folded hands, a man standing by is brandishing his scythe. One seal displays the figure of a monkey. An archer wearing a black garment, a protective cover on his face, and horns on his head, is displayed on another. A figure resembling goddess Durga has also been found. The figures of bulls show their genitals prominently.

Squares resembling the sacrificial pit, a svastika, and a wheel resembling the one of Vishnu, are some other important finds.

### Vedic Literature

Almost all these deities and modes of worship are found in Vedic literature "Oh, sharp-horned Brahmanaspati, come destroying<sup>19.165</sup> the foetus eating, impoverishing foes." (10/155/2) this Indra, is roaring<sup>19.166</sup> like a sharp horned bull in a herd of cows." (R 10/86/15) "Like a sharp-horned bull, this Indra destroys the enemies by himself."<sup>19.167</sup> (7/19/1)" This ox has three udders and three mouths."<sup>19.168</sup> (3/56/3). This humped<sup>19.169</sup> bull is rejoicing, (10/8/2) The brawny figure is probably that of Vishnu in the form of a boar.

The Vrshakapi hymn mentions a monkey as a deity. "The soma-sacrificer regards Vrshakapi, and not Indra, as god. Vrshakapi is intoxicated by soma."<sup>19.170</sup> (10/86/1) "Oh, Indra, what spell does this brown monkey hold for you? You shower wealth on him."<sup>19.171</sup> (10/86/3)

Phallus worship was one of the Vedic practices. The bull and his fertilizing power are often uninhibitedly praised. The monkey-god VRSHAKAPI is extolled as VRUSHA i.e.oozing (semen). The inhibitions about genital organs, which characterize modern society are absent in Vedic literature. As an<sup>19.172/173</sup> example 10/86/16/17 may be seen. Thus the Vedic literature provides no basis for supposing that the Vedic people frowned upon phallus worship.

The Rigveda holds the Indus and the Sarasvati in veneration. There are two entire hymns addressed to Sarasvati. This is quite in line with the fact that some of the venerable objects in the Indus civilization were rivers. Atharvaveda 8/10/29 and panchavinshati

elephant of Indra. 10/97/5<sup>19.174</sup> refers to *Ficus Aeligiosa* or the **PIPAL** as a repository of medicine and wealth.

The figure showing the emanation of a tree from the vagina is obviously that of mother-earth, symbolizing her fertility. It is not possible to depict a tree emanating from the vagina without inverting the figure. "Varuna wears lustre on the top, his branches are below. Let the banners of these branches be always in our heart"<sup>19.175</sup> (1/24/7) The word Varuna is derived from the root Vr 'to cover', and the all-covering sky is the physical form of Varuna. The sky is also called **Dyows DYAVAPRTHIVTI** or the sky-earth is one of the twin deities of the Rigveda. The earth is complementary to the sky, the sky has its head above and branches below; the earth on the other hand, has her head below and branches above. This complementary nature has been depicted in the above figure.

The figure of the sacrificial female victim is in line with the human sacrifices mentioned in Vedic literature. The *Eitareya Brahmana* describes how *Shunahshepa* was tied to the sacrificial post as an offering. The *Vajasneyi Samhita* 30/16 gives a list of those who are acceptable as human victims in a sacrifice. Human offerings were made to the goddess earth, it is for this reason that a picture of a human offering is imprinted behind that of the mother earth.

The figure of the bark-clad horned archer may be that of god Shiva, in the form of the hunter-**KIRATA**. The *svastika* is regarded as an Aryan sign by the Germans. The worship of the wheel figures in the Rigveda. The year is described as a twelve<sup>19.176</sup> spoked wheel. (1/164/11). The wheel weapon of Vishnu is well-known to all.

The find of a sacrificial<sup>39</sup> pit knocks out the bottom of those who maintain that the Indus civilization was non-Vedic.

Durga, Vishnu's incarnation as a boar etc. are Puranic. According to one view, the epics were composed by the Aryans after absorbing some features of the Indus civilization. But this view requires evidence other than the excavations and the Vedic literature. These two by themselves do not provide any basis for it. Confining ourselves to the excavations and the Vedic literature, we cannot easily escape the conclusion that the mode of worship reflected.

## Funeral

### Excavations

Harappa points to the following types of funerals<sup>39</sup>. 1) burying the whole body, 2) putting the bones in a vessel and burying the vessel, 3) burning the body, collecting the remains and building a tomb on it.

Three skeletons indicating the first practice and vessels, tables and chairs along with them, have been found. In the second practice the body is exposed for the birds to feast on, till it is reduced to bones, and then put in an urn and buried. Hundreds of such urns are found to have been buried in the compound of the house itself. The third practice consisted of cremation, keeping the ash and bone remains in a wide-mouthed vessel along with jewels and bracelets and burying the vessel near the door.

A five-roomed cemetery has been found at Dambasuthi. In every room, remains of corpses have been found in stone-squares.

So few skeletons, whether in vessels or without them have been found that cremation seems to have been the usual method of disposal and burial exceptional.

### Vedic Literature

The funerals referred to in the Vedic literature are similar 10/15/14<sup>19.177</sup> talks of burning and non-burning funerals. *Atharvaveda* gives two more; 1) thrown away **PAROPTA**, and 2) exposed or **UDHITA** bodies.

Zimmer regards<sup>24</sup> the first as the same as the Parsi custom of exposing the corpses to the birds and the second as abandoning an old dying man to die in open. According to Whitney it is not a living man that was left in the open, but a corpse placed on a platform for display.

10/18 describes the ritual of burial. There are indications that the corpse was fully dressed and held a bow in his hand. *Atharvaveda*<sup>24</sup> 17/7/35/3/7 mentions a coffin. Sayana maintains that the burial is not that of a corpse but of an urn containing its bones.

The Chhandogya Upanishad<sup>24</sup> refers to the practice of adorning the dead body with ornaments.

Thus the Vedic literature, like the excavations, gives evidence of both cremation and burial. The Greeks also practised both.

### Language

3000 inscriptions have been found in the excavations<sup>38</sup>. These are mostly on terracotta. Some are on vessels and copper-plates. Some consist of only one letter. One has 26 letters and three lines. The figure of a bull is found with a three-lettered inscription.

There is no agreement among researchers about the script and the language of the inscriptions. But Roy and Gidvani in their Bibliographical essay on the Indus civilization have mentioned 12 renderings as the most important. Out of these, six hold the language to be Indo European i.e. a language similar to Sanskrit. The reading of B. Hrozny is of special importance, because he deciphered the Asia minor inscriptions in the absence of any bi-scriptural clue. His reading is universally accepted and has now been confirmed by a piece of bi-scriptural writing. Hrozny had no doubt that the writings are in a Indo-European language and mention the deities worshipped by the Indo-Europeans. (Aryans). Later Gadd supported this opinion and said that the Indus script was the precursor of the Brahmi. Mohenjodaro vol. III contains photostats of the Indus inscriptions. Experts hold that some of the letters in them are Brahmi. S R Rao, a Neheru scholar reads the names of Aryan deities in the inscriptions. Mitchenev called the language Indo-Aryan. Sudhanshu<sup>41</sup> Kumar Ray, who is not mentioned by Roy and Gidvani but was honoured by the Vatungal foundation by an award for reading the Indus script holds that the language is Sanskrit-like and mentions Aryan names like Dasharatha.

In sum the reading that regards the Indus inscriptions as some form of Indo-European; mentioning Indo-European deities, can count on more advocates than any other reading.

### Dress and Ornaments

#### Excavations

Gold/copper/silver ornaments<sup>39</sup> and jewels were worn in the Indus civilization. Women wore a fan-shaped ornament on their

head. A gold or silver band seems to adorn the head. Ear-rings made of gold/silver wires, necklaces of gold/silver/jewels, rings in fingers, copious gem-studded bracelets and anklets were in fashion.

Women tied their hair in a bow, on the back. Men wore long hair, tied at the back with a parting line in the middle. Beards were common.

Cosmetics like collyrium powder, a kind of rouge, lipstick and a green-coloured clay-ball have been found.

Two garments were worn; one like a dhoti, and the other like a shawl on the left shoulder going through the right arm-pit. Needles for sewing cloth have been found.

Hand-loom have been found in some houses.

The find of a metal mirror shows that the art of making glass-mirrors was not known.

### Vedic Literature

R. 1/173/6 speaks of Indra<sup>19.178</sup> bearing the sky like his OPASHA. Indra made the earth move by touching his OPASHA to the sky." (8/14/5)<sup>19.179</sup> Sinivali is described in the Yajurveda as VASVOPASHA or of luxurious hair. Thus OPASHA designated the hair-do of both men and women.

"Oh fire, reach the heavens<sup>19.180</sup> with your heavenly stoopa." (7/2/1)" Varuna holds his matted hair in the<sup>19.175</sup> bottomless sky." 1/24/7

All these descriptions show that both men and women wore long hair.

Beards are also referred to "Oh Indra, come again and<sup>19.181</sup> again to drink soma showing your delight by your shaking beard." (2/11/17)" Indra is entangled in the dissheveled hair of his beard, moustache, and head<sup>19.182</sup> (8/33/6).

"Indra is in high place moving his beard<sup>19.183</sup>" (10/23/1) Rain follows when Indra moistens the beards of Maruts etc along with his own by the soma juice (10/23/4)<sup>19.184</sup> "Indra is moving his beard with ease." (10/26/7)<sup>19.185</sup>

Indra is thus mainly described as bearded. The bearded deity found at Mohenjodaro may therefore be Indra.

Not all the Vedic people kept beards as is shown by the line." Oh fire, like a barber shaving off a beard, you go about shaving off the forests." (10/142/4)<sup>19.186</sup>

The following ornaments are mentioned. 8/78/3 refers to **Karnashobhana** i.e.<sup>19.187</sup> ear-ornament. Atharvaveda 5/38/3 mentions Kumba. Taittiriya Samhita 4/1/5/3 mentions **Kureera** as the head-ornament of women. 5/54/11<sup>19.188</sup> describes Maruts as wearing chains on the feet and necklaces on the chest.

The word Drapi occurs in 1/125/13,<sup>19.189</sup> 86/14.<sup>19.206.</sup>

Sayana construes this to mean armour, but Varuna in<sup>19.189</sup> 1/25/13 and Savita in 4/53/2<sup>19.190</sup> is not dressed for battle. Why should they wear an armour? The "worn out wear" in (1/116/10)<sup>19.191</sup> cannot be armour. Armour is made of metal and the adjective "worn out" does not quite fit in with it. The **PAVAMANA** or 'flowing soma' in 9/100/9 has no reason to wear an armour. So the word **DRAPI** can be more justifiably rendered as skirt. Similarly the word **SHAMULYA** in 10/85/29 on the basis<sup>19.192</sup> of the referenes in the Jaimineeya Brahmana has been rendered as woolen shirt by Keith and Macdonell. This points to the use of sewn garments.

The words **NEEVI** in Atharvaved 8/2/16 and **PARIDHANA** in the very next hymn point to the use of a lower garment like the dhoti.

Kathaka Samhita 23/1 and Taittiriya Brahmana 1/5/6/6 and Shatapatha Brahmana 2/6/4/5 mention **SHALALI**, the feather of a porcupine used for parting the hair and applying cosmetics to the eye.

Maitrayani Samhita, according to Geldner, Shatapatha Brahmana 5/4/5/27 and Taittiriya Brahmana 1/8/2/3 mention **PRAKASHA**, a metal mirror.

## Food

### Excavations

Some kitchens of the Indus civilization have been unearthed. They indicate that goats, oxen, pigs, hens, ducks, fish etc were eaten. Wheat, rice, barley, dates and milk constituted the main meal.

## Vedic Literature

Vajasaneyee Samhita 18/12 mentions **VREEHI** i.e. rice. The later samhitas mention **NEEVARA** i.e. wild rice. **YAVA** i.e. barley or corn and their fried form **DHANA** are mentioned in the Rigveda 24. Dhan also means any grain. The word **GODHUMA** for wheat occurs in Maitrayani Samhita 1/2/8. Milk is mentioned with the words **KSHEERA**, Go and payas.

Shatapatha Brahmana 3/4/1,2 enjoins the killing of a big goat for a guest. All the animal victims offered to the gods, like sheep, goats, oxen were evidently eaten. Man will not offer to the gods anything which he regards unfit for his own consumption.

Atharvaved 3/5/6 mentions a fisherman and 10/4/99 (ibid) refers to the fish Karvar caught by a fisherman Pownjishtha. Vajasaneyee samhita 30/16 and Taittiriya Brahman 3/8 mentions **DASH**, **KAIVARTA/POWNJISHTHA** and Mainal, all meaning a fisherman, as fit victims in a human sacrifice.

## Sea-faring

### Excavations

The figure of a ship with masts has been found at Mohanjodaro. One of the ships carries two birds. S R Rao maintains that Lothal has a dock suitable for anchoring large ships. Some earthenwares in Harappa bear the figure of a ship. One seal bears a boat made of reeds. Its meshes are clearly seen. This boat resembles the ships of ancient Mesopotamia.

### Vedic Literature

The Vedic literature provides ample evidence of sea-faring. A king Tugra sent his son Bhujyu with an army against an enemy across the sea<sup>14</sup>. His ship was engulfed by a storm. So Bhujyu prayed to the Ashvins. The pleased Ashvins rescued him in their boat and brought him back to his father after three days and three nights. The boat of Bhujyu was navigating a sea, which had no harbour or a place of anchor. This boat had a hundred oars. 6/62/6<sup>19.193</sup> speaks of birds guiding the course of the boat. The word Patatri in the second line stands for masts, **PATATRA** or wings of the ship meaning sails. The sails did not have even a particle of dust-Arenubhih-so far they were from land. **PATATRI** cannot be construed to mean birds, because

birds are already mentioned in the first line. Moreover the **PATATRAS** are spoken of as tied-**'YOJANEHBHII'**. This is not applicable to the birds. 7/69/7 talks of the **PATATRAS** as ware-proof **ASRIDHA** and damage-proof **AVYATHI**. These adjectives are also indicative of masts.

The ancient mariners used birds for knowing the direction. These birds were known as **DISHAKAKA** or direction-crows. The birds can detect land from a considerable distance and when released, they fly towards it. The migratory birds who fly in a specific direction in a specific season also serve to guide the ship.

The mention of masts and the necessity of using birds for finding land point to vessels going to the high seas in Vedic times.

The Baveru Jataka<sup>38</sup> also reports a similar use of birds. The Jataka narrates that some traders reached Baveru (Babylon?) With the help of such birds. The Baveruians had never seen such birds. The traders therefore sold some of these birds to them for 100 Kahanas.

### Upshot

1) Reading the Vedic literature in the context of the Indus civilization-excavations affords not a shred of evidence for the Aryan invasion.

2) The excavations do not provide any basis for regarding the Indus civilization as non-Vedic.

## VII

### The Age of the Vedas

**The traditional date of the Bharata war viz. 3101 B.C. is corroborated by independent evidence. Devapi, the brother of Shantanu composed some of the latest hymns of the Rgveda. Devapi was the great grand father of those who fought the Bharata war. Thus the latest portions of the Rigveda were composed around 3201 B.C.**

The Aryan-invasionists used to concede that Sanskrit is the oldest of the "Indo-European" languages, and there is no evidence of Sanskrit being used anywhere outside India., prior to the Vedas. But the latest editions of the Oxford dictionary<sup>6</sup> do not concede this. It is therefore necessary to discuss the antiquity of the Vedas for combating the Aryan-invasion-theory.

### Max Muller's Speculation<sup>47</sup>

The initial attempt to fix the date of the earliest hymns of the Rigveda was made by Max Muller. He calls this earliest period the **CHANDAS** period, the Mantra, Brahmana and the Sutra periods coming after it in the order stated. In the Mantra period, the hymns of the Chandas period were classified, and some new ones composed on the lines of the old. In the Brahman period explanations of the hymns of the Chandas and the Mantra period were given. The sutra period is that of the **ANUKRAMANIS** of **SHAUNAK** and **KATYAYANA**. These are editorial types of works. Max Muller assigns the following dates to these different periods.

Sutra period 200 to 600 B.C.

Brahman period 600 to 800 B.C.

Mantra period 800 to 1000 B.C.

Max Muller assigned these periods on the basis of the estimated time required for the transition of the language and thought of one period into the language and thought of another. But beyond dogmatically asserting that such a development required 400 years for the sutra period, but only 200 for the other three periods, he has not given, any detailed working out of the transition of language and thought. One could be content with 100 years for each of the periods and bring down the Rigveda to only 600 B.C. On the contrary there is no reason why one could not take 500 years instead of 200 and carry the date of the earliest period as far back as 2000 B.C.

In fact Whitney and Benfey using arguments similar to Max Mullers do carry back the date of the Rigveda to 2000 B.C.

### The Linguistic Argument

The language of the Brahmanas can be understood without much difficulty by those who can follow the Ramayana and the Mahabharata. This language is called classical Sanskrit and was spoken at least in the days of Patanjali i.e. 150 B.C. This is clear from his statement how different forms of the word gau (cow) are current in different regions, but only gau is accepted as correct i.e. standard by grammar. It is contended that thousands of years could not have elapsed between the language of the Brahmanas, and the language of Patanjali, since the two are so similar that one of them is intelligible to those who know the other.

As against this, it can be pointed out that Max Muller himself allows 600 years between the Patanjali period and the Brahmana period. If intelligibility is the criterion, there is no reason why this should not be taken as 1000 years. The earliest Marathi sentence of 983 A.D. on the Shravana Belgola is clearly intelligible today even after more than a thousand years. It should be remembered that Marathi was not governed by a strict grammar compulsorily taught to all those who entered the field of Marathi letters. The history of Marathi grammar is only 150 years old and Marathi writers who had undergone the discipline of Marathi grammar is a very recent phenomenon. On the contrary Sanskrit grammar has a history which goes back to a period centuries earlier than Panini. Panini himself mentions 10 grammarians who preceded him. The pratishakhyas are grammatical works which are supposed to be even earlier. Estimates of Panini's date vary from 400 to 700 B.C. The date of the grammatical studies can thus be carried back without

exaggeration to 1000 B.C. there is no weighty evidence against Panini having flourished in 700 B.C.

This has not been said for estimating the date of the Vedas from the date of Panini, but to emphasize that from very early times the composers of Sanskrit works were students of grammar and took care that their compositions were grammatically accurate. This served to preserve the uniformity of this language over a wide region as well as over longer periods than is true of other languages. The fact that the Sanskrit language did not change much from the time of the Brahmanas to the times of Patanjali is thus explicable.

Another factor is that whenever the language, in spite of the efforts of grammarians to preserve it, did change, the grammarians amended their grammar accordingly, and the copyists while copying an ancient book did not hesitate to correct it in the light of the new changes. This is recognised by the edition of the Mahabharata brought out by the Bhandarkar Oriental Research Institute. While restoring the older texts, they have followed the principle that the readings which fit the metre and grammar better are later than the readings which do not. The tendency of the copyists to correct the text while copying it is clearly seen in Marathi manuscripts. The verses of Ramdas have been corrected to bring them in line with the language current at the time of the copyist. Parshuram pant, Godbole has done the same for the work of Ragunatha Pandit. It is therefore wrong to suppose that the Vedic literature handed down to us, specially the Brahmanas, is a photostat copy of the originals and estimate the date of the originals from the difference in their language and that of the later works. Such an estimate can at best give us the date of the stabilization of their present form, when these works were regarded sacred and any change in them a sacrilege.

The idea of sacredness arose about the hymns much earlier than about the Brahmanas, because the Brahmanas are after all a commentary on the hymns. The language of the hymns is therefore found to be so different from that of the Brahmanas that it is difficult to understand it without a commentary.

Thus there is nothing in the linguistic argument which can override all other arguments to the extent of completely ignoring them, and even linguistically there is nothing to prevent placing the Vedic literature thousands of years before 1200 B.C.



### The Astronomical Method

The other method is astronomical. This method has been brought into disrepute by many writers who put astronomical constructions on texts which cannot bear them without outright distortion. Some even change the text to fit their desired meaning with the sole justification that this serves their purpose. Some even base their conclusions on astrological as distinct from astronomical statements.<sup>49</sup> There are stock astrological descriptions for auspicious and inauspicious events and these cannot be taken as seriously intended to describe the observed astronomical phenomena. We shall consider here only those astronomical statements which are free from these blemishes. Some noted scholars, a la Sunilkumar Chatterjee<sup>50</sup> have evaded all astronomical arguments by saying that 1) conclusions based on astronomy vary by thousands of years, and that 2) those who composed the Vedic literature could hardly have known any astronomy.

I have called these objections as evasions because-

1) We have seen that conclusions based on linguistic considerations also vary by a thousand years. The much wider gaps between different astronomical estimates are due, not to the undependability of astronomy, but to the fact that many such estimates are based on fanciful interpretations of the texts. When a straightforward meaning of the texts is taken, there is almost no variation in the estimates.

2) As to the Vedic people not knowing any astronomy, this has to be decided on the basis of the Vedic texts themselves; the Vedic texts should not be interpreted on the basis of preconceived notions about the astronomical ignorance of the Vedics. Traditionally, astronomy has been recognized as one of the six sciences necessary for the study of the Vedas-**VEDANGA**-Astronomy was a part and parcel of Vedic lore.

In fact astronomy was a part and parcel of all ancient civilizations. When gadgets like the watch and the mariner's compass were not available, people kept their time and found their directions by astronomical observations. Even now in the villages, if you ask a person when he wakes up, he will not say "at 4 o'clock", he will reply "at the rise of the Venus". The villagers talk of the **Orion-MRUGA NAKSHATRA** as the signal of the rainy season", they do not talk in terms of the Gregorian calendar.

In ancient times a network of roads with boards indicating direction were not available in most places. So the people depended on the heavenly bodies for finding their way. This was much more necessary for the navigators. So the observation that the Vedic people did not know any astronomy betrays an elementary ignorance, not only about the uses of astronomy, but also about the contents of the Vedas.

### Haug<sup>47</sup> and Tilak<sup>51</sup>

The earliest known use of the astronomical method is by Haug (1827-1876). Haug uses the statement in the **VEDANGAJYOTISHA** to the effect that the sun and the moon embark on their northern course when they are in the constellation of **SHRAVISHTHA** 'Delphinus'. Haug calculated that this position dates back to 1186 B.C. Deenit and Tilak hold that on this very basis we can go back to 1400 BC. The Vedas are admittedly anterior to the Vedangas. Haug therefore assigns the following periods-

Brahmanas 1400-1200 B.C.

Samhitas 2000-1400 B.C.

Oldest Hymns 2400-2000 B.C.

Haug's finding is flawless. The statement on which he has based his calculations is found in an astronomical work and there could be no dispute about its meaning.

The reaction to Haug's finding by the European scholars was evasive. Max Muller has gone to the extent of saying that the verse is interpolated and the **Vedanga Jyotisha** is mostly obscure. There is certainly a good deal of obscurity in the **Vedanga**, but there is no obscurity in this verse, and there is no reason why it should not be regarded as a genuine observation in the work beyond the fact that this does not suit Max Muller's prejudices<sup>3,2</sup>

That the Vedic literature is prior to 1400 B.C. is corroborated by the date of the Asia Minor inscription which mentions Vedic deities. The date of this inscription is 1400 B.C. Macdonell<sup>24</sup> tries to evade this piece of evidence by postulating an imaginary Vedic civilization outside India, more ancient than the **Rigveda** and the inscription. But recourse to imagination just for evading inconvenient facts can hardly be called scientific research. Asia Minor has no history of Vedic worship, and therefore the Vedic

deities in the inscription must have been borrowed from a place where there was such a history. This place is no other than India.

Tilak<sup>51</sup> has pointed out that while the Vedanga Jyotisha says that the northern course starts at the beginning of Delphinus, the Maitrayani Upanishad says that it starts in its middle. This gives a period of about 480 years earlier i.e. about 1600 B.C. The Maitrayani Upanishad quotes from the Chandogya. The Chandogya Upanishad is therefore earlier than 1600 B.C. and the hymn period still earlier.

This is corroborated by the latest date when the Vedic Sarasvati was live. This is given by geologists as 1800 B.C.

### The Date of the Bharata War

The Chandogya upanishad mentions Krishna, the son of Devaki. This Krishna is obviously the Krishna of the Bharata war. The Bharata war presupposes the Vedas. According to the Brihaddevata, Arshitishena Devapi, the brother of Shantanu, composed the rain hymn (10/98) in the Rigveda. The Nirukta says that Devapi composed it when there was a terrible drought in the reign of Shantanu, the Emperor of Hastinapura, and the fourth ancestor of the Pandavas. The latest portions of the Rigveda are thus not much more than a 100 years older than the Bharata war.

Megasthenes<sup>15</sup>, who came to the court of Chandragupta Maurya, states that Heracles, who was worshipped by the Shauraseni people flourished 138 years before Chandragupta Maurya. Heracles worshipped by the Shaurasenis could only be Shrikrishna. Taking 20 years for a generation gives 3072 B.C. as a period when Shrikrishna was living. According to the Mahabharata, Shri krishna left his mortal coil 36 years after the Bharata war. The traditional date of the Bharata war is 3101 B.C. This gives 3065 BC as the date of death of Shri Krishna. The difference of 7 years is negligible in a field where estimates vary by thousands, and specially when Megasthenes is talking in terms of generations and not years.

The traditional date of the Bharata war is given in the Aihole<sup>66</sup> inscription which states that at the time of its composition 3735 years from the Bharata war and 556 years of the Shaka era, i.e. 534 AD, had elapsed. This shows that the Kaliyuga, which according to the Mahabharata marked the end of the Bharata war, and which began in 3101 B.C., was widely used even in historical records like the inscriptions. Kaliyuga is the oldest era current in India.

Varahamihira<sup>15</sup> who flourished in the 6th century quotes Garga as saying that one can get the date of Yudhishtira by adding 2526 years to the SHAKA year. This Shaka year cannot be the year of the Shaka era now current, because Garga is held to have flourished before the shaka era. His name is mentioned in the Mahabharata. Doyen Chrysostom, a Greek traveller who came to Tamilnadu in 50 AD mentions the Mahabharata of 100 thousand verses. If the Mahabharat of 100000 verses was well known in Tamil Nadu, a place far off from Kurukshetra in 50 AD it is obvious that the whole of the Mahabharata as it exists today was composed before the Shaka era, and the Garga mentioned in it could not have belonged to that era.

The Shakakala mentioned by Garga could only be the Shakya kala i.e. the Buddha era, because Buddha was called shakya. Buddha's date is 543 B.C. as current in Burma. Adding 2526 to this gives 3069 as the date of Yudhishtira. Yudhishtira is said to have ruled for 36 years after the Bharata war. The date we have arrived at is only three years short of this, when we add the first year after the Bharata war to it. This lacuna is again negligible in a field where estimates vary by millenia.

Vishnupurana<sup>52</sup> states that 1500 years elapsed between the birth of Parikshit and the coronation of the Nandas. This gives the date of the birth of Parikshit as  $364 + 1500 = 1864$  B.C. Considering that the father of Parikshit viz Abhimanyu died in the Bharata war itself, this does not give us the date of the Bharata war earlier than 1865 BC.

The anomaly however is removed by the following statement in the Mahabharata-

*Janamejaya<sup>53</sup> obtained the kingdom, gone in the kaliyuga, from his father Parikshit for a thousand years."*

*(41st Adhyaya, Astika Parva.)*

This statement is very significant. The phrase KALIYUGE GATAM 'gone in Kaliyuga' suggests that the kingdom ended with the end of kaliyuga. According to the ancient tradition kaliyuga consists of a thousand years only. According to the current notion the kaliyuga consists of 432000 years. If this is accepted, it makes no sense to say that the kingdom which Janamejaya obtained ended in kaliyuga, because all kingdoms after the Bharata war which have ended must

end in kaliyuga. "Kaliyuge gatam" therefore means ended with the end of kaliyuga i.e. after a thousand years allotted to the kaliyuga had passed. Secondly, though Parikshit ruled for 60 years, his son obtained the kingdom for a thousand years, i.e. he ruled for a thousand years. The writer makes this strange statement, because he knew that there was a king called Janamejaya who ruled when thousand years of the Kaliyuga had passed, but did not know anything about the kings who ruled between this Janamejaya and the great-grand-son of Arjuna. He therefore fills the gap by making the great-grand-son of Arjuna himself rule for a thousand years.

If there was another Janamejaya a thousand years after the Bharata war, the likelihood of another Parikshit 237 years later than this Janamejaya cannot be ruled out. The Pandav line ended at the birth and at the death of this Parikshit, because he was born dead. This still birth of the last Parikshit was imposed on the son of Abhimanyu with the miracle story of his being revived by Shri Krishna. It is because the Pandava line ended with the birth of the last Parikshit that the Vishnupurana is referring to the birth of Parikshit as a landmark for its dating. There is no reason why the birth of the son of Abhimanyu should be taken as a landmark when the Bharat war or the death of Shri Krishna could be so taken.

Thus the Vishnupurana does not necessarily contradict the traditional date of the Bharat war, since it could be referring to a Parikshit other than the son of Abhimanyu in its reckoning.

That the Vishnupurana does not have knowledge of kings before 1900 B.C. is shown by its geneology of the kings of Magadha. This geneology according to the years given accounts only for 1912 years before Christ. It begins with Somapi. But there is no evidence that Somapi was a contemporary of the Bharata war. The Magadha king who fought in the Bharata war was Sahadeva, and his son is called Meghasadhi in the Mahabharata, NOT Somapi. Thus the Vishnupurana geneology does not go up to the Bharata war, and therefore the Parikshit mentioned by it was a contemporary of Somapi, sometime in 1900 B.C. and not the son of Abhimanyu.

The Mahabharata<sup>58</sup> itself mentions that the Bharata war took place between the Dvapara and the Kali. The Kaliyuga started in 3101 B.C. Kali means war. The era therefore is an era in commemoration of the war.

The Mahabharata contains an astronomical statement which

points to the Kaliyuga date. Bhishma died on Magha Shukla Ashtami when the sun started on its Northern course. So far this verse has been wrongly interpreted by treating the amavasya mentioned as the tithi on which the war began as the amavasya of months ending in amavasya. But months ending in the full moon are a more ancient practice.

Krishna says to Karna "let the war start on the kartik Amavasya day which occurs when the sun and the moon are both in the Jyeshtha constellation. Dr. Raghavan counts three lunations from this amavasya and gets Magha amavasya in which the Sun was 312.06 degrees of the zodiac. Since we are taking the purnima ending months magha shukla ashtami comes 8 days later when the sun was 318.6 degrees of the zodiac. The sun started on its Northern course from this position in 3094 B.C. This date comes very near to 3101 B.C.

The Mahabharata states that on the eve of the Bharata war seven resplendant grahas were seen in the sky (Deepyamanashcha...and nissaranto vyedrushyanta..) Prof. K. D. Abyankar's calculations show that in the morning of 7th February 3104 B.C. Mars, Mercury, Moon, Venus, Jupiter and the Saturn were within forty degrees above the sun on the horizon. Thus they were seen together just before sunrise. The difference between 3104 B.C. and 3101 B.C. the traditional date of the Bharata war should not disturb anyone. The date of the Bharata war was regarded as 3101 B.C. when the kaliyuga reckoning came into vogue. The memory that the seven planets were together at the commencement of the kaliyuga was also live. But since it was a social memory and not a contemporary record the difference of two years between the date of the war and the exact date of the planetary positions is negligible.

### The Unshakable Thesis of Dikshit<sup>54</sup>

The traditional date of the Bharata war is conclusively proved by a statement in the Shapatha Brahmana. The statement runs "The constellation of pleides does not deviate from the east. All other constellations deviate from the east."

The statement is unambiguous. It is in the present tense and it means that the pleides traversed the sky along the celestial equator, the path followed by the sun on 21st September and 22nd of March. This is the exact east-west line. The distance in degrees of a heavenly

body from this path is called its declination. Thus the declination of the pleides was zero, when this sentence was composed.

S.B. Dixit observed<sup>15</sup> in 1900 that the declination of the pleides was 68 degrees North. The declination changes one degree in 72 years.  $68 \times 72 = 4869$  years had therefore elapsed in 1900 from the time this sentence was composed. This comes to 3996 B.C.

The Shatapatha Brahmana mentions Janamejaya, the son of Parikshit. Parikshit ruled for 60 years, Janamejaya ascended the throne after his death when he was yet a child. Before Parikshit the Pandavas ruled for 36 years. Thus Janamejaya became king in  $3101 - (36 + 60) = 3005$  B.C. The sentence in the Shatapatha Brahmana was thus composed when Janamejaya had already completed a few years of his reign.

The Shatapatha Brahmana statement is conclusive, and should have finally settled the controversy about the age of the Vedas at least as far as the third millenium BC is concerned.

But that was not to be. A typical reaction is that of Keith. He says: "It is impossible to attach serious value to this<sup>3,2</sup> assertion made in a passage which assigns foolish reasons for preferring one or the other Nakshatra." The attitude of evasion is obvious in this reaction. A reason for preferring a nakshatra may be "foolish," but that by itself does not prove that it was non-existent. A man may stop going ahead on a path because a cat crosses his path. One may declare his reason for stopping as foolish, but that does not prove that the cat did not cross his path.

Thebeau<sup>55</sup> takes recourse to the other usual subterfuge viz. saying that the statement is interpolated. He has given no reasons for regarding the statement as interpolated, except that it militates against his prejudice. Secondly, since an interpolation can take place only in an existing work, the interpolation charge would prove that the Shatapatha Brahmana is older than 3000 BC, a conclusion hardly welcome to Thebeau.

Winternitz<sup>7</sup> has devoted a little more thought to Dixit's thesis. He takes the words "do not deviate from the East" to mean "are seen in the east for a considerable time". The astronomical adviser of Winternitz informed him that for an observer at latitude 25 degrees North, the pleides rose 13 degrees to the North of the equator in

1100 BC, slowly came to the east line and crossed it after 2 hours 11 minutes at 29 degrees altitude." According the Winternitz, the Shatapatha Brahmana describes this state of affairs and therefore its date is 1100 B.C.

One is simply stunned by such acrobatics. To say that "do not deviate from the East" means "do not rise in the East and even after coming on the East line, cross it" is like saying that "a man never leaves his home" means "he never lives at home and even when he visits it, leaves it very soon".

### Daptari<sup>49</sup> to the rescue

Daptari has tried to remove the first part of the absurdity by saying that the pleides are NOT seen when they are on the horizon, and therefore they cannot be seen as not rising in the east. They are seen only when they come on the east line.

*"I could see them only when they came 13 degrees above the horizon. So the Shatapatha Brahmana is talking about the pleides which are 13 degrees above the horizon as not deviating from the East."*

Daptari further borrows a line from the Baudhayan sutra quoted by Winternitz to support his position. It runs: "They plan a hut whose bamboos point to the East. The pleides do not leave the East. Some say that the measure (of the East) should be taken by looking at the Shravana."

According to Daptari, Shravana rises at 29 degrees latitude. It can never be in the east when on the horizon. The statement that pleides never deviate from the east has to be similarly interpreted. They were in the east at 13 degrees above the horizon. This was the state of affairs in 1722 B.C.

If anything can strengthen my belief in the truth of Dixit's thesis, it is the refutations advanced by Daptari a la Winternitz. Daptari has managed to escape from the difficulty that the pleides which do not rise in the east cannot be described as undeviating from the east by saying that they can not be seen when they rise. But even according to Daptari, they can be seen when they cross the east line. How can the Shatapatha Brahmana describe the pleides which cross the east line as NOT deviating from the east? Do the pleides disappear again after crossing the east line for the convenience of Daptari? Secondly, according to the Shatapatha Brahmana, it is the

pleides alone that are undeviating from the east, all other stars deviate from the east. On the interpretation of Winternitz and Daptari the pleides can claim no uniqueness, many other stars which come on the east line can be described as seen in the east for a considerable time.

Daptari's trump card is that the pleides cannot be seen when they are on the horizon. The sole reason given for this assertion is that he could not see them. No other Astronomer agrees with him. I made inquiries in the astronomical wing of the Survey of India, Dehradun. I was told that the pleides contain a star of the third magnitude, and a third magnitude star can be seen even on the horizon by a man of normal eyesight. When this star is seen the constellation itself is recognized. Those who are accustomed to the observation of the heavens, know even the precursors of the pleides, and the moment these are seen, they expect the pleides to follow. What is expected can be readily seen. On a moonless and a cloudless night when the pleides rise two or three hours earlier than sunrise or later than sunset, they are clearly visible. A man of normal eyesight accustomed to astronomical observations need not wait till the pleides ascend 13 degrees, for seeing them.

On my request, the Jyothisha department of the Varanaseya Hindu University made actual observations of the pleides on the horizon and confirmed that they can be thus seen.

Winternitz and Daptari have stretched the meaning of east in order to escape from the finding of Dixit. The accepted meaning of east is the equinotical point on the horizon. The celestial equator which starts from this point, up to the altitude which can be easily seen without raising one's head is the east. No other line can be properly called the east line. Any star which rises at the equinotical point will remain on this line, even if it is first seen at the altitude of 10 degrees or so and can be assumed to have risen at the equinotical point.

But Daptari and Winternitz take the line from the equinotical point to the zenith of the observer as the east line. Since no constellation ever follows this path, nobody will ever say that a star on this east line does not deviate from the east, because any star which comes on it must cross it.

Some uneasiness can be caused by the verb **CHYAVANTE** which means "fall off". The statement of the Shatapatha Brahmana that

"All constellations besides the pleides fall off the East" makes no sense, because no constellation will ever fall off the east line defined on the celestial equator, and a constellation which is never on this line cannot be reasonably said to "fall off" it either. One who is never on the top of the Kutub minar cannot possibly fall off from it.

The difficulty ceases if we remember that **CHYAVANTE** "does not necessarily mean fall off". It can also mean "deviate". A's "height deviates from the average" does not mean that it was average at some time and it changed from the average. "A constellation deviates from the East" simply means, "it is not in the East"; it does not mean "it falls off from the east".

This meaning of the root **CHYU** is clearly seen in the term "**CHYUTASANSKRITATVA**" in Poetics. The fault called "**CHYUTASANSKRITATVA**" is committed when a composition is **CHYUTA** "from **SANSKRITATVA** or refinement. This does not mean that the composition was once refined and now has ceased to be so. It simply means it deviates from refinement.

Even if one insists on taking the verb **CHYAVANTE** to mean "fall off", the Shatapatha Brahmana statement fits squarely. The stars to the north of the observer, and those to the south of the equator, are in no sense in the east. We are therefore concerned only with the stars which rise in between the equator and the observer's latitude. All such stars cross the east line as defined by Winternitz, i.e. not being in the east, they come to the east line and then cross it or leave it. But the pleides, rising at the equinotical point are in the east, even when they leave the Winternitz east line; they are always on the equinotical east line. One can therefore say that "all other constellations excepting the pleides" fall off from the East. Thus Winternitz and Daptari in their Herculean effort to escape from the conclusion of Dixit, have only served to show that his thesis is much more precisely correct than perhaps he himself thought it to be.

The statement in the Baudhayana sutra quoted by Daptari really supports Dixit, and not his opponents. At the time of the Baudhayana sutra, the method of fixing the east point on the basis of the pleides had come to stay by sheer tradition, but was not giving correct results. So some preferred the Aquila. But the Aquila also did not give exact results. The Baudhayana sutra says that the pleides do not deviate from the east, echoing tradition, though this statement did not quite fit the contemporary observations. It is to be noted

that Aquila is not credited with the property of not deviating from the east, because it crossed the Winternitz east line, or because it did not follow the equinotical line.

The Shatapatha Brahmana makes its statement foolproof by emphasizing that all constellations other than the Pleides deviate from the east. Both Daftari and Winternitz have observed diplomatic silence about the line, because according to their interpretation every relevant star comes on their self-styled east line some time or the other, and the uniqueness of the pleides is lost. Daptari himself mentions the aquila as coming on the east line, but even this failed to remind him of the Shatapatha assertion "all other constellations deviate from the east".

### Devanakshtra

Daptari further argues that "the Shatapatha mentions the constellations from the pleides to the Virgo as suitable for propitiation. No constellation after Virgo is so regarded. The reason given is that the spring, the summer, and the rains are the seasons of the gods and the autumn, the Hemanta and the winter are the seasons of the manes. The sun is in the region of the gods in its Northern Course and in the region of the manes in its Southern Course. The fire should be consecrated when the sun is in its Northern Course.

This shows that the constellations after Virgo are prohibited because they are to the South of the equator, and the pleides are regarded as suitable, because they are to the north of the equator and therefore are the constellations of the gods. The pleides were not to the North of the equator before 2322 B.C. The Shatapatha therefore cannot go back to the period before 2322 B.C."

Daptari's arguments are typical of his circumlocutions. He has nowhere shown that the Shatapatha Brahmana regards the pleides as a constellation of the gods. The statement quoted by him is from the Taittiriya Brahmana, NOT from the Shatapatha Brahmana. Even if such a statement is found in the Shatapatha Brahmana it could not help Daftari, because a constellation right on the equator can be allotted to both the god's and the manes, being the median it belongs to both. The Shatapatha Brahman gives the following reasons for the suitability of the pleides: 1) they are many 2) they do not deviate from the east, and 3) they are the wives of the fire. The reason alleged

by Daftari viz. that they are the constellation of the gods nowhere figures in this.

By saying that the Shatapatha Brahmana rejects the constellations after the Virgo as unsuitable Daftari is falsely suggesting that it regards all the constellations from the pleides to the virgo as suitable. But this is not so. The Shatapatha Brahmana does not regard Ardra, Pushya and Magha as suitable, though they are between the pleides and the Virgo. Besides the pleides, Rohini, Mrgashirsh, Phalguni, Hasta and Chitra are regarded as suitable, but the reason for suitability is nowhere given as being a constellation of the gods.

Even if the Northern Course of the sun and the sighting of the pleides are regarded as reasons for suitability, it does not follow that the pleides were to the North of the equator. The pleides can be seen when the sun is in its Northern Course, even if they are on the equator.

The date of the Shatapatha Brahmana therefore goes to the threshold of the third millennium B.C.

The Shatapatha Brahman is a Brahman of the Yajurveda. The Yajurveda mentions shravana as the first month of the rains. It also shows knowledge of iron which can not antedate 2000 B.C. It can be legitimately questioned how a Brahmana of the yajurveda which is so late as 2000 B.C. belong to 3000 B.C.

The answer is that originally the Yajurved contained only the 794 hymns of the Rgveda. But the Yajurveda now available contains 1181 hymns not contained in the Rgveda. The references indicating a time span of 2500 to 1500 B.C. are found in these new hymns. The original Shatapatha Brahmana was a Brahmana on the original Yajurveda.

The date of the Bharata war is the lower limit of the Rigveda. Older than the date of the Bharata war is the date of Rama, Rama is mentioned in the Rigveda. (10/93/14).<sup>19,207</sup> The list given in this hymn is a list of kings and no illustrious king named Rama is known to ancient India excepting Dasharathi Rama. The mention of Rama in the Rigveda therefore gives an upper limit to a portion of the Rigveda.

The date of Rama can be ascertained from the following references in the Ramayana.

The birth of Rama took place after twelve months had elapsed from the beginning of the sacrifice performed by Dasharatha. The sacrifice began in the spring. The twelfth month therefore was the second month of winter. The month is called Chaitra, and the tirthi of Rama's birth was navami. The karka rashi was on the eastern horizon but Rama was born at midday. The constellation at Rama's birth was punarvasu.

The Shrowta sutra enjoins that the Asvamedha should be started on Chaitra full moon which was regarded as marking the end of winter and the beginning of spring. This position of the seasons is corroborated by the Ramayana statements that Bhadrapada was the first month of the rains and pausha the first month of Hemanta. 4/28/54 says- "This is the time of study for the o salm-singers, the Brahmins who study the hymns in the month of Bhadrapada" The verse occurs while describing the commencement of the rains. It clearly states that the session for Vedic studies began in Bhadrapada. That this was the first month of the rains is indicated by verse 2 which states that this was the time of jalagama i.e. the beginning of the rains. The academic session began in the first month of the rainy season.

3/16/12<sup>77</sup> says "The sections of the night are lengthened and colder. The nights pass under the guidance of Pushya. Sleeping outdoors is out of question. The dawns are accompanied with dew."

This is a description of the beginning of Hemanta when sleeping outside begins to become intolerable. This does not happen immediately with the beginning of Hemanta which nowadays begins on October 23. After November first week, nobody would think of sleeping in the open. If Pausha is taken as the first month, of Hemanta, in the fullmoon ending month the third week of Hemanta would be the first week of pausha bright half when the pushya would rise near about sunset and set near about sunrise, thus justifying the statement that the night is guided by it, since there is no part of the night when pushya is not there in the sky.

Pausha being the first month of hemanta thus corroborates the statement that Bhadrapada was the first month of the rains.

Jacobi regards this as the description of the beginning of winter i.e. the last week of December. But the last week of December is too late for people in North India to give up sleeping in the open.

Daptari regards the verse as relating to the end of hemanta on the strength of 3/16/8<sup>78</sup> which says." The sun was definitely approaching the south. (Because of this) the North is sulking like a woman without the saffron-mark."

Daptari interprets the word drdham to mean proximate and thus extracts the meaning "near the winter solstice". But drdham does not mean proximate. After the autumnal equinox the nights begin to become longer. But this is not noticed till the difference in the lengths of the day and the night becomes considerable. The statement is definitely about the beginning of Hemanta when sleeping in the open has just begun to be uncomfortable, it can not therefore be applied to the end of Hemanta. Pausha was therefore the first and not the second month of Hemanta.

Raghavan has shown that at the time of Bhishma's death the Northern course started on Magha Shukla Ashtami i.e. rathasaptami. This means that the winter ended on chaitra bright 7. When Rama was born it ended on chaitra full moon i.e. eight days later-Roughly taking 72 years for a precession of one day this gives  $72 \times 8 = 576$  years before the death of Bhishma as the date of Rama. In other words  $3101 + 576 = 3677$  B.C. is the date of Rama's birth.

The Bhagavata statment that Rama flourished 31 generations before the Bharata war gives us the date  $3101 + 600 = 3701$  B.C. This should be regarded as a remarkable tally in a field where estimates vary by millenia.

The Rigveda contains hymns composed by Jamadagni Bhardvaja (3/62/8/101; 9/62; 9/85; 67; 10/110; 10/137; 10/167) 10/10 is composed by Jamadagnya Ram i.e Parashuram, a contemporary of Rama. Thus these portions are composed around 3700 B.C. The father of the author of the Ramayana the 10th son of Prachetas, has composed a hymn of the Rgveda (10/164). This confirms the mention of Rama referred to above.

The Rigveda proper contains many unmistakable astronomical references pointing to its antiquity. We have so far been prevented from going back on astronomical grounds by the dogma that zodiacs i.e Rashis were not known to the Indians before they came into contact with the Greeks and that contact with the Greeks can not be more ancient than the invasion of Alexander or at most the period of Darius. We have already seen that the Karka Rashi is clearly

mentioned in the Ramayana. Strangely enough the Ramayana statement is regarded as post Alexander by a circular argument. But what about the reference to the sinharashi in the Mahabharata which says that Bhim was born in that Rashi? A similar circular argument takes care of this also.

In fact there is no basis whatsoever for supposing that Rashis were not known in India before the Greeks.

A very simple fact is overlooked by those who regard the verse referring to the Rashis, interpolated after 500 B.C. A poet writing in 500 B.C. would never describe chaitra as the last month of winter, and that winter was coming to a close when the sun was in the Mesharashi. People in that age depended on skywatching for keeping time and anybody could have known that in their time chaitra was not the last month of winter and that winter did not come to a close when the sun was in the mesharashi. Redactors tend to interpolate contemporary matter. In order to interpolate astronomical observations which were not true in their own age but obtained thousands of years ago, two things were needed (1) knowledge of precession (2) a motive to make Rama appear more ancient than he really was. There is no reason to suppose that any of these factors were operative in the case of the redactors of the Ramayana or the Mahabharata. The mention of the rashi's in these two works must therefore be accepted as referring to observed phenomena.

The Rigveda clearly mentions the rashis by name. For example "The sweet<sup>19,208</sup> ones (waters) fill the simharashi which is their inducer, the moon, Indra and the ruddy lord of the heavens. The brave and first in battle (Sun) inquires (about) the waters. The showerer (Indra) guards by his observations." (9/89/3)

The simharashi consists of magha, purva and uttara falguni. The hymn describes the combination of the moon, the morning and the fulgunis. Falguna is the name of Indra. Magha also refers to Indra because he is maghava. The combination i.e. falguni amavasya heralds the rainy season. Indra and soma (the moon) search for the cows (waters) several times in the year, and find them ultimately on the falguni amavasya. Thus Indra can do this guardian-work (delivering rain) only with the help of the moon.

Sayana says that this hymn is about the soma in solar form. The soma in the solar form is the amavasya moon which is submerged by the sun.

Sayana takes simha as an adjective of the 'lord of the heaven'. The sun being compared with the lion is very unusual. Sayana agrees that the subject of the sentence viz. somas is in the plural. The word harim can be taken as qualifying simha, since all the constellations of this rashi are named after Hari i.e. Indra. The description of the sun as the ruddy lord of the heaven refers to the morning sun before it has fully risen. So it is at sunrise that the moon (somas) and its rays fill the simharashi as is expected in amavasya.

In the case of the plant the soma juice offered to Indra enters Indra in the form of the simharashi, taking the form of the moon.

The description that the simharashi finds the waters suggests that the rains commenced when the sun was in the simharashi.

The beginning of the rainy season in India is marked from the summer-solstice day (22nd June). The longitude of the sun on 22nd June is 66. In the Rgvedic period the rains commenced when the sun was in the falgunis (Simharashi). 10/85/13<sup>19,209</sup> states that the marriage of soma and surya took a place between the Arjunis i.e. after purva falguni. The last point of purva falguni is on 146-40° longitude. Hence from the Rgveda up to now the sun has preceded 146-66 = 80 degrees. Hence the latest period for this hymn is 80x70 = 5760 years B.P. i.e. 3768 years B.C.

There would be some doubt about this interpretation if this were an isolated reference of the kind. But this by no means is the case. We can find consistent statements with names of the rashis and the seasons corresponding to them.

For example.-

"Oh Arjuni, at your dawn, the birds, the winged ones, the bipeds and the quadrupeds are activated<sup>19,210</sup> around, following the seasons from the ends of the heavens." (1/49/3)

'The ends of the heavens' are the solstitial points. Sayana translates 'arjuni usha' as "white dawn" This is unacceptable since the dawn is not white. Secondly he takes 'your with rtur' i.e. seasons. The seasons of the dawn does not make much sense.

The commencement of the seasons is indicated by rturanu' "following the seasons". The cycle of the seasons ended with the summer, the rainy season heralds the commencement of the new year.



The first stanza of the hymn runs-

"Oh dawn, come majestically with the auspicious ones from the resplendant sky. Let the red calfed<sup>19.211</sup> ones carry you to the house of the somins. (1/49/1)

The 'red-calfed one' refers to the rays which yield red lustre. Sayana translates the second line as "let the redcalfed ones carry you to the house of the soma sacrificers". But how can the rays carry usha to the house of the soma sacrificers? It is hymns that carry the deity to the sacrificers house **NOT** the rays.

"Somino grham" may therefore refer to the constellations with whom the moon is residing. So this is the description of the dawn of amavasya when the sun and the moon are together. The red calfs may refer to the early rain since the word cow i.e. go is used in the sense of water also.

These references are not very explicit and undeniable. But they are supported by 5/84/2 which is almost compelling. It runs:-

"Oh Arjuni, moving one, the hymns adore you<sup>19.212</sup> with lustre, you, who like a braying horse, throw up the clouds." (5/84/2)

This is a clear reference to the constellation arjuni i.e. falguni heralding the rains. Sayana takes vicharini i.e. moving and Arjuni i.e. white as both refering to the earth. It is difficult to suppose that the movement of the earth was known to the composer of the hymn. Furthermore the adjective white is hardly applicable to the earth.

Arjuni throws up the cloud, it brays like a horse and thus in turn adorns it with lustre, in the form of hymns which are called "braying". The lustre can be taken literally as the morning rays of the sun reflected back on the Arjunis.

The next verse continues the theme of arjuni heralding the rain thus:-

"Firm, thou bearest the vegetation along with<sup>19.213</sup> the earth, with your prowess, as the lightning of your clouds showering rains from the skies." 5/84/3)

The first verse of the hymn runs-

"Oh massive one, you verily fill the valleys of<sup>19.214</sup> the mountains as you oh streaming one please the earth with prosperity, oh prosperous one." (5/84/1)

Sayana takes the verse as addressed to the earth by construing prithvi as a vocative for the earth. But in the next verse prithvi is said to please bhumi. Bhumi also means earth. Earth pleasing the earth carries no sense, so the first prithvi has to be taken as the adjectival vocative for the arjunis.

Thus all the three verses of 5/84 are describing the commencement of the rains in the arjuni.

That the word simha in the Rigveda often stands for the simharashi is unmistakably clear from the following.

"Like the charioteer driving the horse by the<sup>19.215</sup> whip, he releases the messengers of showers, From afar the roars of the simha declare that the rain is making the sky showering." (5/83/3)

Here the word simha is taken by Sayana to mean cloud. But this can at best be a figurative meaning. Taking it to refer to the simharashi is direct and natural. Again the reference to the messengers of rain and declaring that the sky is being made fit for showers, indicates that the rainy season is beginning and is not in its full swing. This is therefore a reference to the beginning of the rainy season in the simharashi.

3/9/4 corroborates this usage of the word simha. It runs:-

"The abiding non-haters obtain him (i.e. agni)<sup>19.216</sup> who overtakes the brutals which excel the legions, like the simha residing in waters." (3/9/4)

Sayana takes apsu shritam- "residing in waters" to mean residing in a den. Such a meaning has no support in lexicons. The simha i.e. simharashi enveloped by the rain is straight-forward.

The whole hymn is about the lightning taking the form of fire. The fire is latent in the lightning, just as the simharashi is enveloped in the rainwaters.

Not only simha but also the word mithuna is used in the Rigveda to refer to the rashi of that name. For example-

"The twin<sup>19.246</sup> producer has here given birth to the twins. The tip of the tongue keeps moving (in their praise) Being born they join the destroyers of darkness, they are the bases of heat (summer) (3/39/3)

The twins are the ashvinikumaras who are the sons of the dawn. The thin producer dawn has now given birth to another pair of twins viz. ardra and punarvasu which constitute the mithuna rashi. It is not intended to say that the producer of twins has produced the ashvinis. Such a construction would render the word "here" superfluous. The hymnmaker is talking about the birth in that particular morning when he is addressing the hymn. The Ashvinikumars were not born on that particular day. Sayana renders 'vapumshi' i.e. bodies" as the morning rituals. This is far-fetched. The poet is saying that ardra and punarvasu join in the work of destroying darkness being the bulwark of summer.

A look at the zodiac cycle will show that the days when simha was the rashi marking the beginning of the rains, mithuna must have been the rashi marking the beginning of summer. This leaves no doubt that both simha and mithuna are used to refer to the rashis of that name.

Sayana takes mithuna to refer to the ashvinis. But the ashvins are not known to be makers of the day, as Sayana credits them to be, in translating "tapusho budhna etow." The ashvins are said to represent either the transition from light to darkness or from darkness to light, in the evening or morning. This transition can not be described as the maker of the day. Some take the ashvins to be the morning and evening stars viz. Mercury and Venus. Ashvins in this form also can not be described as the makers of the day. So taking Mithuna to stand for ardra and punarvasu is the most reasonable translation.

"Vapumshi jata mithuna sachete" means that the pair serves all that lives by heralding daylight.

If the mithuna rashi marked the summer, the vrshabharashi would indicate the spring. This is exactly what 6/47/5 states It runs.-

"He obtains the variegated<sup>19.217</sup> light of the multitude of the dawns of the month of shukra (jyeshtha). The great breezeful vrshabha i.e. Indra has stabilized the heavens by the great prop." (6/47/5).

The Vrshabha rashi consists of the constellations, kritika, Rohini and mrga. The month of Jyeshtha is called shukra in the Rigveda. When simharashi marked the rainy season, bhadrapada and ashvin were the rain months, ashadh and shravana were the summer months and Vaishakha and Jyeshtha the spring months. Thus at the time of

the Rigveda the vrshabha rashi appeared at sunrise in the season of spring in the month of jyeshtha. Since the rains began in bhadrapad, jyeshtha was the second month of spring and the vernal equinox fell sometime in Jyeshtha.

The adjective breezeful refers to the pleasant Southern breeze of spring 8/93/1 refers to the entry of the sun in the vrshabha thus.-

"Oh surya, you come up, approaching the<sup>19.218</sup> prosperity-fame manly performing and beautiful vrshabha" (8/93/1)

This is a clear statement of the sun entering the vrshabha rashi which is supposed to bring prosperity and inspire manly acts. This description applies to the approach of spring which is supposed to stimulate sex and make the world blossom all round.

Sayana's interpretation of vrshabha as yajna and surya as Indra is unconvincing. The phrase 'ut eshi' clearly refers to the act of rising. Indra will not rise to the sacrifice but come down to it.

Here the sun is approaching the vrshabha rashi. This implies that no portion of the vrshabha rashi was left unseen before sunrise. Therefore if we take the last point of vrshabha we get longitude 83 for it. This means that the hymn under consideration was composed  $83 \times 72 = 5976$  years B.P. i.e. in 3984 B.C.

We now come to kanyarashi. Kanya is mentioned in 6/49/7. Sayana takes this to refer to the goddess Sarasvati. But in this interpretation the kanya meaning maiden and virpatni meaning the wife of prajapati are contradictory.

If Kanya here is taken to refer to the kanyarashi it yields a consistent meaning thus.-

"Kanyarashi, the purifier with chitra<sup>19.219</sup> constellation as her life, lakeful the keeper of vegetation may promote our intellects. May she give wholeness, strong abode and welfare to the praiser with verses." (6/49/7)

Gna also means woman. Gnabhih achidram sharanam could therefore mean home flawless with women."

Kanyarashi is called purifier because the waters become mudless in kanyarashi which coincided with the autumn in the Vedic days. Kanyarashi is chitrayu i.e. one whose life is chitra because chitra is the central constellation of kanyarashi.

The kanyarashi is lakeful because it beacons the autumn in which lakes are full.

Virpatni = the keeper of vegetation because in autumn the vegetation is seen blooming all round.

The verse could be taken to refer to goddess Sarasvati, the deified river of the Saptasindhu region. She is the purifier because she washes away everything by her streams. She is a kanya because there is a view in mythology that Sarasvati is a maiden. This view arose perhaps because, the Sarasvati in the days of this hymn submerged before reaching the ocean. According to the Arid Zone Research Institute this occurred sometime around 8000 B.C. Sarasvati is a chitrayu because her flow is multifarious with several tributaries. She is the guardian of sons because she bestows bounty by her waters.

The second line is the same in all meanings. That other meanings are equally possible does not go against taking the verse as referring to kanyarashi. Yielding several meanings simultaneously is a known characteristic of Vedic poetry.

5/63/5 gives an indication that rains in the days of the Rgveda started in the month of Bhadrapada. It runs.-

"Oh Mitravarunas, the winds are yoking their<sup>19.247</sup> comfortable chariots, for warfare, for invoking rain, like a warrior in search of cattle-wealth. They are roaming widely in the variegated dust storms, oh lords of heaven, bathe us in rains." (5/63/5)

The Mitravarunas are the presiding deities of the month of Bhadrapada. The description fits the weather of impending rain.

5/63/6 continues the same theme. "Oh<sup>19.221</sup> Mitravarunas, the rain speaks the language resplendant, variegated and fruitful. You make the ruddy and soft heavens, rain. The winds cover the clouds with their mysterious power." (5/63/6)

"Oh Mitravarunas, your secret power rests in<sup>19.222</sup> heaven, (by that power) the sun moves the light, its variegated weapon. You hide him by the clouds and rain. Oh rain, the drops emit honeyed speech." (5/63/4)

"Oh Mitravarunas, you are the severe emperors,<sup>19.223</sup> seeing showers of the earth and lords of heaven. You befriend the sound by

the variegated clouds, you make the heavens shower by the secret power of the divinity." (5/63/3)

"Oh Mitravarunas, you shine as the emperors of the world by your heaven-seeing light, in knowledge. We solicit from you showers and prosperity which is immortality, which spreading, move about the heaven and the earth." (5/63/2)<sup>19.224</sup>

"Oh Mitravarunas, the keepers of order, you ascend your chariot in the sky being of true vows. The one whom you protect, for him the honeyed showers sprinkle from the sky." (5/63/1)<sup>19.225</sup>

3/62/16 also speaks of the Mitravarunas. It runs-

"Oh Mitravarunas, sprinkle our cowsheds with ghee, and the land with honey, oh performers of good deeds." (3/62/16).<sup>19.226</sup>

Only 5/63/5 gives an indication that it is referring to the beginning of the rainy season and therefore the inference that Bhadrapada was the first month of the rainy season could be drawn from it. But there is no such indication in the other verses and it might be felt that quoting them for proving that Bhadrapada was the first month of the rainy season is uncalled for.

The objection does not lack force but it should be remembered that there is rain properly speaking only for two months between which it is not possible to say in which month the rainfall is higher. Therefore singling out a particular month for the presiding deity of the rain on the basis of quantity of rainfall is not possible. The only basis for doing so is that the month is the first month of the rainy season.

The indication that the rain started in Bhadrapada is given by the statement that the sinharashi marked the commencement of the rainy season.

7/55/7 corroborates the fact that rains in the Rigvedic period started in the arjuni constellation. It runs.-

"This Vrshabha of a thousand horns which has come up from the sea, by him who is sahasya, we make the people sleep." (7/55/7)<sup>19.227</sup>

Sayana renders vrshabha as the sun. This is absurd, since it yields the meaning that people were made to sleep at sunrise.

Karandikar translates vrshabha as vrshabha rashi and further

says that in the days of the Rigveda the vrshabha rashi rose after sunset, in the nights after the autumnal equinox. It is only in this season that the Vedics could sleep comfortably.

This interpretation is in line with the usual flights of fancy which Karadikar mistakes for research. Sleeping in the open in the nights of summer is quite pleasant in most parts North India. The rains are not uncomfortable for sleep if the house is tolerably leak-proof. In fact sleeping in a nonleaking house, listening to the music of rain has its own charm. So there is no reason why autumn should be mentioned specifically for a comfortable sleep.

Karandikar completely ignores the word sahasya in his interpretation. The word sahas means winter and sahasya therefore means one pertaining to winter. So obviously the verse is speaking of a star which rises at sunset in winter.

Now vrshabha is one of the names of Indra. Falguna is another. So the reference is clearly to the star Falguni.

We have shown before that the summer solstice in the days of the Rgveda occurred in the falguni constellation. i.e. the falguni rose at sunrise at the time of the summer solstice. It would therefore begin to rise at sunset six months later.

In the days of the Rigveda, when lighting had to be done by kindling fire or by burning edible oil, maximum use was made of sunshine for work and of darkness for sleep. So it was the practice to go to bed at sunset. In winter it was the star of falguni that beckoned men to sleep.

Thus the verses indicating the rise of the sun in the falgunis at the advent of the rains are corroborated by this verse indicating their rise at sunset in winter, six months later.

1/11/6 is addressed to the ashvins. This can be taken as the Ashvini constellation. The verse runs-

"Oh ashvins, this sharadvan of yours, dispeller like the bull moves majestically waxing the honeyed desires. These honeyed desires fulfilled by the powerful goings of another come like rivers overflowing." (1/181/6)<sup>19.228</sup>

Sayana translates sharadvan as autumnal moon. The ashvins rose after sunset, in autumn around 4000 B.C. The reference is

therefore to the bumper crop of autumn. In fact the autumnal moon is known as the harvest moon.

The vrshabha in this verse can alternatively be taken to stand for vrshabharashi. In the Rgvedic age the ashvins and the vrshabharashi consisting of kirttika, rohini and mrga were seen at night in autumn. So the poet is saying-

"Oh ashvins, this autumnal vrshabha i.e the bull of yours is moving augmenting the honeyed desires."

1/180/4 seems to corroborate this view. It runs-

"Oh ashvins, you chose for the desirous Atri, the honeyed warmth like slashes of water. That is, oh leaders, your pashavaishiti that the honeyed ones recur like the wheels of a chariot." (1/180/4)<sup>19.229</sup>

This again could be a reference to the autumnal moon which appeared with the constellation ashvini. The moon is supposed to have sprung from the eyes of Atri. Autumn is the harvest season and therefore could be spoken of as pashvaishti, or the regular fulfiller of desires. The honeyed warmth is the pleasant moonlight which mellows the heat of the sun. The autumn is famous both for pleasant and clear moonlight and plenty of harvest.

So far we have seen that the Rigveda contains astronomical references pointing to 4000 B.C. Recently Prof. Abhyankar has shown references which point to a period even earlier.

"Your car on which your spouse is wont to travel marks with its track the farthest ends of heaven." (7/69/3)<sup>19.230</sup>

"Wherewith ye move round the sun when far away." (1/112/13)<sup>19.231</sup>

The phrase ends of the heavens and paravat i.e. when at the extreme, indicate that the ashvins were seen at the solstitial points. The solstice could only be the winter solstice. The winter solstice occurred in the ashvins in 7000 B.C.

This is further corroborated by the legend that the daughter of surya ascended the three wheeled chariot of the ashvins. The three wheels of the chariot of the ashvins are the three stars alpha, beta and gamma arietis. The daughter of the sun is the Venus, which is close to the sun. In 7000 B.C. Venus was seen among these stars at sunrise every 40 years.

I have found a reference which corroborates Abhyankar's thesis.

"The sleeping Rbhus asked 'Oh unconcealable, who has awakened us?' the *basta* i.e. the goat said the waking one is the awakener. In the year you are illuminating this (world)." (1/161/13).<sup>19/232</sup>

The Rbhus are the seasons. Their sleep is supposed to be coeval with the intercalary days, since in this month the year takes a halt as it were in its onward march, even after the completion of twelve months the new year does not begin.

Macdonell recognizes that the Rbhus represent the three seasons which remain stationary during the twelve days after the winter solstice.

4/33/7<sup>19,233</sup> also speaks of the Rbhus staying for twelve days enjoying the hospitality of the unconcealable (sun). But in this hymn they do so not around the winter solstice but at the advent of the rainy season. This shows that sometimes the correction for reconciling the months, with the year was made at the advent of the rainy season.

The hymn under consideration says that the *Basta* i.e. the goat said that the waxing one is the awakener. The waxing one is the sun which waxes after the winter solstice. The goat is the *mesha rashi*. *Ashvini* is one of the constellations of the *mesharashi*. So the winter-solstice in the *ashvini* is in the *mesharashi* which can be legitimately said to awaken the sun and raise its power. Thus this verse can be said to corroborate Abhyankar's thesis.

1/161/13 and 4/33/7 use figurative language and therefore they are open to the objection that it is unsafe to base astronomical estimates on poetic utterances. In fact Western scholars have vowed not to consider astronomical arguments about the date of the Vedas, though it is Haugh who first used the argument for determining the date of the *Vedanga Jyotish*, Jacobi is another western scholar who has used astronomy. It is noteworthy that the estimates of both these scholars have carried the antiquity of the Vedas much before 1500 B.C., the favourite but unfounded date preferred by Western scholars. The excuse generally given for not using astronomy nowadays is that for the use of astronomy, the meanings of the references must be accurately known. But this can not be an objection to the astronomical method alone. The meanings of the text must be accurately known for drawing any historical inference, not only the

astronomical. It is true that many writers using astronomy have based their calculations on fanciful interpretations. But it is equally true that their interpretations are no more fanciful than the interpretations which try to show an Aryan/non Aryan conflict in the Vedas.

I have scrupulously avoided fanciful interpretations, but figurative interpretations can not and should not be avoided. After all the *Rgveda* is an anthology of poetry. Care has however been taken to use figurative interpretations only when they corroborate other interpretations which are direct.

### Archaeology Corroborates

Recently Dr. Lal has come out with the preposterous view that Ram came later than the Pandavas on the ground that his excavations at Hastinapur have yielded more ancient ruins than those at Ayodhya. There are many elementary fallacies in this thesis. Every student of logic knows that an argument based on absence has no validity unless presence is obligatory. Dr. Lal has not excavated the whole of the Hastinapur and Ayodhya areas, nor is it possible to do so because a good part of them is inhabited.

Secondly Dr. Lal assumes that the descriptions of Ayodhya in the *Ramayana* and those of Hastinapur in the *Mahabharata* belong to the period of Rama and Krishna. Everybody knows that both the *Ramayana* and the *Mahabharata* contain portions which were written nearabout the Christian era. Even if therefore after an entire excavation of Ayodhya and Hastinapur no trace of the cities beyond 900 B.C. is found, the inference to draw is that the descriptions of these cities were inserted in these works around this time and not that Rama and Krishna belong to the period when the insertions were made.

Archaeologists as well as Sanskritists have so far ignored the technological and geographical characteristics of the age of Rama and Krishna. War figures very prominently in both the *Ramayana* and the *Mahabharata*. These wars were fought by the leading powers of the day and leading powers of the day use the latest technology in war. What strikes the reader about the weaponry in the *Ramayana* and the *Mahabharata* wars is the absence of the sword, the principal close-range-weapon in wars fought in the historical periods. The principal close-range-weapon in the *Ramayana* and the *Mahabharata* is the mace. This weapon will be obviously useless against the sword, being very unwieldy and permitting only one type of blow, the one

from above downwards. The sword can be used for blows from any direction and also to thrust.

The absence of the sword is indicative of the absence of bronze as well as iron. The pre bronze-and pre-iron weapons were made of copper, and horns. The mace was made of stone-heads and wooden handles. They were also made of massive logs of wood like the mudgals of today. The arrowheads were made of horns or copper. Full length swords can not be made of copper because such swords, if made, could bend in midcombat and disarm the combatant. Copper could be used for making daggers only. A short weapon like the dagger would not bend as easily as the long sword.

It is significant that the Vanaras are described in the Ramayana as talsalshilayudhah. i.e. those who fight with the tal and sal trees or with stones. The stones were thrown by slings which are mentioned in both the Ramayana and the Mahabharata. The Vanaras are never described as using bows and arrows. It can be easily seen that in long-range fighting between armies where a volley of the missiles is more important than accurate aiming, the slings would not be inferior to bows and arrows, either in range or deadliness.

The yuddhakanda<sup>79</sup> of the Ramayana mentions shields of bullock-skins. Such shields could obviously be useless against a sword made of any metal. The copper daggers must have been used mostly for piercing and not for cutting. Stabbing is the main function of a dagger. A shield made of bullock-skin could be a sufficient protection against such daggers, because they could penetrate at most six inches or so. Against a full length sword of bronze or steel such a shield would be of no use. The hand that wields it could be cut into pieces by a single blow of such swords.

The word khadga shows that the first swords were made of the horns of the rhinoceros, which is only 40 centimeters in length. A shield of bullocks skin would be enough protection against such a sword.

As to the sword itself it is described in 5/54/31<sup>79</sup> as polished by skin. This description again applies to a sword of horn, not to a metal sword. The animal skin and the hair on it are rough and therefore could be used for rubbing and polishing the horn-sword. Metal being harder can not be polished by skin.

6/99/18<sup>85</sup> talks of a battle-axe which was washed by oil and

was strengthened by the power of shila. Here shila can not mean stone because any metal even copper is stronger than stone. Stone is brittle and lacks the main requirement of a weapon. Shailasaramaya therefore does not mean as strong as stone. This would hardly be a compliment to even a copper sword.

A correct interpretation of shaila is arsenic. The archaeologist Agraval has pointed out that the copper weapons found in the excavations are all treated with arsenic to make them strong. When metallurgists were consulted on the point they confirmed that arsenic can increase the strength of copper.

When such references to the stone-copper-age are pointed out many writers bring out the reference to iron by the unmistakable term karsnayasa in another place in the Ramayana. The simple truth that the composition of the Ramayana as well as the Mahabharata was spread over 3000 years is forgotten. The reference to iron in some places does not mean that the references to the chalcolithic age are not there. The reference to Buddha in the Ramayana does not entail that the entire Ramayana is post Buddhistic.

The Mahabharata as well as the Ramayana contains references to the chalcolithic age. Mace was the main close-range weapon in the Mahabharata as in the Ramayana. Sword is mentioned in Bhurishrava's attempt to sever the neck of Satyaki, and Dhrshtadyamuna's beheading of Drona. In both places the feat is accomplished or sought to be accomplished by holding the victim by the hair and operating the 'sword' on the neck. This clearly shows that the so called sword was only a dagger made of copper and was not sharp enough to sever the neck by one blow.

The Mahabharata contains a reference to a bronze sword. When Jayadratha tried to cut Abhimanyu to pieces by a blow of his sword Abhimanyu parried the blow and the sword got stuck up in his quiver. Jayadratha tried to pull out his sword by a violent jerk, but the sword, instead of coming out, broke into pieces.<sup>80</sup> In this place the sword is specifically described as mahan asi or a big sword to distinguish it from a dagger. An iron or a copper sword will not break by a mere pull. The sword mentioned therefore was a bronze sword.

There are further references to swords made of meteorite materials. But since our concern here is with the date of the Rgveda and not of the different Strata of the Mahabharata we shall not pursue the topic of the meteorite sword.

The most ancient portions of the Mahabharata belong to the chalcolithic age. This is proved beyond doubt by the finds of copper-weapons in Kurukshetra. These have been dated at 2800 B.C., a date nearabout the traditional date of the Mahabharata war. The weapons found are arrow and spearheads and what is called an anthropomorph because it has a head like that of a man and two legs. Its outer edge is sharp and it can be thrown like a missile and when so thrown could cut an unarmoured portion of the body. This must be a prototype of Krishna's suadarshan chakra.

We turn now to the Rigveda. The Rigveda uses the word *ayas* which undoubtedly means copper. The root *yas* means to exert, and *ayas* therefore refers to something which requires no exertion, i.e. a soft and plastic metal like copper.

This copper is always described as red. 5/62/8 says that the chariot of the sun appears golden at dawn and like *ayas* at sunrise. At sunrise the colour of the sun is red.<sup>19.163</sup>

10/87/2 says -

"Oh kindled fire, engulf the goblins with your flame, oh, know all, with jaws of *ayas*..."<sup>19.234</sup>

The fire is said to have jaws of *ayas* obviously because its flames have the colour of copper. Rendering *ayas* here as iron makes no sense. Iron is known for its power to resist deformity. Fire on the contrary can change its shape with even a mild breeze. The sharpness of iron again is no property with which to eulogize fire. Fire can melt iron itself, the sharpness of iron can have no effect on fire.

1/88/5<sup>19.235</sup> again refers to the fire which spreads in the forest with the blowing of Maruts" (winds) as having jaws of *ayas*.

6/71/4<sup>19.236</sup> describes the evening sun (*priti-dosham*) as having a golden hand (rays) and a chin of *ayas*. The chin is said to be of *ayas* because as long as the disc (face) of the sun is visible it looks red like copper. When it is submerged its rays above the horizon appear yellow like gold.

The main reason why a full-length sword can not be made of copper is that copper bends very easily and a full-length sword of copper would bend in mid-combat and disarm the combatant. This is what is precisely mentioned in the following hymns.-

"Oh Indra,<sup>19.237</sup> you bent the weapon of the godless killers."  
(1/174/8) 2/19/7<sup>19.238</sup>

Full-length swords of copper were obviously never made. But even the daggers, arrow-heads, spear-heads, and battle-axes must often be bending right in the midst of the combat and therefore "bending the weapon of the enemy" was synonymour with defeating him.

There is conclusive linguistic evidence to prove that swords were not invented in Vedic and the epic periods. All the words standig for the sword in Sanskrit originally stood for the dagger. The following are the words for the sword given in the Amarakosh.-

(1) *Khadga*. This word means the horn of the rhinocers. This is about 40 centimeters long. This was sharpened and pointed and then used as a weapon.

(2) *Nistrinsha*. This means a weapon more than 30 *angulas* in length. The span is said to be equal to 12 *angulas*. 30 *angulas* would therefore be not more than 15 inches. That this length was thought to be something to write home about is a fair indication that full-length swords were unknown.

(3) *Chandrahassa*. This was a proper name for the sword of Ravana and not a general name for a sword. Proper names are generally not descriptive. But even the name *chandrahassa* suggests that the sword was like the disc of the moon or like a sickle in shape.

(4) *Asi*. This word is derived from the root *as* meaning to throw. It is obvious that the weapon *asi* was employed as a missile like a dagger and not used for close combat like the sword.

(5) *Rshti*. Sayana says that this was used in chiselling wood. So it was some kind of *patasi*.

(6) *Kauksheyak*. This literally means what concerns the belly. *Kauksheyak* must therefore have been a weapon which could be kept in the knot on the belly. Obviously it could not have been a full length sword.

*Mandalagra*. This literally means a weapon whose tip is round. This description fits the anthropomorph found in the kurukshetra and not the full-length sword.

(8) karavala. This literally means a small (weapon) to be held in the hand. The name itself precludes the sword.

(9) krpana. This word is found in the form kripani meaning a pair of scissors. Kripani is a dual number-of the word kripani meaning possessed of kripana. Thus kripana obviously stood for a blade of the scissor. Originally therefore kripana was a blade considerably short of the sword.

Old words standing for new gadgets are quite usual in the history of language. Torch originally stood for the coverless oil-burning shaft. Now torch stands for the cylinder emitting light with the aid of the battery. Car originally stood for a chariot, now it stands for the motor car.

A very important piece of evidence has come out after the discovery of the river Sarasvati. This is the principal river in the Rgveda. This was clearly stated to have flowed between the Yamuna and Satalaja in the nadisukta. (10/75/5)<sup>19.164</sup> This river was so mighty that it could sweep away mountain tops by its powerful current.<sup>19.249</sup> It was called Sarasvati obviously because it had tank-like huge pools at several places in its course.

Such a river nowhere exists between the Yamuna and the Satalaj today. The river ghaggar which is shown to be a remnant of the ancient Sarasvati is admitted to be not the real Sarasvati but is what remained of it after it was submerged by the land.

Attempts have been made to search for the Sarasvati outside India but such attempts are obviously misdirected because the nadisukta unmistakably gives the location of the Sarasvati.

Recently the several beds of the Sarasvati have been found underground and they have also<sup>40</sup> been dated. The Arid Zones Research Institute has published the data.

Sarasvati came to its present state in about 1800 B.C. Any date for the Rgveda after 1800 B.C. is therefore inconceivable.

Geologists have dated the various courses of Sarasvati. Among these are two courses which begin very near the present Yamuna and go right up to the Arabian sea. The other courses go towards the Indus and are very much in the North. They do not meet the ocean by themselves. They were most probably the tributaries of the Indus. The Sarasvati of the Rgveda is by no means a tributary. It

is the most important river. Some of the Sarasvati hymns were therefore composed when the ocean going beds of the Sarasvati were live. 7/95/1<sup>19.247</sup> clearly mentions that the Sarasvati meets the ocean.

Geologists have surmised that the ocean going beds of Sarasvati are as old as 8000 B.C. This portion of the Rigveda therefore goes back to 8000 B.C.

The Northern non-sea going beds belong to the Harappa and Mohenjodaro period since most of the cities of the Indus valley civilization have been found in these beds.

Geologists also surmise that the ocean-going bed of Sarasvati was diverted to the east-going Yamuna and what remained of it in the west soon dried up. A memory of this is enshrined in the Rgveda in 2/15/3.

"Measuring by the measures, as if while making a house, Indra by his vajra dug the courses of rivers eastwards." (2/15/3)<sup>19.240</sup>

Only two major rivers in North India flow eastward. Most of the mighty rivers flow towards the west and meet the Arabian sea. With this background the statement that Indra made the rivers flow eastward, implies that the rivers, but for this act, would not have flowed eastward. This may be a reference to the ocean going course of Sarasvati, changing its direction and flowing into the Yamuna. This event is much more ancient than the nadi sukta, which belongs to the Mohenjodaro period.

### Corroborative Evidence

That the Vedic literature goes back to this period is corroborated by the fact that it does not know cotton which is found in the Indus excavations. Secondly silk is not known to most of the Vedic literature. Silk was invented in China in 2640 B.C. The Vedic people were in the Himalayan regions bordering on China. It should not have taken more than a couple of centuries for silk to have come to India from China. Literature which is ignorant of silk must therefore be older than 2400 B.C.

### The Mahabharata Geneology

We have seen that the latest portions of the Rigveda are about 100 years older than the Bharata war. How far back can we go on



the basis of the Mahabharat? The Adiparva of the Mahabharata gives the geneology of the Pandavas, beginning with Brahma. The son of Brahma was Maricha and the son of Maricha was Kashyapa. This Kashyapa is supposed to have composed 100 rks of the Rigveda, of which only one has survived. (1/99). He seems to be one of the oldest hymn-makers of the Rig veda. The 39th descendant of Kashyapa was Devapi. Taking 20 years for a generation, we see that one of the earliest hymn-makers of the Rigveda flourished 780 years before the latest who in turn flourished three generations i.e. 60 years before the Bharata war. The early hymns of the Rigveda thus go back 840 years before 3101 BC i.e. 3941 BC. The estimates of Tilak and Jacobi, which place the Rigveda in 4000 BC on the basis of astronomical constructions put on some hymns of the Rigveda, are not therefore baseless.

The generation number of some of the hymn-makers according to this geneology is Vivasvan 3) Ushanas or Shukracharya 9) Kanva and Vishvamitra 25.

Vasishtha, in the period of Rama is a hymn-maker of the Rigveda. His date is therefore 3720 BC. The date of Kanva and Vishvamitra comes to be 3251 BC. Thus Vasishtha, the priest of Rama and the real and fosterfather of Shakuntala were NOT contemporaries. The statement in the Dasharajna hymn that both Vasishtha and Vishvamitra were the priests of Sudas has to be harmonized with this by supposing that the names Vasishtha, Vishvamitra, and Kanva are family names.

There is a pointer to the existence of Vedic civilization<sup>17.1</sup> even before 4000 BC though not for placing any existent portion of the Rigveda in that period, in the Taittiriya Brahmana, which says that Jupiter, the first born, occulted the constellation of Tishya.<sup>61</sup> Jupiter is called the first born, because it is the largest of the planets and is seen full or phaseless for a considerable time. It is also called GURU. The occultation occurred in 4500 BC. But from this we can not infer that the Taittiriya, samhita goes back to this date. The event is described in perfect past tense, which is used in connection with remote events. Nevertheless the statement shows that the Vedic civilization and the practice of astronomical observations can go back to that date.

This antiquity of the Vedic civilization is corroborated by the date of Zarathushtra given by ancient Greek writers. Pliny<sup>6</sup>

(23-79 A.D.) quotes Aristotle and Eudoxus as assigning Zarathushtra the period 6000 years before Plato (427-347 BC).

This takes us back to 6347 BC for Zarathushtra and 7847 BC for the Rigveda. Hermodorus and Theopompus assign Zarathushtra<sup>6</sup> to 5000 years before the Trojan war. This takes us to 6800 BC. Max Muller dismisses these estimates as exaggerated. It is strange that sources which are regarded as valuable for writing European history are declared of no consequence by Max Muller, when the age of the Vedas is to be considered. Writers like Aristotle had no motive to exaggerate the antiquity of Zarathushtra. They are only echoing the views that were current among Greeks several centuries before Christ. If celebrated Greeks three centuries before Christ, thought that Zarathushtra was thousands of years older than themselves, the estimates of the western scholars which try to bring Zarathushtra within less than a thousand years from these writers stand discredited.

## VIII

### What about the Similarity of Roots?

**The time sequence Sanskrit, Zend, Hittite & Greek and the geographical sequence India, Persia & Asia-Minor to Greece suggests the way the common roots have travelled from Sanskrit to Greek and India to Greece. The Etruscans carried them from Asia-Minor to Rome and the Roman empire disseminated them throughout Europe.**

1) What has been said so far is sufficient to convince the reader that there is no evidence whatsoever for the Aryan invasion of India. But the hard fact of thousands of common roots in Indian and European languages remains to be explained. Thousands of roots phonetically and semantically similar could not have arisen by chance alone. Human speech contains about 50 distinct sounds. The combinations of two of them, three of them etc, are practically infinite. So are the possible meanings which can be expressed by these permutations and combinations. The probability of a coincidence between a particular group of sounds and a particular meaning in different languages is almost nil. The roots must have therefore emanated from their origin to all the regions where they are used.

The obvious inference is that they have emanated from India; obvious because, the most ancient language in which these common roots are found is Sanskrit, and there is no evidence whatever that Sanskrit was used anywhere outside India before the age of the Rigveda. Not only is Sanskrit the most ancient, Burrow<sup>7</sup> has conceded that it is the most archaic. Why should it then not be regarded as the origin of the common roots? European scholars have

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not been able to answer this question. In fact, they have not even tried to answer it. It is downright common sense that if facts can explain something, recourse should not be taken to imaginary entities for explaining the same. The original Indo-European language is a creature of imagination.

Inferences drawn from the postulation of an imaginary Indo-European language are a *reductio ad absurdum*. For example, it is said that the original Indo-European language had a word for cow, since the present day, Indo-European languages have a word for cow, derived from a common root (Gau) but did not have a word for milk, since its existent offsprings have words for milk, which are not derived from a common root. It is simply absurd to suppose that people who kept cows, did not know that the cow yields milk, nor did they know that their mothers fed them on their breasts. Cows milk is not necessary for having a word for milk; even mother's milk is milk.

There could be no doubt that the common roots emanated from Sanskrit. We see them next in Zend, the language of the Avesta in Persia. Macdonell says that the Rigveda can be translated into Zend, and the Avesta into Sanskrit, by using phonetic rules alone. In other words, Zend is a way of pronouncing Sanskrit and vice versa. Macdonell places the Rigveda 500 years earlier than the Avesta. Khabardar contends that the Avesta is older than the Rigveda on the ground that at the time of the Avesta, the vernal equinox was in the constellation punarvasu (6000 BC). Tilak<sup>17,2</sup> maintains that the Rigveda also refers to the same position of the vernal equinox. Burrow is prepared to concede the same antiquity to the Avesta and the Rigveda. But there is no evidence for the higher antiquity of the Avesta.

2) There are some indications in the Avesta that the Zend speaking people may have migrated into Iran from India. Zarathushtra, who is supposed to have composed the Gathas which are the most ancient portions of the Avesta, says: "To which country should I go? Which country will give me refuge? No servant respects me. The wicked rulers also behave in the same manner. Very few are with me. I prefer to be an enemy of the Devas and the devotee of the asuras"<sup>81</sup>. It can be inferred from this that Zarathushtra and his followers fell out with the Vedics and migrated to Iran from India. This is also corroborated by the fact that in the earlier portions of the Rigveda, the word asura is used reverentially, but later it

designates the enemies of the gods. The Avesta, on the contrary, uses the word deva in a bad sense. Another notable fact is that the Avesta mentions the Mainak mountain and the rivers Rangha, Haraivati, and the harayu. The epics regard the Mainak as a minor mountain in the Himalayan range. Rasa, the counterpart of the Iranian Rangha, flowed in between Sushartu and Shreti, and meets the Sindhu from the west. Sarasvati flowing in between Yamuna and Ishutudri, and Sarayu near Ayodhya, are the Indian counterparts of haraivati and Harayu. It is common knowledge that migrants name the rivers and mountains of the new country after the rivers and mountains of their older country. The names New Orleans, New York and New England are examples. The word new is used by Americans to avoid confusion between the York and New York etc. which can occur in days of close international communication. This was not the case in ancient days when such communications were difficult.

It should be noted that Arvi, Talegao etc. are found in Vidarbha as well as in western Maharashtra. Most probably, the Vidarbha names are the older, judging from the older mention of Vidarbha in ancient literature.

Kalidasa<sup>71</sup>, echoing ancient tradition, reports the invasion of Persia by Raghu, the great-grand-father of Rama. This invasion could have occurred in 3781 BC (vide chapter: The age of the Rigveda).

That the Vedics migrated from India to Iran is further indicated by the fact that there are references to the Saptasindhu region in the Avesta, but there are no references to Iran in the Rigveda.

Apart from the Avestan culture, there is evidence of Sanskrit influence in what is called Assyria on the upper Tigris river. This region was called ASURA. Here we find a king by name ASURANASIRPAL in the 9th century BC. Asuranasirpal is a downright Sanskrit word meaning the "defender of the vanguard of the Asuras. A later king is called Asuravanirpal again a downright Sanskrit word meaning" the protector of the flash speech of the Asuras.

These Assyrians obviously migrated from India before the word Asura acquired a bad sense in India, like the followers of Zarathushtra.

The Assyrian empire lasted for two centuries and in its hey day extended to Egypt.

There is another reference to Indian migration to West. Yayati banished his sons/Anu Druhyu and Turvasu. Druhyu was cursed by Yayati that he will have to wander years on end on the seas. The Mahabharata further<sup>45</sup> asserts that the descendants of Anu were the Mlechchaas and those of Turvasu were the Yavanas. The Yavanas are generally identified with the Ionian Greeks. The Mlechchas are also people who speak a corrupt form of Sanskrit.

3) The assertion that the Ionian Greeks have descended from Turvasu is very important. The author of the Mahabharata could have had no motive in foisting Indian ancestry on the Greeks. If Indians in those days were impressed by the superiority of the Greeks they would have tried to trace their own ancestry from the Greeks and not vice versa. When the Manusmriti describes the Dravidas, Kiratas and Pallavas as fallen Kshatriyas the motive may have been to assimilate them and avoid scism within the country. But this consideration is not relevant in the case of the Greeks who came as invaders within living memory and who were known to be living in a far off country, outside the fold of the Vedic society. It may be argued that claiming the ancestry of conquerers is as good a way of self glorification as claiming descent from them; and the Mahabharata is only weaving a myth flattering to the Hindu ego in asserting that the Ionian Greeks were the descendants of a banished Hindu prince. But there is not a single example in Hindu history where the Hindus tried to flatter themselves by believing that those who conquered them belonged to the same descent as themselves. The Arabs, Afgans and Mughals appeared in Indian history as conquerers, but far from claiming co-sanguinity with them the Hindus did not regard them as even worthy of sharing a meal with. The Brahmins who gave lessons to Akbar in Hindu philosophy when he was trying to found an eclectic religion sat on a hanging chair, refusing to share the same earth with him. People with such a mentality will not claim fictitious co-sanguinity with an out group even if the group is that of conquerers.

The Mahabharata should therefore be regarded as recording a genuine tradition when it asserts that the Yavanas were descended from Turvasu.

4) Ionia, the home country of the Yavanas is in Asia-minor. There is evidence that the Vedic people migrated to Asia Minor after they established themselves in Iran. An inscription belonging to 1400 BC is found in Asia Minor. This inscription mentions Vedic

deities and is composed in the Hittite language, which is accepted as "Indo European", i.e. Sanskrit like.

Some of these Asia-Minor Vedics may have come from Iran which borders on Asia-minor. Besides Geographical proximity, the powerful empire of the Iranian Vedics was another factor in influencing the language and religion of Asia-Minor.

But the Iranian was not the only such influence. Ionia is in Asia Minor and we have the Mahabharat statement that the Ionians were the descendants of Turvasu. The Ionians therefore seem to have owed their language and culture to a twofold influence. The Iranian and the Indian, the latter directly through the migration of Turvasu.

Greeks from the North-West are also said to have migrated to Ionia. Even if this is true, the event is considerably later than the migration of Turvasu and seems to have occurred when the Vedic influence had come to stay. The Greeks, like the Shaka and Hoona invaders of India were therefore linguistically and culturally absorbed by the Vedics in Ionia.

Ionia as a cultural centre acquired importance by 1100 BC. The most ancient available Greek work viz. Homer's Iliad is composed in the Ionian language in about 900 to 800 BC. It is claimed that an inscription composed in Greek, probably belonging to 1400 BC has been found in the Cretan regions. But this "Greek" can be identified as Greek only by linguists and some of them hesitant to do so. Greek literature as we know it can not go back to times more ancient than those of Homer, and Homer used the Ionian<sup>73</sup> language which was influenced by the Avestan and the language of Turvasu i.e. Sanskrit. The Ionian Sanskrit language was the mother of the Greek language.

Vedic Asia-Minor was not only the cradle of the Greek language, it is also the cradle of the Roman languages like Latin. In 900 BC the Etruscans<sup>73</sup> first appeared in Italy, probably from Asia-Minor in consequence of the break-up of the Hittite empire. They established themselves North of the Tiber in Etruria probably as a conquering minority. They extended into the Po valley, Latium and Campania until the end of 600 BC. The Etruscans introduced into Rome: (1) an alphabet (2) the religion of three deities Jupiter, Juno and Minerva and Greek culture in general. The deity Jupiter is derivable from the Vedic **DYOWSHPITRU**. The Greek language was influenced by Sanskrit influence from the remotest times known.

5) Later history is well known. The Roman empire spread throughout Europe and Latin was the language of the Empire. It was the common language of Europe through centuries. The Sanskrit roots thus spread throughout Europe through the influence of Latin and the Roman Empire.

The chronological sequence generally accepted is: Rigveda, Avesta, Hittite Greek and Latin. The Geographical sequence corresponding to this is India, Asia Minor, Greece Rome and Europe. It is fairly certain that this is broadly the history of the migration of Sanskrit roots.

The racialists may argue that: "it is easy to suppose that the white Europeans migrated to India and became mixed in complexion by inter-racial breeding. On the contrary it is inconceivable that the mixed Indians could have created a pure white race in Europe after migrating there.

The analogy with South East Asia will help answering this objection. Nobody questions that the Sanskrit influence on the South East Asian languages emanated from India. And yet the South East Asian population does not seem to be racially influenced by the Indians specifically the South Indians who went to South East Asia. This is because the Indians went there as traders, rulers, preachers etc. they did not migrate there like the white in America or Australia. Their influence was therefore confined to language, culture and religion, like the influence of the British or the Turks/Mughals on India. The racial influence of the British is confined to the Anglo Indian community which is too small as compared to the population of India. There are no recognised communities in India which could be racially labelled as Indo-Turks.

It is admitted that the above account of the spread of Sanskrit roots to Europe has many missing links. But this is to be expected with the very meagre source material. The chronology of the languages however makes it certain that the roots went the way described above and not in the reverse.

## IX

### The Motivation and Attitudes of the Western Scholars

**There is evidence in the published utterances of Western scholars themselves that the Aryan-invasion theory was not put forward as a serious scientific theory, but as a politico-religious ploy.**

In our examination of the case for the Aryan invasion, at least some readers may have felt that the case is so tenuous, or even ridiculous, as to make one wonder whether it was honestly put forward, and if it was, whether the proponents of the theory were endowed with the scientific temper necessary for research.

#### Missionary Bias

Among those who took to Sanskrit studies, the missionaries were quite prominent. Robert Nobili deserves a special mention in this connection. His contention was that the missionaries should try to convert, not the lower caste Hindus, but the Brahmins<sup>43</sup> first; the conversion of the lower castes will then automatically follow. In order to do this, he concocted a Yesurveda, a Veda containing Christian teachings, most probably a rendering of the New testament, in Sanskrit. He dressed and lived outwardly like a Brahmin and taught this book as the real Veda. His disciples, well versed in it, naturally, imbibed the Christian faith, considering it to be the real Vedic faith.

This experiment seems to have died with Nobili, because later on nothing was heard of his disciples and their cult. But the point to be emphasized is that the missionaries were prepared to perpetrate frauds in order to achieve their objective.

Nobili did not tell his victims that his Veda was his own concoction. But he did not hide this from his correlative religionists and fellow nationals. In fact, he maintained that his example should be emulated by other missionaries.

In this respect Boehtling<sup>44</sup>, who edited Panini, bears comparison with Nobili. When Goldstucker criticised him for his errors, one of the admirers of Boehtling urged him not only to have respect for the editor of Panini, but even for the "hidden reasons" for foisting on the public his blunders of every kind. These "hidden reasons" were the same or similar to those of Nobili. They were hidden from the Indians but not from the Europeans.

Col. Boden took a step forward. He did not think that there is any need to hide the sacred purpose of conversion of heathens to Christianity. After all, the frauds such as those of Nobili, were perpetrated for saving the souls of the heathens. The heathens should be grateful to the faithful for such frauds, and not resent them, Col. Boden gave an endowment for establishing a Chair of Sanskrit at Oxford, and said in his will that the purpose in establishing the chair is to aid the conversion of the natives of India to Christianity. There was no intention to hide this purpose even from the Hindus. Monier Williams publicized it in his Sanskrit-English dictionary, which was going to be used by thousands of Hindus.

Monier Williams was the second occupant of the Boden Chair. Max Muller never occupied this Chair, but he was even more enthusiastic in fulfilling the will of Boden. He writes to his wife: 'This edition of mine and the translation of the Veda will here-after tell to a great extent on the fate of India...It is the root of their religion and to show them what the root is, I feel sure, is the only way of uprooting all that has sprung from it in the last 3000 years.'<sup>44</sup>

He writes to Duke of Argyl, minister of India:

*"The ancient religion of India is doomed, and if Christianity does not step in, whose fault will it be?"*

All this shows that Max Muller sees nothing wrong in studying Sanskrit works with the express purpose of showing Hinduism to be evil and worthless. There is no such thing as objective truth for him. A consistently perpetrated fraud is sanctified by the holy purpose of Christian proselytization, and the western scholars have no need to keep this purpose hidden.

The attitude is reminiscent of the communists. When pushed to the wall for objective scientific evidence, they openly say that there is no such thing as truth, apart from class-interest. Whatever helps the communist revolution is true for them.

This sort of attitude with Christianity, substituted for the Marxist dogma, rules out ab initio any view that Christianity, could have been influenced by more ancient religions. No evidence pointing to this need be examined, but simply dismissed as heresy. Max Muller's criticism of the German scholar Spiegel, who held that the Biblical theory of the creation of the world could have been borrowed from the ancient religion of the Persians, should be noted in this connection. He writes: "writers like Dr Spiegel should know that he can expect no mercy, nay, he should himself wish for no mercy, but invite the heaviest artillery against the floating battery, which he has launched in the troubled waters of Biblical criticism<sup>44</sup>."

This is an instance of sheer *argumentum ad baculum*.

It is very difficult to understand why Max Muller thought that by reading his translation of the Vedas, the Hindus will begin to dislike their religion. This expectation of Max Muller betrays his utter naivety and incompetence for scientific thinking. How many Hindus read his translation, and how many thought ill of their religion as a result? Max Muller perhaps expected that the Hindus will come to know by reading his translation that the so-called divine hymns only consist of supplications to the deities for perfectly mundane things like cows, food and women. But this was no news to any Hindu, who had some knowledge of the Vedas derived from Sayana.

Max Muller perhaps did not expect the miraculous result viz. destruction of Hinduism merely from his translation of the Vedas, but from the translation coupled with his Aryan-invasion-theory. He perhaps expected the Hindus to get the following message: "You belong to the same stock as ourselves. We were fortunate to get a saviour in Christ, but you continued to stick to the archaic Vedic religion, further vitiated to produce Hinduism, by your cultural and racial admixture with the aboriginals. We have prospered by embracing Christianity. On the contrary, you have been enslaved, mainly as a result of Hinduism. The solution is clear, embrace Christianity and welcome the rule of your ancient co-racials."

### Animus against Hinduism

Max Muller was not chosen for the Boden Chair. The first Boden Professor was Wilson. In order to perform the duties enjoined on him by the Chair he was occupying, he published a book "The Religious and Philosophical Systems of the Hindus". Explaining the reason for writing this book, he says. "These lectures were written to help candidates for a prize of 200/- given by John Muir for the refutation of the Hindu religious system."

Those who believe that the purpose of research should be to find out the truth, the whole truth, and nothing but the truth, will wonder what scientific value can be attached to research such as mentioned above.

There was a section among the Western scholars, which believed that Hinduism is non-Vedic, and the Hindus do not know this, because they hardly read the Vedas, and even those who do, read Sayana's version of it. This version is all wrong. If the correct version is placed before them, the result will be as stated by Hoernle: Swami Dayananda may possibly convince the Hindus that their modern Hinduism is altogether in opposition to the Vedas. If once they become thoroughly convinced of this radical error, they will no doubt abandon Hinduism at once...they cannot go back to the Vedic state that is dead and gone, and will never revive. Something more or less new must follow. We hope it may be Christianity."

We can see in this the reason for the propaganda that the Vedas are against idol-worship. On the supposition that polytheism is something bad and must be shunned, monotheism was also imposed on the Vedas by some Hindus as a result of this propaganda.

According to this picture of the Vedas, the Vedas are antagonistic to Hinduism and nearer to Christianity.

This propaganda did have its effect, but it was diametrically opposed to Hoernle's expectations. The Arya Samaj gave a call of return to the Vedas, but far from being sympathetic to Christianity, it became its opponent, far more virulent than the orthodox Hindus. In fact, it used the very argument of the similarity of the Vedic religion to Christianity to present Christianity as a second-rate copy of the Vedic religion.

Hoernle's attitude, like that of Max Muller, shows that these writers were ill equipped for scientific research, they were also inept in judging the possible effects of their propaganda.

### Past-Masters in Guile

The scholars were inept, but those, who made use of their research, were past masters in guile and political chicanery.

After the uprising of 1857, they gave up the attempt to Christianize India, but used the propaganda of western scholars for sowing dissensions and a sense of inferiority in the Indian people. They controlled the media of propaganda, the foremost among them being education. They took care that only those portions of the research of the western scholars get wide publicity, which are conducive to these two objectives. They took care to propagate that Max-Muller has "proved" the Aryan invasion of India, but kept mum on the fact that Max-Muller was not keen on emphasizing the foreign origin of the Aryans. He was prepared to concede that the Aryan *urheimat* may have been somewhere in Asia, which expression could include India. They took care to publicize that the invading Aryans were white, but scrupulously avoided to mention Max Muller's later retraction that by Aryans he is only referring to a linguistic and not to a racial group. They took care to emphasize the names of western scholars who propounded the Aryan invasion theory, but kept in oblivion the fact, that far from being a unanimous opinion of the Western scholars, the Aryan-invasion-theory is not accepted by <sup>44</sup> Jacobi, Hillebrant and Winternitz. They took care to highlight the view that the Vedas are against idol-worship, but cleverly bypassed the references to the contrary.

The British rulers further presented Indian history so as to sow dissensions among different sections of the Hindu society. Hinduism was shown to be a conglomeration of warring religions, not a harmonious doctrine. The Vedas were shown as inimical to Shaivism and phallus worship, a mode of worship practised by crores of Hindus. Caldwell's baseless view that the South Indian languages are genetically and structurally different from the North Indian languages and that the South Indians are the aboriginal Dravidians, defeated by the Aryans and driven away to the South, was dinned into the ears of every educated Indian. This gave rise to the Dravidist movement. Caldwell was a missionary and his purpose in propounding this baseless view was obvious. He told the South Indians that what they believe to be their religion was imposed on them by the North Indian Aryans, so they might as well become Christians. The propaganda succeeded in driving a wedge between the North and the South Indians.

The western scholars' obsession with Christianity led them to another argument against Hinduism, and that is: "Hinduism can only give rise to evil; it is inimical to all originality in any field, whether scientific, artistic, literary or cultural". Says Dampier. "The paucity of Indian contribution to sciences may be due to the Hindu religion." Says Weber<sup>44</sup>: "The peculiar colouring of the Krishna sect, Christian legendary matter, and other western influences are undeniably present in the Mahabharata".

### Ill-founded Notions about Christianity

The burden of this research is that if there is anything commendable in India, it must be posterior to and necessarily borrowed from something similar in Europe. The very significant language which is the core of Hindudom is an offshoot of an original European language; no population of India, excepting perhaps remote tribals, were original inhabitants of India. India is a sea of successive waves of invaders, the Hindus must have borrowed their Astronomy and drama from the Greeks, and their Ramayana from the Iliad. What cannot be shown as borrowed, for example classical poetry such as that of Kalidasa, is artificial and second-rate.

In giving the credit for European resurgence to Christianity, these scholars have betrayed very poor knowledge of their own history. Greece, the father of European civilization, was not Christian, but followed a religion of idol-worship and polytheism, akin to Hinduism. The first 1400 years of the Christian era in Europe are called the dark ages. Europe could emerge out of the dark age, only when the scientists challenged Christianity and when the hold of the church weakened.

The western scholars needed no evidence to assert that everything worthwhile in India is borrowed. The whole of the Mahabharata of 1,00,000 verses was available to Doyen Chrysostom in 50 AD in Tamil Nadu, a province far off from Kurukshetra. In other words, the whole epic, as we know it today, was complete before the Christian era, and yet Weber sees Christian influence in it. The only thing common to the Iliad and the Ramayana is that both these epics centre round a war resulting from the kidnapping of a woman. If this is enough to indicate borrowing, why should the Iliad not be regarded as borrowed? There is nothing to show that the main story of the Ramayana is post-Iliad.

The only argument for asserting that the Sanskrit drama was

borrowed from the Greek is that the curtain was called Javanika in Sanskrit. Javanika is pronounced as yavanika and the word is taken to refer to, Yavana i.e Greek.

Even if all this is conceded, how does it follow that the art of drama was borrowed from the Greeks? One could say that the cloth of the curtain was imported from Greece, or that Greek servants were entrusted with the task of making and maintaining curtains.

In fact, there is no reason why the word javanika should be read as yavanika, it means not only the play-screen, it also refers to the screen which surrounds a tent. Both these are temporary improvisations to be put up and dismantled at short notice. The word therefore stands for something temporary and is probably derived from the root *JYU* 'to go'.

### **"You are good for nothing Hindus"**

It should further be noted that the differences between Sanskrit and Greek drama are more striking than the similarities.

The charge that Sanskrit classical poetry is artificial is made by Winternitz, in addition to Monier Williams, who does not spare even Kalidasa. Anything which follows meticulous rules could be called artificial, but then in that case, grammatically accurate language, classical music, sculpture and even the science of mathematics could be called artificial. The charge of artificiality would stand, only if the rules have no aesthetic justification. Williams and Winternitz have not cared to show this. Again, scholars who read Sanskrit in the Roman script and cannot pronounce Sanskrit correctly, let alone recite Sanskrit verses with the perfect cadence of Sanskrit meters, are hardly qualified to judge Sanskrit poetry. Unlike English, sound and cadence are an integral part of Sanskrit poetry, not the meaning only. Translating *nitamba* as hip or *Pinda* as rice-ball may serve the purposes of a dictionary, but is hardly sufficient for appreciating Sanskrit poetry.

Those who charge that Indian astronomy is borrowed from the Greek, have not been able to show that a particular Sanskrit astronomical work A is similar to a particular Greek astronomical work B, and that A is posterior to B. There is further no evidence that Greek books were read in India all through the period of the development of Indian Astronomy. At times when they were, Indian astronomers have acknowledged the fact, as for example Varahamihira.

It is sometimes said that the word *kendra* meaning "centre" has no derivation in Sanskrit and is not a Sanskrit word, but is derived from a Greek word for centre. It is not felt necessary to show that the word has a proper derivation in Greek. The borrowing of astronomy and geometry from the Greeks is inferred from this.

The word *kendra* meaning centre is needed in everyday life, not only in astronomy and geometry. A language therefore should have a word for centre, even if its speakers are innocent of Astronomy and Geometry.

The purpose of all this propaganda about borrowing was to create a sense of inferiority in the Hindus, a sense that they are good for nothing.

The Aryan-invasion-theory cannot therefore be regarded as a product of honest research.



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- 1) पाति प्रियं रिपो अग्रं पदं वेः पाति यद्वश्चरणं सूर्यस्य।  
पाति नाभा सप्तशीर्षाणमग्निः पाति देवानामुपमादमृष्यः॥ 3/5/5
- 2) सोमं मन्यते पपिवान् यत्सं पिषन्त्योषधिम्।  
सोमं यं ब्रह्माणो विदुर्न तस्याश्नाति कश्चन॥ 10/85/3
- 3) यस्येमे हिमवन्तो महित्वा यस्य समुद्रं रसया सहाहुः।  
यस्येमाः प्रदिशो यस्य बाहू कस्मै देवाय हविषा विधेम॥ 10/21/4
- 4) मा नो गुह्या रिप आयोरहन्दभन् मा न आभ्यो रीरधो दुच्छुनाभ्यः।  
मा नो वि योः सख्या विद्धि तस्य नः सुम्नायता मनसा तत् त्वेमे॥ 2/32/2
- 5) उदित्रावस्य रिच्यतैऽ शो धनं न जिग्युषः।  
य इन्द्रो हरिवान् न दभन्ति तं रिपो दक्षं दधाति सोमिनि॥ 7/32/2
- 6) अव वेदिं होत्राभिर्यजेत रिपः काश्चिद् वरुणधुतः सः।  
परि द्वेषोभिर्यमा वृणक्तूरुं सुदासे वृषणा उ लोकम्॥ 7/60/9
- 7) वितिष्ठध्वं मरुतो विक्ष्विच्छत गृभायत रक्षसः सं पिनष्टन।  
वयो ये भूत्वी पतयन्ति नक्तभिर्ये वा रिपो दधिरे देवे अध्वरे॥ 7/104/18

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- 8) प्र मातुः प्रतरं गुह्यामिच्छन् कुमारो न वीरुधः सर्पदुर्वीः।  
ससं न पक्वमविदच्छुचन्तं रिरिह्मांस रिप उपस्थे अन्तः॥ 101/79/3
- 9) विश्वेता ते सवनेषु प्रवाच्या या चकर्थ मघवन्निन्द्र सुन्वते।  
पारावतं यत् पुरुसंभृतं वस्वपावृणोः शरभाय ऋषिबन्धवे॥ 8/100/6
- 10) तानीदहानि बहुलान्यासन् या प्राचीनमुदिता सूर्यस्य।  
यतः परि जार इवाचरन्त्युषो ददृक्षे न पुनर्यतीव॥ 7/76/3
- 11) शश्वत्पुरोषा व्युवास देव्यथो अद्येदं व्यावो मघोनी।  
अथो व्युच्छादुत्तरां अनु दूनजरामृता चरति स्वधाभिः॥ 1/113/13
- 12) इन्द्राय गिरो अनिशितसर्गा अपः प्रेरयं सगरस्य बुध्नात्।  
यो अक्षणेव चक्रिया शचीभिर्विष्वक् तस्तम्भ पृथिवीमुत द्याम्॥ 10/89/4
- 13) स सूर्यः पर्युरु वरांस्येन्द्रो ववृत्याद्रथ्येव चक्रा॥  
अतिष्ठन्तपस्यं न सर्गं कृष्णा तमांसि त्विष्या जघान॥ 10/89/2
- 14) अतारिष्म तमसस्पायमस्य प्रति वां स्तोमो अश्विनावधायि।  
एह यातं पथिभिर्देवयानैर्विद्यामेषं वृजनं जीरदानुम्॥ 1/183/6
- 15) प्रमे पन्था देवयाना अदृश्रन्मर्धन्तो वसुभिरिष्कृतासः।  
अभूदु केतुरुषसः पुरस्तात् प्रतीच्यागादधि हर्म्यभ्यः॥ 7/76/2
- 16) अशोच्यग्निः यमिधानो अस्मे उपो अदृश्रन् तमसश्चिदन्ताः।  
अचेति केतुरुषसः पुरस्ताच्छ्रिये दिवो दुहितुर्जायमानः॥ 7/67/2
- 17) अभि वां नूनमश्विना सुहोता स्तोमैः सिषक्ति नासत्या विवक्वान्।  
पूर्वीभिर्यातं रथ्याभिरर्वाक् स्वर्विदा वसुमता रथेन॥ 7/67/3
- 18) व्युच्छा दुहितर्दिवो मा चिरं तनुथा अपः ।  
नेत् त्वा स्तेनं यथा रिपुं तपाति सूर्यो अर्चिषा सुजाते अश्वसूनुते॥ 5/7/9
- 19) कियात्या यत्समया भवाति या व्युष्याश्च नूनं व्युच्छान्।  
अनु पूर्वाः कृपते वावशाना प्रदीध्याना जोषमन्याभिरिति॥ 11/113/10
- 20) पर ऋणा सावीरध मत्कृतानि माहं राजन्नन्यकृतेन भोजम्।  
अव्युष्टा इन्नु भूयसीरुषास आ नो जीवान् वरुण तासु शाधि॥ 2/28/9
- 21) समान ऊर्वे अधि संगतासः सं जानते न यतन्ते मिथस्ते।  
ते देवानां न मिनन्ति व्रतान्यमर्धन्तोवसुभिर्यादमानाः॥ 7/76/5
- 22) सदृशीरद्य सदृशीरिदुश्वो दीर्घं सचन्ते वरुणस्य धाम।  
अनवद्यास्त्रिंशतं योजनान्येकैका क्रतुं परि यन्ति सद्यः॥ 1/123/8
- 23) अदिते मित्र वरुणोत मृळ यद् वो वयं चक्रमा कच्चिदागः।  
उर्वश्यामभयं ज्योतिरिन्द्र मा नो दीर्घा अभि नशन्तमिरत्राः॥ 2/27/14

- 24) प्र पस्त्यामदितिं सिन्धुमर्कैः स्वस्तिमीळे सख्याय देवीम्।  
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- 26) तिस्त्रो द्यावो निहिता अन्तरस्मिन् तिस्त्रो भूमिरुपराः षडिधानाः।  
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- 27) धेनुः प्रत्नस्य काम्यं दुहानाऽन्तः पुत्रश्चरति दक्षिणायाः।  
आ द्योतनिं वहति शुभ्रयामोषसः स्तोमो अश्विनावजीगः॥ 3/58/1
- 28) य उदाजन् पितरो गोमयं वस्वृ तेनाभिन्दन् परिवत्सरे बलम्।  
दीघायुत्वमंगिरसो वो अस्तु प्रति गृणीत मानवं सुमेधसः॥ 10/62/2
- 29) सखाह यत्र सखिभिर्नवगैरभिज्ज्वा सत्वभिर्गा अनुगमन्  
सत्यं तदिन्द्रो दशभिर्दशगैः सूर्यं विवेद तमसि क्षियन्तम्। 3/39/5
- 30) एभिर्नृभिरेन्द्र त्वायुभिष्ट्वा मघवदभिर्मघवन् विश्व आजौ।  
द्यावो न द्युमैरभि सन्तो अर्यः क्षपो मदेम शरदश्च पूर्वीः॥ 4/16/19
- 31) पत्र्वारे चक्रे परिवर्तमाने तस्मिन्ना तस्थुभुवनानि विश्वा।  
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- 32) सनेमि चक्रमजरं वि वावृत उत्तानायां दश युक्ता वहन्ति।  
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- 33) तम आसीत्तमसा गूळहमग्रे। 10/129/13
- 34) त्वमपो वि दुरो विषूचीरिन्द्र दृळहमरुजः पर्वतस्य।  
राजाभवो जगतश्चर्षणीनां साकं सूर्यं जनयन्धामुषासम्॥ 6/30/5
- 35) या आपो दिव्या उत वा स्रवन्ति खनित्रिमा उत वा याः स्वयंजाः।  
समुद्रार्था याः शुचयः पावकास्ता आपो देवीरिह मामवन्तु॥ 7/49/2
- 36) समानमेतदुदकमुच्चैत्यव चाहभिः।  
भूमिं पर्जन्या जिन्वन्ति दिवं जिन्वन्त्यग्नयः॥ 1/164/51
- 37) यः शम्बरं पर्वतेषु क्षियन्तं चत्वारिंशं शरद्यन्विन्दत्।  
ओजायमानं यो अहिं जघान दानुं शयानं स जनास इन्द्रः॥ 2/12/11
- 38) एते धामान्यार्या शुक्रा ऋतस्य धारया वाजं गोमन्तमक्षरन्। 9/63/14
- 39) ब्रह्म गामश्वं जनयन्त ओषधीर्वनस्पतीन् पृथिवीं पर्वतां अपः 10/65/11
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- 41) ससानात्प्यां उत सूर्यं ससानेन्द्रः ससान पुरुभोजसं गाम्।  
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- 42) अगस्त्यः खनमानः खनित्रैः प्रजामपत्यं बलिमिच्छमानः।  
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- 43) प्र कृष्टिहेव शूष एति रोरुवदसुर्यं वर्णं नि रिणीते अस्य तम्।  
जहाति वद्विं पितुरेति निष्कृतमुपपुतं कृणुते निर्णिजं तना॥ 9/71/2
- 44) इन्द्रः समत्सु यजमानमार्यं प्रावद् विश्वेषु शतमूतिराजिषु स्वर्मादेष्वाजिषु।  
मनवे शासदव्रतान् त्वचं कृष्णामरन्धयत्।  
दक्षन्ना विश्वं ततृषाणमोषति न्यर्शसानमोषति॥ 1/130/8
- 45) अव द्रप्सो अंशुमतीमतिष्ठदियानः कृष्णो दशभिः सहस्रैः।  
आवत्तमिन्द्रः शच्या धमन्तमपस्नेहितीर्नृमणा अधत्त॥ 8/96/13
- 46) पितुर्मातुरध्या ये समस्वरन्नुवा शोचन्तः संदहन्तो अव्रतान्।  
इन्द्रद्विष्टामपधमन्ति मायया त्वचमसिक्रीं भूमनो दिवस्परि॥ 9/73/5
- 47) प्र ये गावो न भूर्णयस्त्वेषा अयासो अक्रमुर्घन्तः कृष्णामप त्वचम्॥ 9/41/1
- 48) अयं चक्रमिषणत्सूर्यस्य न्येतशं रीरमत्ससुमाणम्। आ कृष्ण ई  
जुहुराणो जिघर्ति त्वचो बुध्ने रजसो अस्य योनौ॥ 14/17/14
- 49) भद्रो भद्रया सचमान आगात् स्वसारं जारो अभ्येति पश्चात्।  
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- 50) युवं नरा स्तुवते कृष्ण्याय विष्णाप्यं ददथुर्विश्वकाय।  
घोषायै चित् पितृषदे दुरोणे पतिं जूर्यन्त्या अश्विनावदत्तम्॥ 1/117/7
- 51) उत कृण्वं नृषदः पुत्रमाहुकृत श्यावो धनमादत्त वाजी।  
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- 52) पिशंगरूपः सुभरो वयोधाः श्रुष्टी वीरो जायते देवकामः।  
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- 53) प्रान्यच्चक्रमवृहः सूर्यस्य कुत्सायान्यद् वरिवो यातवेऽ कः।  
अनासो दस्यूरमृणो वधेन नि दुर्योण आवृणङ् मृधवाचः॥ 5/29/10
- 54) आ संयतमिन्द्र णः स्वस्ति शत्रुतूर्याय बृहतीममृधाम्।  
यया दासान्यार्याणि वृत्रा करो वज्रिन् सुतुका नाहुषाणि॥ 6/22/10
- 55) विजानीह्यार्यान् च दस्यवो बर्हिष्मते रन्धया शासदव्रतान्।  
शाकी भव यजमानस्य चोदिता विश्वेत् ता ते सधमादेषु चाकन॥ 1/51/8
- 56) इन्द्रं वर्धन्तो अप्तुरः कृण्वन्तो विश्वमार्यम्।  
अपघ्नन्तो अरावणः॥ 9/63/5
- 57) अयमेमि विचाकशद् विचिन्वन्दासमार्यम्।  
पिबामि पाकसुत्वनोऽभि धीरमचाकशं विश्वस्मादिन्द्र उत्तरः॥ 10/86/19
- 58) अन्यव्रतममानुषमयज्वानमदेवयुम्।  
अव स्वः सखा दुधुवीत पर्वतः सुघ्नाय दस्युं पर्वतः॥ 8/70/11
- 59) अकर्मा दस्युरभि नो अमन्तुरन्यव्रतो अमानुषः।  
त्वं तस्यामित्रहन् वधर्दासस्य दम्भय॥ 10/22/8
- 60) अच्छा कविं नृमणो गा अभिष्टौ स्वर्षाता मघवन्नाधमानम्।  
ऊतिभिस्तमिषणो द्युमनहूतौ नि मायावानब्रह्मा दस्युरर्त॥ 4/16/9

- 61) त्वमेतान् रुदतो जक्षतश्चायोधयो रजस इन्द्र पारे।  
अवादहो दिव आ दस्युमुच्या प्र सुन्वतः स्तुवतः शंसमावः ॥ 1/33/7
- 62) दस्युञ्छिन्मूर्ध्नि पुरुहूत एवेर्हत्वा पृथिव्यां शर्वा निबर्हीत्।  
सनत् क्षेत्रं सखिभिः श्वित्येभिः सनत्सूर्य सनदपः सुवज्रः ॥ 1/100/18
- 63) धिष्वा शवः शूर येन वृत्रमवाभिनद् दानुमौर्णवाभम्।  
अपावृणोज्ज्योतिरायाय नि सव्यतः सादि दस्युरिन्द्र ॥ 2/11/18
- 64) तन्न सत्यं पवमानस्यास्तु यत्र विश्वे कारवः संनसन्त।  
ज्योतिर्यदहे अकृणोदु लोकं प्रावन्मनुं दस्यवे करभीकम् ॥ 9/92/5
- 65) बिभ्राड् बृहत् सुभृतं वाजसातमं धर्मन् दिवो धरुणे सत्यमर्पितम्।  
अमित्रहा वृत्रहा दस्युहंतमं ज्योतिर्जज्ञे असुरहा सपत्नहा ॥ 10/170/2
- 66) कुत्साय शुष्णमशुषं नि बर्हीः प्रपित्वे अहः कुर्यवं सहस्त्रा।  
सद्यो दस्यून् प्रमृण कुत्स्येन प्र सूरश्चक्रं वृहतादभीके ॥ 4/16/12
- 67) रथिरासो हरयो ते अस्त्रिध ओजो वातस्य पिप्रति।  
येभिर्नि दस्युं मनुषो निघोषयो येभिः स्वः परीयसे ॥ 8/50/8
- 68) अनु त्वा रोदसी उभे क्रक्षमाणकृपेताम्। इन्द्र यदस्युहा भवः ॥ 8/76/11
- 69) मन्दमान ऋतादधि प्रजायै सखिभिरिन्द्र इषिरेभिरथम्।  
आभिर्हि माया उप दस्युमागान्मिहः प्र तन्ना अवपत् तमांसि ॥ 10/73/5
- 70) अग्निर्जातो अरोचत घ्नन्दस्युञ्ज्योतिषा तमः।  
अविन्दद् गा अपः स्वः ॥ 5/14/4
- 71) वृष्णे यत् ते वृष्णो अर्कमर्चानिन्द्र ग्रावाणो अदितिः सजोषाः।  
अनश्वासो ये पवयो रथा इन्द्रेषिता अभ्यवर्तन्त दस्यून् ॥ 5/31/5
- 72) प्रति यत् स्या नीथादर्शि दस्योरोको नाच्छा सदनं जानती गात्।  
अध स्मा नो मघवन्नृकृतादिन्मा नो मघेव निष्पपी पश दाः ॥ 11/104/15
- 73) वधीर्हि दस्युं धनिनं घनेन एकश्चरन्नृपशाकेभिरिन्द्र।  
धनोरधि विषुणक् ते व्यायन्नयज्वानः सनकाः प्रेतिमीयुः ॥ 1/33/4
- 74) एभिर्द्युभिः सुमना एभिरिन्दुभिर्निरुन्धानो अमतिं गोभिरश्विना।  
इन्द्रेण दस्युं दरयन्त इन्दुभिर्युतद्वेषसः समिषा रभेमहि ॥ 1/53/4
- 75) स्त्रियो हि दास आयुधानि चक्रे किं मां करन्नबला अस्य सेनाः।  
अन्तर्हृष्यदुभे अस्य धेने अथोप प्रैद् युध्ये दस्युमिन्द्रः ॥ 5/30/9
- 76) दासपत्नीरहिगोपा अतिष्ठन् निरुध्वा आपः पणिनेव गावः।  
अपां बिलमपिहितं यदासीद् वृत्रं जघन्वा अप तद् ववार ॥ 1/32/11
- 77) उत दासं कौलितरं बृहतः पर्वतादधि।  
अवाहन्निन्द्र शम्बरम् ॥ 4/30/14
- 78) विषू मृधे जनुषा दानमिन्वन्नहन् गवा मघवन् त्संचकानः।  
अत्रा दासस्य नमुचेः शिरो यदवर्तयो मनवे गातुमिच्छन् ॥ 5/30/7

- 79) अहं स यो नववास्त्वं बृहद्रथं सं वृत्रेव दासं वृत्रहारुजम्।  
यद्वर्धयन्तं प्रथयन्तमानुषग् दूरे पारे रजसो रोचनाकरम् ॥ 10/49/6
- 80) स इहासं तुवीरवं पतिर्वन् षळक्षं त्रिशीर्षाणं दमन्यत्।  
अस्य त्रितो न्वोजसा वृधानो विपा वराहमयो अग्रया हन् ॥ 10/99/6
- 81) स ह श्रुत इन्द्रो नाम देव ऊर्ध्वो भुवन्मनुषे दस्मतमः।  
अव प्रियमर्शसानस्य साह्याञ्छिरो भरद् दासस्य स्वधावान् ॥ 2/20/6
- 82) स वृहन्नेन्द्रः कृष्णयोनीः पुरंदरो दासीरैरयद् वि।  
अजनयन् मनवे क्षामपश्च सत्रा शंसं यजमानस्य तूतोत् ॥ 2/20/7
- 83) परो यत् त्वं परम आजनिष्ठाः परावति श्रुत्ये नाम बिभ्रत्।  
अतश्चिद्विन्द्रादभयन्त देवा विश्वा अपो अजयद् दासपत्नीः ॥ 5/30/5
- 84) यः सृबिन्दमनर्शनिं पिपुं दासमहीशुवं। वधीदुगो रिणन्नपः ॥ 8/32/2
- 85) शुभ्रस्त्वमिन्द्र वावृधनो अस्मे दासीर्विशः सूर्येण सह्याः ॥ 2/11/4
- 86) पुरु यत् त इन्द्र सन्त्युक्था गवे चक्रथोर्वरासु युध्यन्।  
ततक्षे सूर्याय चिदोकासि स्वे वृषा समत्सु दासस्य नाम चित् ॥ 5/33/4
- 87) त्वं तदुक्थमिन्द्र बर्हणा कः प्रयच्छता सहस्त्रा शूर दर्षि।  
अव गिरेर्दासं शम्बरं हन् प्रावो दिवोदासं चित्रभिरुती ॥ 6/26/5
- 88) त्वं ह त्यद् वृषभ चर्षणीनां घनो वृत्राणां तविषो बभूथ।  
त्वं सिन्धूरसृजस्तस्तभानान् त्वमपो अजयो दासपत्नीः ॥ 8/96/18
- 89) तां सु ते कीर्तिं मघवन् महित्वा यत् त्वा भीते रोदसी अह्वयेताम्।  
प्रावो देवा आतिरो दासमोजः प्रजायै त्वस्यै यदशिक्ष इन्द्र ॥ 10/31/1
- 90) अपि वृश्च पुराणवद् व्रततेरिव गुष्पितमाजो दासस्य दम्भय।  
वयं तदस्य सम्भृतं वस्विन्द्रेण विभजेमहि नभन्तामन्यके समे ॥ 8/40/7
- 91) यो नो दास आर्यो वा पुरुष्टुताऽदेव इन्द्र युधये चिकतति।  
अस्माभिष्टे सुषहाः सन्तु शत्रवस्त्वया वयं तान्वनुयाम संगमे ॥ 10/38/3
- 92) त्वं ह त्यदिन्द्र कुत्समावः शुश्रूषमाणस्तन्वा समर्थे।  
दासं यच्छुष्णं कुर्यवं न्यस्मा अरन्धय आर्जुनेयाय शिक्षन् ॥ 7/19/2
- 93) शतं मे गर्दभानां शतमूर्णावतीनाम्।  
शतं दासाँ अति स्रजः ॥ 8/56/3
- 94) उषस्तमश्यां यशसं सुवीरं दासप्रवर्गं रयिमश्वबुध्यम्।  
सुदंससा श्रवसा या विभासि वाजप्रसूता सुभगे बृहन्तम् ॥ 1/92/8
- 95) शतं दासे बन्धूथे विप्रस्तरुक्ष आददे।  
ते ते वासविमे जना मदन्तीन्द्रगोपा मदन्ति देवगोपाः ॥ 8/46/32
- 96) स सत्पतिः शवसा हन्ति वृत्रमग्ने विप्रो वि पणेर्मर्तिं वाजम्।  
यं त्वं प्रचेत ऋतजात राया सजोषा नप्त्रापां हिनोषि ॥ 6/13/3

- 97) त्रिधा हितं पणिभिर्गुह्यमानं गवि देवासो घृतमन्वविन्दन्।  
इन्द्र एकं सूर्य एकं जजान वेनादेकं स्वधया निष्टतक्षुः॥ 4/58/4
- 98) इन्द्रो वलं रक्षितारं दुघानां करेणैव वि चकर्ता रवेण।  
स्वेदाज्जिभिराशिरमिच्छमानो ऽरोदयत्पणिमा गा अमुष्णात्॥ 10/67/6
- 99) नि सर्वसेन इषपुधीरसक्त  
समर्थो गा अजति यस्य वष्टि।  
चोष्कूयमाण इन्द्र भूरि वामं  
मा पणिभूरस्मदधि प्रवृद्धः॥ 1/33/3
- 100) ककुहं चि त्वाकवे मन्दन्तु धृष्णविन्दवः।  
आ त्वा पणिं यदीमहे॥ 8/45/14
- 101) य उस्त्रिया अप्या अन्तरश्मनो निर्गा अकृन्तदोजसा॥  
अभि व्रजं तत्तिषे गव्यमश्व्यं वर्मीव धृष्णवा रुज॥ 9/108/6
- 102) हिमेव पर्णा मुषिता वनानि बृहस्पतिनाकूपयद्वलो गाः।  
अनानुकृत्यमपुनश्चकार यात् सूर्यमसा मिथ उच्चरातः॥ 10/68/10
- 103) क इमं दशभिर्ममेन्द्रं क्रीणाति धेनुभिः।  
यदा वृत्राणि जङ्घनदथैनं मे पुनर्ददत्॥ 4/24/10
- 104) दूरमित पणयो वरीय उदगावो यन्तु मिनतीर् ऋतेन।  
बृहस्पतिर्या अविन्दन्निगूळहाः सोमो ग्रावाण ऋषयश्च विप्राः॥ 10/108/11
- 105) अगस्त्यस्य नदभ्यः सप्ती युनक्षि रोहिता।  
पणीन्यक्रमीरभि विश्वान् राजन्नराधसः॥ 10/60/6
- 106) सा ते जीवातुरुत तस्य विद्धि मा स्मैतादृगप गूहः समर्थे।  
आविः स्वः कृणुते गूहते वुसं स पादुरस्य निर्णिजो न मुच्यते॥ 10/27/24
- 107) यज्ञैरिषूः संनममानो अग्ने वाचा शल्यौ अशनिभिर्दिहानः।  
ताभिर्विध्य हृदये यातुधानान् प्रतीचो बाहून् प्रति भङ्ध्येषाम्॥ 10/87/4
- 108) उग्रस्तुराषाळभिभूत्योजा यथावशं तन्वं चक्र एषः।  
त्वष्टारमिन्द्रो जनिषाभिभूयाऽऽमुष्या सोममपिबच्चमूषु॥ 3/48/4
- 109) किं स ऋधक् कृणवद् यं सहस्त्रं मासो जभार शरदश्च पूर्वीः।  
नहीं न्वस्य प्रतिमानमस्त्यन्तर्जातेषूत ये जनित्वाः॥ 4/18/4
- 110) आ बुन्दं वृत्रहा ददे जातः पृच्छद् विमातरम्।  
क उग्राः के ह शृण्विरे॥ 8/45/4
- 111) जज्ञान एव व्यबाधत स्पृधः प्रापश्यद् वीरो अभि पौंस्यं रणम्।  
अवृश्चदद्रिमव सस्यदः सृजदस्तभान्नाकं स्वपस्यया पृथुम्॥ 10/113/4
- 112) अर्भको न कुमारकोऽधि तिष्ठन्नवं रथम्।  
स पक्षन्महिषं मृगं पित्रे मात्रे विभुक्रतुम्॥ 8/69/15

- 113) सखा सख्ये अपचत् तूयमग्निरस्य क्रत्वा महिषा त्री शतानि।  
त्री साकमिन्द्रो मनुषः सरांसि सुतं पिबद् वृत्रहत्याय सोमम्॥ 5/29/7
- 114) तन्नस्तुरीपमदभुतं पुरु त्मना।  
त्वष्टा पोषाय विष्यतु राये नाभा नो अस्मयुः॥ 1/142/10
- 115) उत न ई त्वष्टा गन्त्वच्छा स्मत् सूरिभिरभिपित्वे सजोषाः।  
आ वृत्रहेन्द्रश्चर्षणिप्रास्तुविष्टमो नरां न इह गम्याः॥ 1/186/6
- 116) त्वष्टा रूपाणि हि प्रभुः पशून् विश्वान् त्समानजे।  
तेषां नः स्फातिमा यज॥ 1/188/9
- 117) विश्वेभ्यो हि त्वा भुवनेभ्यस्परि त्वष्टाजनत्साम्नः साम्नः कविः।  
स ऋणचिद् ऋणया ब्रह्मणस्पतिर्द्रुहो हन्ता मह ऋतस्य धर्तरि॥ 2/23/17
- 118) उत स्य देवो भुवनस्य सक्षणिस्त्वष्टा ग्नाभिः सजोषा जूजुवद्रथम्।  
इळा भगो बृहद्विवोत रोदसी पूषा पुरंधिरश्विनावधा पती॥ 2/31/4
- 119) देवस्त्वष्टा सविता विश्वरूपः पुपोष प्रजाः पुरुधा जजान।  
इमा च विश्वा भुवनान्यस्य महद्देवानामसुरत्वमेकम्॥ 3/55/19
- 120) उत नो विष्णुरुत वातो अस्त्रिधो द्रविणोदा उत सोमो मयस्करत्।  
उतऋभव उत राये नो अश्विनोत त्वष्टोत विश्वानु मंसते॥ 5/46/4
- 121) अहं तदासु धारयं यदासु न देवश्चन त्वष्टाधारयद्रुशत्।  
स्पार्हं गवामूधःसु वक्षणास्वा मधोर्मधु श्वात्र्यं सोममाशिरम्॥ 10/49/10
- 122) न यातव इन्द्र जूजुवुर्नो न वन्दना शविष्ट वेद्याभिः। स शर्धदर्यो  
विषुणस्य जन्तोर्मा शिश्नदेवा अपि गुर् ऋतं नः॥ 7/21/5
- 123) स वाजं यातापदुष्यदा यन् त्वर्षाता परि षदत् सनिष्यन्।  
अनर्वा यच्छतदुरस्य वेदो च्चिश्नदेवो अभि वर्पसा भूत्॥ 10/99/3
- 124) किमित् ते विष्णोपरिचक्ष्यं भूत् प्र यद् ववक्षे शिपिविष्टो अस्मि।  
मा वर्षो अस्मदप गूह एतद् यदन्यरूपः समिथे बभूथ॥ 7/100/6
- 125) अश्याम ते सुमतिं देवयज्यया क्षयद्वीरस्य तव रुद्र मीद्वः।  
सुम्नायन्निद् विशो अस्माकमा चरारिष्टवीरा जुहवाम ते हविः॥ 11/114/3
- 126) स्तुहि श्रुतं गर्तसदं युवानं मृगं न भीममुपहत्नुमुग्रम्।  
मृळा जरित्रे रुद्र स्तवानोऽन्यं ते अस्मन्नि वपन्तु सेनाः॥ 2/33/11
- 127) हवीमभिर्हवते यो हविर्भिरव स्तोमेभी रुद्र दिषीय।  
ऋदूदरः सुहवो मा नो अस्यै बभ्रुः सुशिप्रो रीरधन्मनायै॥ 2/33/5
- 128) यो वाचा विवाचो मृधवाचः पुरु सहस्त्राशिवा जघान।  
तत्तदिदस्य पौंस्यं गृणीमसि पितेव यस्तविषीं वावृधे शवः॥ 10/23/5
- 129) त्वं पुरं चरिष्वं वधैः शुष्णस्य सं पिणक्।  
त्वं भा अनु चरो अध द्विता यदिन्द्र हव्यो भुवः॥ 8/1/28

- 130) विदुष्टे अस्य वीर्यस्य पूरवः पुरो यद्विन्द्र शारदीरवातिरः  
सासहानो अवातिरः।  
शासस्तमिन्द्र मर्त्यमयज्युं शवसस्पते।  
महीममुष्णाः पृथिवीमिमा अपो मन्दसान इमा अपः॥ 1/131/4
- 131) दनो विश इन्द्र मृधवाचः सप्त यत् पुरः शर्म शारदीर्दत्त।  
ऋणोरपो अनवद्यार्णा यूने वृत्रं पुरुकुत्साय रन्धीः॥ 1/174/2
- 132) तूर्वन्नोजीयान् तवसस्तवीयान् कृतब्रह्मेन्द्रो वृधमहाः।  
राजाभवन्मधुनः सोम्यस्य विश्वासां यत् पुरां दर्तुमावत्॥ 1/620/3
- 133) वि पिप्रोरहिमायस्य दृळहाः पुरो वज्रिच्छवसा न दर्दः।  
सुदामन् तद् रेकणो अप्रमुष्यमृजिष्वने दात्रं दाशुषे दाः॥ 6/20/7
- 134) सनेम तेऽवसा नव्य इन्द्र प्र पूरवः स्तवन्त एना यज्ञैः।  
सप्त यत् पुरः शर्म शारदीर्दध्वन् दासीः पुरुकुत्साय शिक्षन्॥ 6/20/10
- 135) तस्मै तवस्यमनु दायि सत्रेन्द्राय देवेभिरर्णसातौ।  
प्रति यदस्य वज्रं बाहोर्धुर्हत्वी दस्युन् पुर आयसीर्नि तारीत्॥ 12/20/8
- 136) उत शुष्णस्य धृष्णुया प्र मृक्षो अभिवेदनम्।  
पुरो यदस्य संपिणक्॥ 14/30/13
- 137) शतमश्मन्मयीनां पुरामिन्द्रो व्यास्यत्।  
दिवोदासाय दाशुषे॥ 4/30/20
- 138) वधीदिन्द्रो वरशिखस्य शेषोअभ्यावर्तिने चायमानाय शिक्षन्।  
वृचीवतो यध्वरियूपीयायां हन् पूर्वे अर्धे भियसापरो दर्त॥ 6/27/5
- 139) द्वयाँ अग्ने रथिनो विंशतिं गा वधूमतो मघवा मह्यं सम्राट्।  
अभ्यावर्ती चायमानो ददाति दूणाशेयं दक्षिणा पार्थवानाम्॥ 6/27/8
- 140) सं मा तपन्त्यभितः सपत्नीरिव पर्शवः।  
नि बाधते अमतिर्नग्नता जसुर्वेर्न वेवीयते मतिः॥ 10/33/2
- 141) पशुर्ह नाम मानवी साकं ससूव विंशतिम्।  
भद्रं भल त्यस्या अभूद् यस्या उदरमामयद् विश्वस्मादिन्द्र उत्तरः॥ 10/86/23
- 142) शतमहं तिरिन्दरे सहस्त्रं पर्शावाददे । राधांसि याद्वानाम्॥ 8/6/46
- 143) दश राजानः समिता अयज्यवः सुदासमिन्द्रावरुणा न युयुधुः।  
सत्या नृणामदमसदामुपस्तुतिर्देवा एषामभवन् देवहूतिषु॥ 7/83/7
- 144) इन्द्रावरुणा वधनाभिरप्रति भेदं वन्वन्ता प्र सुदासमावतम्।  
ब्रह्माण्येषां शृणुतं हवीमनि सत्या तृत्सूनामभवत् पुरोहितिः॥ 7/83/4
- 145) अर्णांसि चित् पप्रथाना सुदास इन्द्रो गाधान्यकृणोत् सुपारा।  
शर्धन्तं शिम्पुमुचथस्य नव्यः शापं सिन्धूनामकृणोदशस्तीः॥ 7/18/5
- 146) ईयुरर्थं न न्यर्थं परुष्णीमाशुश्चनेदभिपित्वं जगाम।  
सुदास इन्द्रः सुतुकाँ अमित्रानरन्धयन्मानुषे वध्निवाचः॥ 7/18/9

- 147) इन्द्रेणैते तृत्सवो वेविषाणा आपो न सृष्टा अधवन्त नीचीः।  
दुर्मित्रासः प्रकलविन्मिमाना जहुर्विश्वानि भोजना सुदासे॥ 7/18/15
- 148) आवदिन्द्रं यमुना तृत्सवश्च प्रात्र भेदं सर्वताता मुषायत्।  
अजासश्च शिग्रवो यक्षवश्च बलिं शीर्षाणि जभुरश्व्यानि॥ 7/18/19
- 149) दाशाराज्ञे परियत्ताय विश्वतः सुदास इन्द्रावरुणावशिक्षतम्।  
शिवत्यञ्चो यत्र नमसा कपर्दिनो धिया धीवन्तो असपन्त तृत्सवः॥ 7/83/8
- 150) दण्डा इवेद् गोअजनास आसन् परिच्छिन्ना भरता अर्भकासः।  
अभवच्च पुरेता वसिष्ठ आदित् तृत्सूनां विशो अप्रथन्त॥ 7/33/6
- 151) उप प्रेत कुशिकाश्चेतयध्वमश्वं राये प्रमुञ्चता सुदासः।  
राजा वृत्रं जङ्घनत् प्रागपागुदगथा यजाते वर आ पृथिव्याः॥ 3/53/11
- 152) किं ते कृण्वन्ति कीकटेषु गावो नाशिरं दुहे न तपन्ति घर्मम्।  
आ नो भर प्रमगन्दस्य वेदो नैचाशाखं मघवन् रन्धया नः॥ 3/53/14
- 153) पुरं न धृष्णवा रुज कृष्णया बाधितो विशा।  
अन्तिषदभूत् वामवः॥ 8/73/18
- 154) विभिद्या पुरं शयथेमपार्ची निस्त्रीणि साकमुदधेरकृन्तत्।  
बृहस्पतिरुषसं सूर्यं गामर्कं विवेद स्तनयन्निव द्यौः॥ 10/67/5
- 155) युधा युधमुप घेदेषि धृष्णुया पुरा पुरं समिदं हंस्योजसा।  
नम्या यदिन्द्र सख्या परावति निबर्हयो नमुचिं नाम मायिनम्॥ 1/53/7
- 156) त्वं करजमुत पर्णयं वधीस्तेजिष्ठयातिथिग्वस्य वर्तनी।  
त्वं शता वङ्गदस्याभिनत्पुरोऽनानुदः परिभूता ऋजिष्वना॥ 1/53/8
- 157) आ यः पुरं नार्मिणीमदीदेदत्यः कविर्नभन्यो नार्वा।  
सूरो न रुरुक्वाञ्छतात्मा॥ 1/149/3
- 158) आ न इन्द्र महीमिषं पुरं न दर्षि गोमतीम्। उत प्रजां सुवीर्यम्॥
- 159) स गोरश्वस्य वि व्रजं मन्दानः सोम्येभ्यः। पुरं न शूर दर्षसि॥ 8/6/23
- 160) अर्चत प्रार्चत प्रियमेधासो अर्चत अर्चन्तु पुत्रका उत पुरं न धृष्णवर्चत॥  
8/69/8
- 161) अश्वस्यात्र जनिमास्य च स्वर्दुहो रिषः संपृचः पाहि सूरीन्।  
आमासु पूर्ष परो अप्रमृष्यं नारातयो वि नशन्नानृतानि॥ 2/35/6
- 162) एतत् त्यन्न योजनमचेति सस्वर्ह यन्मरुतो गोतमो वः।  
पश्यन् हिरण्यचक्रानयोदंष्ट्रान् विधावतो वराहन्॥ 1/88/5
- 163) हिरण्यरुपमुषसो व्युष्टावयःस्थूणमुदिता सूर्यस्य।  
आरोहया वरुण मित्र गर्तमतश्चक्षाथे अदितिं दितिं च॥ 5/62/8
- 164) इमं मे गंगे यमुने सरस्वति शुतुद्रि स्तोमं सचता परुष्या।  
असिकन्या मरुद्वधे वितस्तयाऽऽ जीकीये शृणुह्या सुषोमया॥ 10/75/5

- 165) चत्तो इतश्चत्तामुतः सर्वा भूणान्यारुषी।  
अराय्यं ब्रह्मणस्पते तीक्ष्णशृङ्गोदृषन्निहि॥ 10/155/2
- 166) वृषभो न तिग्मशृङ्गोऽन्तर्यूथेषु रोरुवत्।  
मन्थस्त इन्द्रं हृदे यं ते सुनोति भावयुर्विश्वस्मादिन्द्र उत्तरः॥ 10/86/15
- 167) यस्तिग्मशृङ्गो वृषभो न भीम एकः कृष्टीश्चावयति प्र विश्वाः।  
यः शश्वतो अदाशुषो गयस्य प्रयन्तासि सुषितराय वेदः॥ 7/19/1
- 168) त्रिपाजस्यो वृषभो विश्वरूपः उत त्र्युधा पुरुध प्रजावान्।  
त्र्यनीकः पत्यते माहिनावान् त्स रेतोधा वृषभः शश्वतीनाम्॥ 3/56/3
- 169) मुमोद गर्भो वृषभः ककुदमानस्त्रेमा वत्सः शिमीवाँ अरावीत्।  
स देवतात्युद्यतानि कृण्वन् त्वेषु प्रथमो जिगाति॥ 10/8/2
- 170) वि हि सोतोरसृक्षत नेन्द्रं देवममंसत।  
यत्रामददृषाकपिरर्यः पुष्टेषु मत्सखा विश्वस्मादिन्द्र उत्तरः॥ 10/86/1
- 171) किमयं त्वां वृषाकपिश्चकार हरितो मृगः।  
यस्मा इरस्यसीदुन्वर्यो वां पुष्टिमद्वसु विश्वस्मादिन्द्र उत्तरः॥ 10/86/3
- 172) न सेशे यस्य रम्बतेऽन्तरा सक्थ्या कपृत्।  
सेदीशे यस्य रोमशं निषेदुषो विजृम्भते विश्वस्मादिन्द्र उत्तरः॥ 10/86/16
- 173) न सेशे यस्य रोमशं निषेदुषो विजृम्भते।  
सेदीशे यस्य रम्बतेऽन्तरा सक्थ्या कपृत् विश्वस्मादिन्द्र उत्तरः॥ 10/86/17
- 174) अश्वत्थे वो निषदनं पर्णे वो वसतिष्कृता।  
गोभाज इत् किलासथ यत् सनवथ पूरुषम्॥ 10/97/5
- 175) अबुध्ने राजा वरुणो वनस्योर्ध्वं स्तूपं ददते पूतदक्षः।  
नीचीनाः स्थुरुपरि बुध्न एषामस्मे अन्तर्निहिताः केतवः स्युः॥ 1/24/7
- 176) द्वादशारं नहि तज्जराय वर्वर्ति चक्रं परि द्यामृतस्य।  
आ पुत्र अग्ने मिथुनासो अत्र सप्त शतानि विंशतिश्च तस्थुः॥ 1/164/11
- 177) ये अग्निदग्धा ये अनग्निदग्धा मध्ये दिवः स्वधया मादयन्ते।  
तेभिः स्वराळसुनीतिमेतां यथावशं तन्वं कल्पयस्व॥ 10/15/14
- 178) प्र यदित्था महिना नृभ्यो अस्त्यरं रोदसी कक्ष्ये नास्मै।  
सं विव्य इन्द्रो वृजनं न भूमा भर्ति स्वधावाँ ओपशमिव द्याम्॥ 1/173/6
- 179) यज्ञ इन्द्रमवर्धयद् भूमिं व्यवर्तयत्। चक्राण ओपशं दिवि॥ 8/14/5
- 180) जुषस्व नः समिधमग्ने अद्य शोचा बृहद् यजतं धूममृण्वन्।  
उप स्पृश दिव्यं सानु स्तूपैः सं रश्मिभिस्ततनः सूर्यस्य॥ 7/2/1
- 181) उप्रेष्ठिन्नु शूर मन्दसानस्त्रिकद्रुकेषु पाहि सोममिन्द्र।  
प्रदोधुवच्छर्मश्रुषु प्रीणानो याहि हरिभ्यां सुतस्य पीतिम्॥ 2/11/17
- 182) यो धृषितो योऽवृतो यो अस्ति श्मश्रुषु श्रितः।  
विभूतद्युम्नश्च्यवनः पुरुष्टुतः क्रत्वा गौरिव शाकिनः॥ 8/33/6

- 183) यजामह इन्द्रं वज्रदक्षिणं हरीणां रथ्यं विव्रतानाम्।  
प्र श्मश्रु दोशुवदूर्ध्वथा भूद् वि सेनाभिर्दयमानो वि राधसा॥ 10/23/1
- 184) सो चिन्नु वृष्टिर्यूथ्या स्वा सचाँ इन्द्रः श्मश्रूणि हरिताभि प्रुष्णुते।  
अव वेति सुक्षयं सुते मधूदिध्नोति वातो यथा वनम्॥ 10/23/4
- 185) इनो वाजानां पतिरिनः पुष्टीनां सखा।  
प्र श्मश्रु हर्यतो दूधोद् वि वृथा यो अदाभ्यः॥ 10/26/7
- 186) यदुद्वतो निवतो यासि बप्सत् पृथगेषि प्रगर्धिनीव सेना।  
यदा ते वातो अनुवाति शोचिर्वप्तेव श्मश्रु वपसि प्र भूम॥ 10/142/4
- 187) उत नः कर्णशोभना पुरुणि धृष्णावा भर।  
त्वं हि शृण्विषे वसो॥ 118/78/3
- 188) अंसेषु व ऋष्टयः पत्सु खादयो वक्षःसुरुक्मा मरुतो रथे शुभः  
अग्निप्राजसो विद्युतो गमस्त्योः शिप्राः शीर्षसु वितता हिरण्ययीः॥ 5/54/11
- 189) विभ्रद् द्रापिं हिरण्ययं वरुणो वस्त निर्णिजम्।  
परि स्पशो नि षेदिरे॥ 1/25/13
- 190) दिवो धर्ता भुवनस्य प्रजापतिः पिशङ्गं द्रापिं प्रति मुञ्चते कविः।  
विचक्षणः प्रथयन्नापृणन्नुर्व जीजनत्सवितासुम्नमुक्थ्यम्॥ 4/53/2
- 191) जुजुरुषो नासत्योत वरिं प्रामुञ्चतं द्रापिमिव च्यवानात्।  
प्रातिरतं जहितस्यायुर्दस्मादित् पतिमकृणुतं कनीनाम्॥ 1/116/10
- 192) परा देहि शामुल्यं ब्रह्मभ्यो वि भजा वसु।  
कृत्यैषा पद्वतीभूत्या जाया विशते पतिम्॥ 10/85/29
- 193) ता भुज्युं विभिरदभ्यः समुद्रात्पुनस्य सूनूमहथू रजोभिः।  
अरेणुभिर्योजनेभिर्भुजन्ता पतत्रिभिरर्णसो निरुपस्थात्॥ 6/62/6
- 194) अनारम्भणे तदवीरयेथामनास्थाने अग्रभणे समुद्रे।  
यदश्विना ऊहथुर्भुज्युमस्तं शतारित्रां नावमातस्थिवांसम्॥ 1/116/5
- 195) स इत्स्वपा भुवनेष्वास, य इमे द्यावापृथिवी जजान।  
उर्वी गभीरं रजसी सुमेके अवंशे धीरः शच्या समैरत्॥ 4/56/3
- 196) प्रमन्दिन पितृमदर्वता वचो यः कृष्णगर्भा निरहनृजिश्वना।  
अवस्यवो वृजनं वज्रदक्षिणं मरुत्वन्तं सख्याय हवामहे॥ 1/101/1
- 197) स वृभहेन्द्रः कृष्णयोनीः पुरन्दरो दासीरैरयद्वि।  
अजयन्मनवे क्षामपश्च सत्रा शंसं यजमानस्य तूतोत्॥ 2/20/7
- 198) त्वं पिपुं मृगयं शूशुवांसमृजिश्वने वैदथिनाय रन्धीः।  
पंचाशत्कृष्णा निवपः सहस्रा, अत्कं न पुरो जरिमा विदर्दः 4/16/13
- 199) यदिन्द्राह्नप्रथमजामहीना मान्मायिनाममिनाः प्रोत मायाः।  
आत्सूर्यं जनयन्धामुषासं तादीत्ना शत्रुं न किला विवित्से॥ 1/32/4

- 200) महे चन त्वामद्रिवः परा शुल्काय देयाम्।  
न सहस्राय नायुताय वज्रिवो न शताय शतामघः॥ 8/1/5
- 201) तव श्रियं मरुतो मर्जयन्त रुद्र यत्ते जनिमा चारु चित्रम्।  
पदं यद्विष्णोरुपमं निधायि तेन पासि गुह्यं नाम गोनाम्॥ 5/3/3
- 202) युवां नरा पश्यमानास आप्यं प्राचा गव्यन्तः पृथुपर्शवो ययुः।  
दासा च वृत्रा हतमार्याणि च सुदासमिन्द्रावरुणावसावतम्॥ 7/83/1
- 203) आ पक्थासो भलानसो भनन्ता, अलिनासो विषाणिनः शिवासः।  
आ यो नयत्सधमा आर्यस्य गव्या तृत्सुभ्यो अजगन्धुधा नृन्॥ 7/18/7
- 204) वातस्याश्वोम वायोः सखा अथो देवेषितो मुनिः।  
उभौ समुद्रावक्षेति यश्च पूर्व उतापरः॥ 10/136/5
- 205) जुहुरे विचिन्तयन्तो अनिमिषं नृष्णं पान्ति। आ दृढां पुरं विविशुः॥ 5/19/2
- 206) द्रापिं वसानो यजतो दिविस्पृशमन्तरिक्षप्रा भुवनेष्वर्पितः।  
स्वर्जज्ञानो नभसाभ्यक्रमीत् प्रत्नमस्य पितरमा विवासति॥ 9/861/14
- 207) प्र तद्दुःशीमे पृथवाने वेने प्र रामे वोचमसुरे मघवत्सु।  
ये युक्त्वाय पंच शता स्मयु पथा विश्राव्येषाम्॥ 10/93/14
- 208) सिंहं नसन्त मध्वो अयासं हरिमरुषं दिवो अस्य पतिम्।  
शूरो युत्सु प्रथमः पृच्छते गा अस्य चक्षसा परि पाति उक्षा॥ 9/89/3
- 209) सूर्यायाः वहतुः प्रागात् सविता यमवासृजत्।  
अघासु हन्यन्ते गावो अर्जुन्योः परि उह्यते॥ 10/85/13
- 210) वयश्चित्ते पतत्रिणो द्विपच्चतुष्पदजुनि। उषः प्रारन् ऋतूरनु  
दिवोन्तेभ्यस्परि॥ 1/49/3
- 211) उषो भद्रेभिरागहि दिवश्चिद्रोचनादधि।  
वहन्त्वरुणत्सवः उपत्वा सोमिनो गृहम् ॥ 1/49/1
- 212) स्तोमासस्त्वा विचारिणि, प्रतिष्ठोभन्त्यक्तुभिः।  
प्र या वाजं न हेषन्तं पेरुमस्यस्यर्जुनि॥ 5/84/2
- 213) दृढा चि द्या वनस्पतीन् क्षमया दर्धष्योजसा।  
यत्ते अभ्रस्य विद्युतो दिवो वर्षन्ति वृष्टयः ॥ 5/84/3
- 214) बळित्था पर्वतानां खिद्रं बिभर्षि पृथिवि।  
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- 216) ईयिवांसमति सिधः शश्वतीरतिसश्चतः।  
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- 217) अयं विदच्चित्रदृशीकमर्णः शुक्रसदमनामुषसामनीके।  
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- 218) उध्देदभि श्रुतामघं वृषभं नर्यापसम्। अस्तारमेभि सूर्य॥ 8/9/1
- 219) पावीरवी कन्या चित्रायुः सरस्वती वीरपत्नी धियं धात्।  
ग्नाभिरच्छिद्रं शरणं सजोषा दुराधर्षं गृणति शर्म यंसत्॥ 6/49/7
- 220) अधि श्रिये दुहितां सूर्यस्य रथे तस्थौ पुरुभुजा शतोतिम्।  
प्रमायाभिर्मायिना भूतमत्र नरा नृत् जनिमन्यज्ञियानाम्॥ 6/63/5
- 221) वाचं सु मित्रवरुणाविरावतीं पर्जन्यश्चित्रं वदति त्विषीमतीम्।  
अभ्रा वसत मरुतः सुमायया द्यां वर्षयतमरुणामरेपसम्॥ 5/63/6
- 222) माया वां मित्रावरुणा दिवि श्रिता सूर्यो ज्योतिश्चरति चित्रमायुधम्।  
तमग्रेण वृष्टया गूह्यो दिवि पर्जन्य द्रप्सा मधुमन्त ईरते॥ 5/63/4
- 223) सम्राजा उग्रा वृषभा दिवस्पती पृथिव्या मित्रावरुणा विचर्षणी।  
चित्रेभिरभ्रैरुपतिष्ठतो रथं द्यां वर्षयथो असुरस्य मायया॥ 5/63/3
- 224) सम्राजावस्य भुवनस्य राजथो मित्रावरुणा विदथे स्वर्दृशा।  
वृष्टिं वां राधी अमृतत्वमीमहे द्यावापृथिवी विचरन्ति तन्यवः॥ 5/63/2
- 225) ऋतस्य गोपावधिपतिष्ठतो रथम्, सत्यधर्माणा परमे व्योमनि।  
यमत्र मित्रावरुणावथो युवं तस्मै वृष्टिर्मधुमत्पिन्वते दिवः॥ 5/63/1
- 226) आ नो मित्रावरुणा घृतेर्गव्युतिमुक्षतम्। मध्वा रजांसि सुक्रतू॥ 3/62/16
- 227) सहस्रशृङ्गो वृषभो यः समुद्रादुदाचरत्।  
तेना सहस्येना वयं नि जनान्त्स्वापयामसि॥ 7/55/7
- 228) प्र वां शरद्वान्वृषभो न निःषाद् पूर्वीरिषश्चरति मध्व इष्णन्।  
एवैरन्यस्य पीपयन्त वाजैर्वेषन्तीरूर्ध्वा नद्यो न आगुः॥ 1/181/6
- 229) युवं हि धर्मं मधुमन्तमत्रये अपो न क्षोदो अवृणीतमेषे।  
तद्वां नरावश्विना पश्वइष्टी रथ्येव चक्रा प्रतियन्ति मध्वः॥ 1/180/4
- 230) स्वस्वा यशसा यातमवार्क दसा निधिं मधुमन्तं पिबाथः।  
वि वां रथो वध्वा यादमानो, अन्तान्दिवो बाधते वर्तनिभ्याम्॥ 7/69/3
- 231) याभिः सूर्यं परियाथः परावति, मन्धातारं क्षेत्रपत्येषावतम्।  
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- 233) द्वादश द्यून् यदगोह्यस्यातिथ्ये रणन्भुवः ससन्तः।  
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- 234) अयोदंष्ट्रो अर्चिषा यातुधानानुपस्पृशं जातवेदः समिधः।  
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- 235) एतत्यन्नं योजनमचेति सस्वर्ह यन्मरुतो गोतमो वः।  
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- 236) उदुष्य देवः सविता दमूना हिरण्यपाणिः प्रतिदोषमस्थात् ।  
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- 237) सना ता त इन्द्र नव्या आगुः सहो नभो विरणाय पूर्वीः ।  
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- 238) एवा ते इन्द्रोचथमहेम श्रवस्या न त्मना वाजयन्तः ।  
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- 242) तमी हिन्वन्त्यग्नौ धमन्ति बाकुरं द्रुतिम्, त्रिधातु वारणं मधु ।। 9/1/8
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1/105/8
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