

Indology-studies in Germany

With special reference to Literature, R̥gveda and Fire-Worship

By

Rita Kamlapurkar

A thesis submitted towards the fulfilment for

Degree of Ph.D. in Indology

Under the guidance of

Dr. Shripad Bhat

And

Co-Guidance of

Dr. G. U. Thite

**Shri Bal Mukund Lohiya Centre Of Sanskrit And
Indological Studies**

Tilak Maharashtra Vidyapeeth, Pune.

December 2010.

Acknowledgements :

Achieving the ultimate goal while studying the Vedas might require many rebirths, as the ancient Ṛṣis narrate. In this scrutiny it has been tried to touch some droplets of this vast ocean of knowledge, as it's a bold act with meagre knowledge.

It is being tried to thank all those, who have extended a valuable hand in this task. I sincerely thank Dr. Shripad Bhat without whose enlightening, constant encouragement and noteworthy suggestions this work would not have existed. I thank Dr. G. U. Thite for his valuable suggestions and who took out time from his busy schedule and guided me.

The constant encouragement of Dr. Sunanda Mahajan has helped me in completing this work.

I thank the Librarian and staff of Bhandarkar Oriental Research Institute, Pune, Maharashtra Sahitya Parishad, Pune and Tilak Maharashtra Vidyapeeth for their help. I am very much grateful to Homa-Hof-Heiligenberg, Germany, its staff and Ms. Sirgun Bracht, for keeping the questionnaire regarding the Agnihotra-practice in the farm and helping me in collecting the data. My special thanks to all my German friends for their great help. Special thanks to Dr. Ulrich Berk and the Editorial staff of 'Homanewsletter' for their help.

My sincere thanks to Mr. Ravi Dhavalikar of Fontasy Typesetters for his kind co-operation in preparing the Sanskrit texts.

Finally, I thank all those who helped me directly and indirectly in the task of making this work a success-story.

... Rita Kamlapurkar.

Declaration

I hereby declare that the thesis entitled “ **Indology-studies in Germany (With special reference to Literature, R̥gveda and Fire-Worship)** ” completed and written by me has not previously formed the basis for the award of any Degree or other similar title of this or any other University or examining body.

Place :

Rita Kamlapurkar

Date :

Research student

CERTIFICATE

This is to certify that the thesis entitled “ **Indology-studies in Germany (With special reference to Literature, Ṛgveda and Fire-Worship)** ” which is being submitted herewith for the award of the Degree of Ph.D. in Indology of the Tilak Maharashtra Vidyapeeth, Pune is the result of original research work completed by Mrs. Rita Kamlapurkar under our supervision and guidance. To the best of our knowledge and belief the work incorporated in this thesis has not formed the basis for the award of any Degree or similar title of this or any other University or examining body.

Place :

Date:

Research Guide : Dr. Shripad Bhat

Research Co-Guide : Dr. G. U. Thite

Abbreviations :

1. AgniP	-----	Agnipurāṇa
2. AiB	-----	Aitereya Brāhmaṇa
3. AV	-----	Atharvaveda
4. GA	-----	Gaṇapati Atharvaśirṣa
5. GoG	-----	Gobhila Gṛhyasūtra
6. GoB	-----	Gopatha Brāhmaṇa
7. JaiB	-----	Jaiminīya Brāhmaṇa
8. Ka Ār	-----	Kaṭha Āraṇyaka
9. MB	-----	Mahābhārata
10. Mu	-----	Muṇḍakōpaniṣad
11. ṚV	-----	Ṛgveda
12. SV	-----	Sāmaveda
13. San	-----	Saṅyuttanikāya
14. ŚāB	-----	Śāliki Brāhmaṇa
15. ŚivaP	-----	Śivapurāṇa
16. ŚB	-----	Śatapatha Brāhmaṇa
17. Sutt	-----	Suttanipāta
18. Tai Ār	-----	Taittirīya Āraṇyaka
19. TaiB	-----	Taittirīya Brāhmaṇa
20. Taitt Up	-----	Taittirīya Upaniṣad
21. ViṣṇuP	-----	Viṣṇupurāṇa
22. WYV	-----	White Yajurveda
23. YV	-----	Yajurveda

... ..

Index :

Indology Studies in Germany

(with special reference to Literature, Ṛgveda and Fire-worship)

1. Introduction	1 ... 8
1.1 Historical traces of Indian culture in the world	
1.2 Aims and Objectives	
1.3 Methods	
1.4 Hypothesis	
1.5 Conclusions	
2. Indology and Germany	9 ... 49
2.1 Brief account of Indo-German relations	
2.2 Definition: Indology	
2.3 Survey of Indology Studies in Germany	
2.4 Present situation of Indology Studies in various German universities	
2.5 Limitations of this work	
3. The Ṛgveda	50 ... 111
3.1 Fixing the date of the Ṛgveda	
3.2 Method of preserving the Vedic knowledge amongst Indians	
3.3 Division of the Vedas	
3.4 The language of the Ṛgveda	
3.5 Various commentaries on the Ṛgveda	
3.6 The physical appearance of the Ṛgveda	
3.7 The Deities of the Ṛgveda	
4. Vedic sacrifices	112 ... 149

- 4.1 Classification of the Yajñas
- 4.2 Somayaga
- 4.3 Animal-sacrifice in the Yajñas
- 4.4 Darśapūrnamāseṣṭi
- 4.5 Vyāhṛatihoma

5. Agnihotra

150 ... 175

- 5.1 Procedure
- 5.2 Basic Religion
- 5.3 Three folded form of Agni
- 5.4 Significance of oblations

6. Yajña : A Scientific Perspective

176 ... 233

- 6.1 Purification of atmosphere
- 6.2 Importance of material used in Agnihotra
 - 6.2.1 : Dried cow-dung cakes
 - 6.2.2 : Clarified butter made out of cow-milk
 - 6.2.3 : Rice grains
 - 6.2.4 : Copper pyramid
- 6.3 : Chanting of Mantras
- 6.4 : Significance of time
- 6.5 : Significant Effects of Agnihotra on human mind
 - 6.5.1: Homogeneous Effect on the mind
 - 6.5.2 : Brain-waves
- 6.6 : Agnihotra and organic farming
- 6.7 : Agnihotra ash medicines
- 6.8 : Agnihotra and Radioactivity
 - 6.9.1 : Measuring the effects with Kirlion Photography
 - 6.9.2 : Measuring the effects with PIP Imaging
- 6.10: Research regarding the effects of Soma Sacrifice

7. Interviews	233 ... 250
8. Conclusions	251 ... 281
8.1 Vedic Tradition	
8.2 : Yajña - the original ritual of every religion	
8.3 : Agnihotra	
8.3.1 : Further Research Opportunities	
8.4 : Summary	
9. Bibliography	282 ... 292
10. Appendix	293 ... 296
10.1 Fire-worship around the world	

... ..

Introduction :

Since time immemorial, India has stirred the human imagination. Her ties with the world are keen and powerful. Various names and reasons can be acquired for the same, like trade, politics, religion or social causes, etc. The history regarding is not much known or is so deeply forgotten that these relations are almost unbelievable and are mere fairytales, while they were being elaborated by the historians. As in the middle-ages the narrow-minded social beliefs ruled the Indian society, nobody was allowed to travel across the seas. If anyone tried it, the penalty was severe. Even in the years of colonial rule the self-confidence was totally lost and Indians were made to believe that they cannot be having any enriched civilisation ages before.

According to great philosopher Hegel, India was rich in natural wealth, natural resources and especially it was a treasury of knowledge and wisdom.¹ At the same time, India's geographical centre position in the Indian Ocean was matched by her spiritual stature. Hence there was a competition amongst the countries to experience this wealth of India. Therefore many businessmen, historians, religious travellers and diplomats visited India. Thus she was never aloof from the world, but exchanged various types of relations with rest of the nations and cultures.

In India meet the opposites, the abstract and the all-too elemental. The mathematical symbol of the zero was gifted by Indian mathematicians, which turned out revolutionary. At the same time it provided food for the people's nostalgic yearnings with its legends and fairytales.

For a long time the people of the West regarded India as an entity serving generations of the Indologists as the inspiration source. These Indologists were co-operating each other in their research. India became the goal of scientific pilgrimage for them.

¹ vide Leifer, Walter. Indien und die Deutschen. 500 Jahre Begegnung und Partnerschaft.- Kunst Dichtung Religion Philosophie Forschung Medizin Wirtschaft Politik, Horst Ermann Verlag, Tübingen und Basel, 1969, p. 9.

The traces of Indian culture and civilization have been found in every part of the world. The ancient Indians carried their civilized culture, wherever they went. Though they never used any force to acquire new followers for their culture, their civilized culture and noble behaviour attracted many followers. Another speciality of this culture is that it allows everyone to follow his/her own culture, religious beliefs and rituals instead of forcing Indian culture on them. They believed in co-operation and tolerance.

Thus, if you examine closely the theory of the good secular Muslim/Christian/Marxist, versus the bad/dangerous/fundamentalist Hindu, you are bound to come-up against several deep contradictions. Firstly, historically, Hindus have been the least fundamentalist people in the world : Never trying to impose their creed upon others by the sword, like Christianity or Islam, or even by the non-violent means of preaching, like Buddhism. Hinduism has also proved over the ages is infinite tolerance towards other religions giving refuge to all persecuted minorities in the world whether Parsis, Syrien, Christians, Jews or Tibetans today.²

Famous french journalist 'Francois Gautier' of 'Asian Age' has expressed his opinions in this manner, while explaining he specialities of Indian culture and religion.

Historical traces of Indian culture in the world :³

The architectural remains in the world narrate the history. Same is the case of Lothal in Saurashtra, Gujarat. Lothal was a rich, well planned port since 2450 B. C., approximately at the same scale as Harappa or Mohenjodaro.

² Gautier, Francois. Hindus and India. In the Eyes of a Frenchman, The Pioneer, International Opinion, www.internationalopinion.com.

³ vide Mujumdar, R. C.(Ed.). The History and Culture of the Indian People, Vol. II- The Age of Imperial Unity, Bharatiya Vidya Bhavan, 6th Edition, Bombay, 1990, pp. 629 -634.

The trade between Egypt, Mesopotemia, Persia, etc. was carried through its docks. It had a long pier, i.e. 734 ft. long and 126 ft. broad. The ships carrying 60 to 75 tonnes of goods visited this port. 90 to 100 ft. long ships used to stand in its pier. Sopara and Bharuch were the other main ports on the western coast of India. In 'Periplus' and in 'Jatai-stories' one can read about these business relations of India with foreign countries. In Sanchi a carved picture of a ship can be seen or in Ajanta-caves decorated paintings of ships can be seen, eg. a fighter boat, elephants and horses carrying ships etc. Hence the historians could assume that the art of building and developing large ships and travel across the seas was very much known to Indians since ancient times.⁴

These brave Indian travellers took their culture with them and infected the countries they visited with their noble culture. Indians had colonies in Egypt and Greece. They sold precious stones, silk, cotton clothes, rice, spices, pepper, cardamom and carved pots etc. Traders got gold as the currency back to homeland, India. One finds Indian wood and wooden building material in ancient Greek and Roman buildings. Roman ladies loved Indian silk clothing. Thus roman emperors had put heavy and strict duties for importing Indian goods, especially on Indian silk.⁵

These Indian merchants took their philosophy, literature, art, astrology, medicines and styles of construction with them. The carved stupas and stones in Sanskrit from Indonesia, Cambodia, Indo-China, Borneo, Iran, Irak, Soviet Union and Siberia narrate the history of bravery of these Indians. One finds Śiva, Viṣṇu and Buddha temples in these countries. The cultural heritage and life-style of the people in these countries is a reflection of India. The Indian traditional rituals, pūjas, beliefs about good and bad deeds and daily life has clear Indian traces.

There are two reliable sources to acquire knowledge of the past according to

⁴ vide Hebalkar, Sharad P. Bharatiya Sanskriticha Vishwasanchar, Bharatiya Vichar Sadhana, 5th Edition, Pune, 2004, pp. 108-119.

⁵ ibid, pp. 108-119.

the historians. One of them is physical evidences, which are scattered all over the world. Important in them are the stūpas or the stone works, that are written mainly in Sanskrit and the architectural remains of ancient constructions. Secondly the Chinese travellers and historians. They have collected the information for the future generations. They have taken tremendous efforts for preserving, writing and publishing the ancient knowledge of India.

Hindu emperors ruled Cambodia for almost 1400 years. Hence whatever was developed in India went to Cambodia. Science, literature, art and at the same the theory of rebirth are believed in there even today.

For the purpose of spreading the Buddhism in the world emperor Ashok has organised a religious meet in 240 B.C. These Buddhist monks got then the help of Indian businessmen and navigators who have settled Indian colonies in various countries years before.

Ancient culture of Mexico is known as 'maya-culture'. 'Maya' people were good artists and architects. The historians have found well planned old colonies in Mexico. These maya people believed in and worshipped the God Sun. The lifestyle of today's Mexicans is comparable with Indians. Many religious beliefs and rituals are same as Indians. Original Americans (ancient Americans) believed in God Sun. The ancient people of Peru known as 'Inka' have worshipped God Fire or Agni, which is practised in modern times also. From the birth till the death many rituals are performed in Peru or in Inka society as do the Indians. They perform various Yagnyas in this twenty-first century also.⁶

Indians visited Somalia, Kenya and Tanzania. Indians introduced them sugar. Many western philosophers are of the opinion that the name of river Nile is derived from Sanskrit.

The relations between Afghanistan and India and its evidences are numerous. As also in the region near Caspian sea in Russia the historians have found well planned and constructed colony, which they are comparing with Harappa,

⁶ Op cit, pp. 96-107.

Mohinjodaro and Lothal. In the region near Baikal lake ancient Buddhist architectural remains are found. If one visits these Vihāras, one gets a special 'Prasāda' made from honey, ghee and curds. There are 33 Vihāras in the surroundings. The people in this area worship since ancient times, God Agni and Indra and the Ganges water carries the same importance, as in any Indian house, in the religious rituals even today.⁷

Though Indians and Indian culture had never confrontation with the established culture, one finds 'Indian' element present in many ancient cultures. For example in Japan Indian element can be observed in all walks of life, in paintings, literature, ideas about God, religious beliefs, etc. One can read Rāmāyaṇa, Mahābhārata, stories from Pañcatantra and Hitopadeśa in Japanese.

The recognition of Indian culture is varied amongst various societies of the world. It is known as the Vedic culture, Hindu culture, as oriental culture or as original culture. The historical glance on this culture allows to believe that this culture has its origin in the Vedas. At the same this culture has a path designed for many ancient cultures of the world. This culture strongly believes in the Yajñas. Co-operation, co-existence, tolerance, helpfulness, thankfulness, sacrifice, total - surrender, to follow various duties honestly eg. duties towards oneself, towards society, towards mankind are the characteristics of the Yajñas. It develops all these qualities in its practitioners and in the human life. The ancient thinkers of India believed that God Agni is the symbol of the Sun on this earth. Thus they have worshipped God Agni. The original religious literature of Indians - Ṛgveda describes God Agni through prayers. The very first Ṛc of Ṛgveda is devoted to Lord Agni and the same the last Ṛc depicts a prayer for the well being of the society, mankind and the world.

⁷ Op cit, pp. 108-119.

Aims and Objectives :

At the end of the 18th century the first translations of classical Indian literature received enthusiastic welcome in Germany. In the 1823 A. W. Schlegel published the translation of 'Bhagwad Gītā'. After him there is long tradition of Indologists. Some names one never forgets are like E. F. K. Rosenmüller, Hermann Brockhaus, Theodor Benfey, Franz Kielhorn. One can not forget the enormous work of Paul Deussen, who translated the Upaniṣdas in German. This marked the beginning of Indology studies in Germany. Then followed the translations of Ṛgveda and Sāyaṇabhāṣya by F. Max Müller.

The eternal knowledge preserved in India was introduced to the whole world by the translations of Ṛgveda. It was a tough job which Max Müller undertook with the help of Oxford University. Various German Universities are keeping themselves busy with their studies of Indology and offering many courses for Indian languages, literature, art, culture, etc. The students are encouraged to develop their 'India' knowledge by offering scholarships for field trips. DAAD (Deutsche Akademische Austauschdienst) has taken a keen initiative in this. Göttingen University is one of the first Universities to collaborate with Pune University for such student's training programme. Pro. Thomas Oberlies has taken efforts in this project as he is interested in studies of Yajñas, especially in Somayāga. There are many more Indologists, Scientists and Scholars, who are undertaking researches about the Fire-Worship (Yajñas) as ordained by the Vedas. They go on performing regularly morning and evening sacrifices (Agnihotra - as it is called in the Vedas). They are monitoring its effects on human body, plants, animals and at the same time on atmosphere. The aim of this scrutiny is to study all these aspects critically. The main and important objective of this study is to find out the relevance of all these in the practical life of today's modern man.

Methods :

Germans are better known for their articulateness and scholarly approach. Hence it is important to study, their approach and viewpoint about this ancient knowledge and their findings if any. As also it is important to note, whether they have taken colonial or post colonial approach or whether they hold a totally different view. It is also important to observe, whether it is orientalist approach.

Stress would be on the relevance of these studies in twenty-first century I.T. revolution that we are in today and the practical life of every one. The relevant methods of analysis with this approach are used for the studies.

For a literary study the main important method is of survey. Using this method survey of a vast literature has been taken. Specially scholars and scientists, who are working in this field and the regular Yajña performers were interviewed and given a set of questions regarding for how long they practice Yajña and their experiences. For finding out certain facts regarding Soma-sacrifice the Somayāga that took place from 06 to 11 March 2009 at Muhamadwadi, Pune, was visited and photographs were taken. To gather first hand information the Adharyu - Shri B. Shrinivas Sattri - of the same was interviewed.

Hypothesis :

In this twenty-first century it is important to study Indology with various new angles and aspects. German scholars studying 'India-element' with new approaches in the 18th century laid foundations of scientific study of Indology. Their works are pioneering in this field. Max Müller with his volumes of the ṚV has given a new dimension to the ṚV study. He explained the valuableness and immortality of the knowledge of the ṚV to the Western scientists' world. Today in the IT era new generation of German Indologists has come forward

to set again a completely new dimension to the study of the ṚV and Yajña culture. They are dealing with all modern techniques and yardsticks to find out the relevance of Yajña in daily life of common man. They have found out that solution to all sorts of pollution problems lies in the daily practice of Yajña. For proving their views they have undertaken different experiments in the field of chemistry, physics, biology, agriculture, psychology, etc. These experiments are carried out in different countries of the world , including India.

1.5 : Conclusions :

According to the scientific observations of the various experiments, it can be said that the knowledge imparted in the Vedas is useful and important for everyone, in whichever corner of the world one may be born and live. As it was assumed earlier by certain scholars, the Vedas are not just hymns addressed to God, nor it has only a mystic approach or value. They have been described as working manuals of the universe. And they have very much relevance in every day life of common man in this IT era. In fact many in Germany, Latin America, Europe, USA, Poland and many other nations are working on these lines and surprisingly they have come across many positive results, which tell us that the Vedas are nothing but eternal knowledge.

... ..

2. Indology and Germany

The German President Johannes Rau and his wife visited India on 3 March 2003. At that time he pointed out the traditional relations of Germany with India in details in his speech at the State Banquet hosted by the Indian President Dr. A P J Abdul Kalam in New Delhi. He said :

We Germans have always been fascinated with India and its culture. The great India scholar Max Müller once titled a lecture series of his "What can India teach us ?" He summed it up as follows : "If I were asked under what sky the human mind has most fully developed some of its- chieftest gifts (...), I should point to India. Another German expressed the following opinion: " India possesses a sufficient amount of the gold of wisdom, the silver of eloquence and the gems of all virtues". This quote is somewhat older -1200 years older to be exact- and is attributed to the great clerk and teacher Rhabanus Maurus.

Also in recent times, India has accomplished a historic achievement that has won recognition in Germany and the world over. ...

Relations between India and Germany have always been based on friendship and trust. India is our preferred partner in South Asia. ...

Mr. President, after having spent only two days in New Delhi and in Jaipur with its magical charm, we have come to understand why so many people are fascinated with India and its legendary status. One of these people was the German writer Hermann Hesse, who said, " For anyone who has visited India not only with his eyes ... but also with soul, to him it will remain a land of yearning...¹

In these words the German President has expressed the fascination and the special feelings German common man as well as thinkers, philosophers, politicians and leaders are having towards India. The famous thinker, Walter Leifer is no exception, he wrote :

¹ Rau, Johannes. *German President Johannes Rau in India, German News, VOL XLIV, German Embassy New Delhi, April 2003, p. 6.*

Wir Deutschen haben immer zu Indien ein besonderes Verhältnis gehabt.²

(We Germans gave always had a special relationship to India.)³

There are various reasons why Germany and Germans had a 'special' relations with India. The fascination towards India, Indians, their culture, philosophy, life-style, multi-linguality of Germans is not only of modern times but it dates back to many centuries. India is attracting Germans even today as a land of various fairytales and fables. Germany never ruled any part of India as their colony like some other European countries. All the while only the spiritual quest and philosophy of India has attracted Germans. They have had no prejudices towards India. The German interest in India is, therefore, predominantly focussed on research of philosophy, religion and classical and Vedic literature. German philosophers and wanderers on the path of spiritual perfection want to search and test their ways and aims vis-a-vis Indians. Hence study of Indology with a scientific approach started in Germany as back as 18th century.

2.1: Brief account of Indo-German relations :

Indo-German relations have a long tradition which - as the written evidences

² Leifer, Walter. *Indien und die Deutschen, 500 Jahre Begegnung und Partnerschaft*, - Kunst Dichtung Religion Philosophie Forschung Medizin Wirtschaft Politik, Vorwort, Horst Ermann Verlag, Tübingen und Basel, 1969, p. 9.

³ Leifer, Walter. *India and the Germans, 500 Years of Indo-German Contact*, Art Poetry Religion Philosophy Research Medicine Economics Politics, Forward, Shakuntala Publishing House, Bombay, 1977, p. vii.

narrate - starts with the birth of Jesus Christ.

2.1.1 : Birth of Jesus Christ and India

After the birth of Christ three 'Wise Men' or 'Magis' came in the darkness following a bright star in the sky to see the 'Holy Child'.

Nothing is known to substantiate that the ancient Arabs, nomadic tribes, were considered especially wise. At the time of Christ's birth, the wisdom of the Chaldeans was no longer lauded. Yet Indian wisdom was proverbial. Persian historian praised that wisdom. They went to India 'in search of the tree of the wisdom'. India was the country where wisdom had been of a high order since earliest times. The sages of India, called 'risis', have always and into our days formed a 'social cast superior to all others in the land'.

India was also country where astronomy was being cultivated. The Indian epic, Mahabharata, announces the coming of a divine redeemer who was to absolve mankind from its misfortune and its misery. He would enjoy great power and being a commanding ruler ; he would restore order and harmony in this world; he would destroy all evil and create a new era:

The Indian prophecy also speaks of new phenomenon in the sky upon the birth of the reformer or redeemer. The modern Indian astronomer, Shri Swamikannu Pilli, has stressed the study of Kepler and Karl Adams and come to the conclusion that the star which guided the Wise Men from the East was Brhaspati in conjunction with the Sun and the Moon, when they entered the constellation Tisya ... ⁴

There are many theories about from where these 'Wise Men' originate, but according to the much believed theory, they came from Indo-Iranian region.

In the Middle Ages the theory that one of these Maggies came from India was much believed.

⁴Hogge, Helmut. Woher kamen die Heiligen Drei Könige?, Die Zeit, Hamburg, Nr. 51 vom 20.12.1963. op.cit: Leifer,Walter. India and the Germans, 500 Years of Indo-German Contact, p. 17.

Moreover, the people of the Middle Ages had always thought that one of the magi came from India.⁵

Only one German city that is Cologne is known as the sacred place or the Deva-Bhūmī (as it is described in Sanskrit) according to the beliefs of Christian people of the Middle Ages. They believed that Magies came from this region.

They offered the child 'gifts of gold, incense and myrrh'. These three gifts usually offered according to Oriental etiquette; by presenting them, they honored the new-born baby as king.

Gold existed in India. Incense and myrrh, it is true, originally came from 'lucky Arabia', yet they were doubtless to India. It was perfectly natural for risis from India to offer the traditional gifts of gold, incense and myrrh ...⁶

The baby got the special gifts which are mainly presented in India and the most important is incense and myrrh which is originated in India itself. Thus these historical documents allow to believe that one of the Magies came from India. Since then the relations of India can be observed with the Western world or even with Germany.

2.1.2 : Christian Missionaries and India :

German missionaries visited India in the first century. They tried to establish Christianity through Danish colony in India. It was the southern part of India i.e.

⁵ Op cit. p. 17.

⁶ ibid, p. 17.

today's Tamilnadu.

India has also at all times been linked to the name of the St. Thomas, the doubting disciple. After this martyr's death in 68 A.D., his tomb was in a town near Madras, in Mylapore, the ancient Tamil Mayilapuram, the 'city of peacocks', until Syrian Christians, who had maintained close relations with the Christian communities of Southern India since the earliest times, took the body relics in Edessa about 232.⁷

St. Thomas, one of the apostles had visited India and his name is related with the spreading of Christianity in Kerala in early years. He died in India and his tomb was in Mylapore till 232 A.D.. Then his body was taken to Edessa where it remained till 1144 and then it was taken to the Island Chios.

Many travelers and pilgrims from Germany visited his tomb in India. Many German writers and poets have depicted St. Thomas's work through their literary works.

German authors had frequently referred to Thomas, India's first apostle, in their writings, both Latin and German. Such references can be found dating from Carolingian days onward in the work of , for example, Wandalbert who was born in Prüm in 813, in the *Annolied*, and in the *Austrian Rhymed Chronicle*.⁸

Thus many authors have association with the magic word India and with the apostle. St. Thomas enjoyed a certain amount of fame in Germany. In view of these close ties, it is not surprising that in those times stories about personalities

⁷ Op cit, p. 18.

⁸ Op cit, p. 19.

and events of West also made their way to India. One can visit the Church of St. Thomas, which is today in Kerala.

Bartholomäus Ziegenbalg (1682-1719) was one of the missionaries whose name's command respect also in the field of linguistics. He was the first of a number of Protestant missionaries and scholars in India who specifically chose the Southern India as the area of work. He came to India as a Lutheran theologian and decided to settle in Tranquebar. He then became famous as the first German Dravidologist. He kept himself busy in research into language and religion of the Dravidians. He translated Luther's 'Little Catechism' into Tamil. Ziegenbalg translated many church hymns and also Bible up to the Book of Ruth into Tamil. He also laid foundation of a Tamil-German dictionary, wrote a Tamil grammar, a study on Malabar deities and many translations of Tamil texts into German. In 1707 he founded the first school for girls in India. The Tamil-German dictionary was published in 1716 in Halle.

These German missionaries not only wrote grammar or dictionaries of Indian languages but also laid certain foundation in the field of Indian Journalism.

Der Name Manglore ist für die Geschichte der deutsch-indischen Freundschaft von ähnlicher Bedeutung wie Tranquebar. Dieser Ort ist zugleich das Herz des Kannada - Journalismus, dessen Entwicklung der Aufgeschlossenheit deutscher und deutschsprachiger Missionare zu verdanken ist. ...

Das Volk von Süd - Kanara wird sich dankbar der deutschen Missionare wegen der Anlage ihres religiösen Eifers, des Handelsfleißes und wegen der Anlage der Druckereien erinnern ...

Evangelischer Eifer führte zur Gründung der Baseler Mission in Pressarbeit und hat auf diese Weise das Evangelium, die Frohbotschaft, verbreitet. Die Mission gab ihr erstes Blatt, »Kannada Samachara«, eine Monatszeitschrift, im Jahre 1842 heraus. ... Auf »Samachara« folgten 1857 »Kannada Vartika«, 1869 »Krista Sabhapatra«, 1896 »Satya Deepika«, 1910 »Vaidika Mitra«, 1922 »Suvarta Prasarak« und 1924 »Krista Hitavadi« ...

Englischsprachiger Journalismus hatte, obwohl nicht gerade mit langem Erfolg bedacht, eine farbige Existenz im Distrikt. »Indian Magazine« wurde durch den Verlag der Baseler Missionsgesellschaft im Jahre 1903 veröffentlicht. Rao Saheb A. C. Pinto begann die Herausgabe von »

Mangalore “ im Jahre 1927, und C. J. Varkeys ” Indian Educational Review “ erschien bis 1939. ” The Way of Christ “ stellte sucg 1939 vir. Andere englischsprachige Periodika waren ” Vision “ , ” Educated India “ , ” Sunday News “ , ” Indian Chronicle “ und ” Human Affairs “ (Udipi , 1940). ” Friend of the Poor “ war der erste und einzige Versuch, eine englischsprachige Tageszeitung (im Jahre 1942) herauszugeben ... ⁹

There are many more Germans who were inspired by the ‘India’ element. Some of them are Hilko Wiardo Schomerus, Richard Garbe, Clemens Schoner, Alfons Väth, O. Wecker und Joseph Zahlemann etc.

2.1.3. Buddhism and Germans :

Buddha and the knowledge of Buddhism is always attracting and is a believed themes of Germans and their researches in Germany. The Germans never came in contact with Buddhism from its homeland - India, but through East and Southeast Asia Buddhist knowledge came to Germany. The first encounter with Buddhism for Germans was occurred in the Middle Ages, but it was not realized at that time. From the Southeast Asian countries came Buddhism to Europe and then to Germany. St. Jerum was one of the first persons to come in contact with Buddhism. In 17. century Wilhelm Leibnitz (1646-1716) declared that he had understood the philosophy of Buddha.

At the same time Immanuel Kant (1724-1804) had studied the Buddhism much

⁹ Janardana, M. Mangalore, the cradle of Kannada Journalism, Mangalore, a Souvenir - a Survey of the Place and its People (Inauguration of the New Building of the Canara Ind. A. Bank. Synd. Udipi- Mangalore on 31st May 1958), Manipal 1958, pp. 128 - 137, Op. Cit. Leifer, Walter. Indien und die Deutschen, p. 79.

thoroughly. He taught philosophy and Geography in the Königsburg University. He never left his motherland, but he could speak about the Buddhism of Bramhadesh, China, Thailand, Japan and Tibet with proficiency.

Georg Wilhelm, Friedrich Hegel (1770- 1831), Friedrich Wilhelm von Schelling (1775-1831), Arthur Schopenhauer (1788-1860), Friedrich Nietzsche (1844-1900), J. J. Schmidt, Susanne Sommerfell are some other famous German philosophers of the 18th and 19th century, who had studied Buddhism.

Max Müller was one of the first German scholars to approach Buddhist teaching with more than academic interest. At the philology congress held in Kiel in 1869 he identified himself with a good many views of Buddhism. As a scientist, he pointed to the dividing line between Buddhist religion and Sankhya philosophy.¹⁰

Some of the famous German authors have used Buddhism or its philosophy as the theme for their works.

Über Ferdinand von Harnstein (Drama : Buddha 1912) und Alfons von Czibulka (Roman : Der Tod vor dem Buddha,1935) führt die Linie zu erstrangigen Schriftstellern wie Stefan Zweig, Hermann Hesse und Thomas Mann, die alle irgendwann einmal sich dem Bannkreis des Buddha näherten.¹¹

Georg Grimm, Ulrich Rieker, Rainer Maria Rilke, Thomas Mann and Stefan Zweig took India and its philosophy as the background for their novels and

¹⁰ Op cit, p. 102.

¹¹ Leifer, Walter. Indien und die Deutschen, p. 141.

dramas etc. Hermann Hesse was impressed with the Indian element. He used 'Bhagwān Gautam Buddha' and his philosophy as the central idea of his novel 'Siddhartha', which depicts the development of the main character of the novel from a common student of an āśrama towards the spiritual perfection.

2.1.4 : Indian Literature and German Authors :

Since 500 years one finds the theme -'India' portrayed in German literature. India was the origin of many stories and fairy tales. It was famous as the country of mysteries and magic and a source of such stories. It became famous for its deep wisdom of wise-men (Ṛṣis). Even today many translations of 'Pañcatantra'- Indian fables are popular.

Wo Sakuntala lebt mit ihrem entschwundenen Knaben,
Wo Duschnanta sie neu, neu von den Göttern empfängt,
Sei mir gegrüsst, o heiliges Land, und du, Führer der Töne,
Stimme des Herzens, erhebe oft mich im Ather dahin.

Herder (Nachgelassene Werke)

(Where Shakuntala lives with her vanished boy,
Where Dushmanta receives her anew, anew from the Gods,
Hail to thee, o holy land, and Thou, leader of sounds,
Voice of the heart, uplift me often thither through celestial space.)

Herder (Nachgelassene Werke)¹²

In these words Johann Gottfried Herder reflects his feelings and bows himself in front of the beautiful literary figure ' Śakuntalā ' from Indian literature of

¹² Op cit, p. 75.

‘Mahākavi Kālidāsa’, who created immortal poetic images in Abhijñānaśākuntalam in 4th or 5th century.

Shakuntala- Forster had taken over this spelling from Sir William Jones, heading it down to the classicist and romanticist writers- as the heroine of a drama by Kalidasa who wrote his Sanskrit works in the 4th or 5th century of our era, at a time when the powerful Gupta rule formed the grandiose background for a political and intellectual upsurge in the Northern Indian Empire. Shakuntala was part of a rich lode which Forster brought with him in 1790 from a stay in England.¹³

Georg Forster(1754-1794) was the first German, who introduced German authors the drama ‘Abhijñānaśākuntalam’. Georg Forster, son of famous author Reinhold Forster, was a wanderer. He traveled through the world with a critical view and wrote for the downtrodden and fought for the fundamental right for all races of the world. He came across the drama ‘Abhijñānaśākuntalam’ in England and with its translation he paid a valuable gift to the Europe.

Sir William Jones translated ‘Śākuntalam’ in English, which Forster brought to Germany in 1790. The German translation of ‘Śākuntalam’ was published on 17 May 1791 by Kurfürsten Privilegierten Verlag, in Mainz. The copies of this book were sent with a letter by Forster to Goethe, Herder and Christian Heine. In his forward of the book ‘Śākuntalam’ Forster wrote :

... its having five or seven acts, but in the fact that the tenderest emotions of which the human heart is capable could have been as well expressed on the Ganges by dark-skinned people as on the Rhein, the Tyber or the Ilissus by our white race...

Perhaps one may grow, fond of her own sake, not allowing her to miss the

¹³ Op cit, p. 76.

noble hospitality of her own homeland.¹⁴

Schiller wrote in his letter to Wilhelm Humbolt, that in the complete Greek antique works, there is not a single literary piece, which portrays such a poetical expression of a beautiful womanhood and love and that could come anywhere near 'Śakuntalā'.

*Es ist eine bedauernswerte Tatsache, dass deutsche Übersetzungen indischer Literaturen im deutschen Kulturraum meistens eher als kultur- und sozialwissenschaftliche Informationsquellen und Verständnishilfe für die eigene Weltanschauung oder als geheime Signatur der Fremde verstanden worden sind, als Dokumente einer andersartigen Literatur, die nach anderen ästhetischen Wertkategorien und Spielregeln produziert und rezipiert worden ist und wird.*¹⁵

According to the Indian professor and German expert Mr. Vridhagiri Ganeshan, Goethe expresses a pure enthusiastic and spontaneous reaction about the drama 'Abhijñānaśākuntalam'. He came from another culture, hence the pure womanhood, the natural conditions and between heaven and earth suspending drama meant something different for him. V. Ganeshan adds here further :

Während Goethe in den Texten indischer Dichtungen einiges entdeckte, die er als wesengemäß seiner Weltanschauung entsprechend empfand, lehnte er

¹⁴ Op cit, p. 78.

¹⁵ Ganeshan, Vridhagiri. Deutsche Dichter und Indien, Indien in der Gegenwart, Band II, Nummer 4, Indian Council for Cultural Relations, 1997, p. 139.

die indische Kunst als wesensfremd ab. Er fühlte sich der Götterwelt der Inder gegenüber doch dermaßen verwirrt und verunsichert, ...¹⁶

Goethe was interested in the universal literature of India. But the figures of Indian Gods and Indian art created confusion in his mind, writes V. Ganeshan. Goethe had his own world of thoughts and his own approach or views towards the world. He found India as a foreign element, or as medium for conformation of his own expressions and emotions.

Indian philosopher Ranjit S. Pandit wrote in his book on Friedrich Schiller, that in 'Maria Stuart' the influence of ' Ṛtusañhāra ' of Kālidāsa is prominent. Here Schiller had borrowed the idea of making the clouds the messenger, which is originated by Kālidāsa in ' Meghadūta '. The queen of Scotland requests the clouds to carry her message to the country, where she has spent her youth. August Wilhelm Schlegel (1767-1845) has written a critical essay on 'Śākuntalam' on 30 April 1791 in Göttingischer Anzeigen. In which he wrote the following way:

*eine feine Sensibilität darin, welche die zartesten Blüten des Gemusses mit schonender Hand zu pflücken weiß.*¹⁷

After this critical essay he was introduced as the first German Indologist. Śākuntalam had become a bridge between literature and science. In those days it was a keyword for the 'classical' generation of authors. After the grand success

¹⁶ Goethe. Berliner Ausgabe., a.a.o., Bd. I, S. 651 und 653. Op. Cit, Ganeshan, Vridhagiri. Deutsche Dichter und Indien, Indien in der Gegenwart, p. 138.

¹⁷ Leifer, Walter. Indien und die Deutschen, p. 106.

of Śākuntalam of Kālidāsa his other works were also translated in German and the critical opinions were discussed on them. The drama 'Ūrvaśī' was translated by Robert Lenz in Latin and by A. Hoffner in 1837 in German. In 1856 A. Hoffner translated ' Mālavikāgnimitra ' of Kālidāsa in German. He was Indologist from Berlin. Hr had brought the specialities of the Sanskrit drama to the lime light and with that he explained specially the importance of the writing style of Kālidāsa and his intelligence.

Immer wieder reizte Kalidasa zu Deutungen und Einführungen in das indische Drama überhaupt.¹⁸

The idea of 'prelude of the stage' in Goethe's 'Faust' was borrowed from Śakuntalā. In the year 1851 Heinrich Heine has written about it in his forward of 'Faust-Ballad'. Śākuntalam had offered a new field of literary experiments. The German authors have used 'Śākuntalam-element' often in the German literature, e.g. in the book - Indische Dichtung- oder Zahme Xenien one reads these lines of Goethe praising Śakuntalā :

*Was will man denn vergnüglicher Wissen !
Sakontala, Nala, die muß man küssen ...¹⁹*

In the year 1898 Karl Bleibtreu wrote the drama Karma. Friedrich Hebbel wrote

¹⁸ Op cit, p. 108.

¹⁹ Op cit, p. 104.

'Der Brahmine', in which he gave the message of 'do not kill anyone'. In his another Greek drama 'Gyges und sein Ring' he introduced India. Lion Feuchtwanger took the central idea from 'Mālavikāgnimitra' and he wrote a drama 'Kalkutta 4. Mai' narrating the British rule in India.

'Der Siebente Ring' is a collection of poems by Stefan George. He wrote old Indian ballades, namely 'Indischer Zug', 'Die Veden', 'Die Drei Fremden'.

'Mṛchchhakatik' of Kālidāsa was translated in German six times. The books of Rabindranath Tagore were translated in German and were popular. Max Geilinger translated 'Geetanjali' in 1914.

Because of 'Śākuntalam' many musicians were influenced. An opera - 'Shakuntala' was written by J.W. Tomaschek (1774 -1850). Leopold Schefer (1784-1862), Felix Wingartner (1863-1942), Liszt, Franz Schubert (1797-1828), Karl von Perfall (1824-1913), Sigismund Bachrich (1841-1913), Karl Goldmark (1832-1915) were among those musicians, who had written operas on Śākuntalam. On 6th June 1966 Indo-German Cultural Society had celebrated the 175th anniversary of the first publication of 'Śākuntalam' in German in Mumbai. Between 1910 to 1920 many adaptations of Indian dramas were staged in the Western countries. One of the successful amongst them was 'Vasantsena' by Feuchtwanger. Bertold Bercht had used Indian names for his characters in the drama 'Mann ist Mann'. He had used certain Indian themes and in the 'Elefanten Verkauf' he used the traditional Indian 'Miming Play'.

In some works of Hermann Hesse, Stefan Zweig and Thomas Mann the influence of Indian culture could be observed prominently. For the story 'Die vertauschten Köpfe' Thomas Mann had processed an Indian folk story, i.e. 'Madansundari' in the year 1940. Stefan Zweig took 'India' as the background for his novels. The same is the case of Hermann Hesse.

Hesse lernte Indien vielfach kennen, aus Büchern, aus eigenen Beobachtungen während seiner Asienreise und durch eigenen Meditationen

über die indische Gedankenwelt. Die Berührung mit Indien war am Anfang bloß ein Auslösefaktor zum Nachdenken über die eigene deutsch-europäische Tradition. Hesse nahm die Konfrontation mit dem indischen Gedankengut in hohem Maße wahr, weil diese fremde Welt einige Lösungsvorschläge für die Probleme anzubieten imstande war, die Europa um die Jahrhundertwende und während der Kriegsjahre bewegten.²⁰

Hermann Hesse was impressed by Indian culture. He came from a protestant family. In his childhood he found Indian religious books in his grand-father's library. He read them curiously. He had even read the books of German indologists. In 1911 he made a trip to India. 'Erinnerungen an Indien(1916)', 'Besuch aus Indien(1922)', 'Bhagavad Gītā' (1914)', 'Media in vita', 'Siddhartha', 'Die Morgenlandfahrer', 'Die Glasperlenspiel - Der Indische Lebenslauf' - all these books show his love for Indian philosophy.

In 1909 'Banaras- Die Stadt der tausend Tempel' of Stefan Zweig was published. In 1944 he wrote 'Über Europa hinaus'. Both books show a direct expression of his experiences of India. In addition to these the books from Ingeborg Drewitz can be listed like - 'Drama Am Ufer des Ganges (1996)' - Roman von Josef Winkler und 'Mein Indisches Tagebuch(1983)'.

Günter Grass, who has written much about India, visited the country in may 1975 for the first time on an invitation of Indian Council for Cultural Relations. He was never excited and attracted by India. He wrote:

Von Europa aus gesehen ist Indien ein Land, das sich nicht mehr romantisch verklären oder als 'geheimnisvoll unbegreiflich' verdrängen läßt. Man spricht vom indischen Trauma. Indien ? Bald kein touristisches Ziel mehr. Demnächst abgeschrieben. Und dennoch erschreckend gegenwärtig. Wir kennen die Zahl der wachsenden Bevölkerung. Sind es fünfhundert siebenzig oder sechshundert Millionen ? Wir hören von Hunger in den Bundesstaaten

²⁰ Ganeshan , Vridhagiri. Deutsche Dichter und Indien, Indien in der Gegenwart, Band II, Nummer 4, Indian Council for Cultural Relations, 1997, p. 141.

Bihar und Uttar Pradesh. Grobe Schätzungen variieren mehrstellige Zahlen. Bei uns gibt es junge Leute, die von Hare-Krischna-Kult und dem Nirwana schwären. Bei uns sind gut ausgestattete Bildbände käuflich, in denen die Kultur Indiens schön ist. In unseren Zeitungen voll mit eigenen Skandalen, haben indische Korruptionsskandale ihren mittleren Stellenwert.²¹

In the year the novel 'Der Blut' was published, in which Grass had reported about his experience of India. In the autumn of 1986 he visited India and returned back in the spring of 1987 to Germany. He lived in India as a refugee. He spent his time in Calcutta and visited Hydrabad, Madras and Pune and also Bangladesh specially Dacca. He had documented these experiences of India and his stay in an interesting form. The book 'Zunge zeigen' expresses the motives like : poverty, pavement-dwellers, misery, slums, rubbish, burning of dead-bodies and at the same Goddess Kāli.²²

Es ist eben ein echtes 'indisches Grabmal' aufgestellt von Grass, eben nicht lang, sondern kurz und groß.²³

It is a real 'monument of India' erected by Günter Grass, not very long but short and big, in these words Pro. Ganeshan expresses his opinion about 'Zunge zeigen' by Grass. He adds further, what Grass wrote is not comfortable, not only for himself but also not for the reader. Grass is of social-democratic views. For

²¹ Grass, Günter. Die Zukunft hat uns schon eingeholt, Die Zeit, 21.2. 1975. Op. cit., Ganeshan, Vridhagiri. Deutsche Dichter und Indien, p. 143.

²² vide. Ganeshan, Vridhagiri. Deutsche Dichter und Indien, pp. 143-150.

²³ Op. cit., p. 145.

him India was a experimenting stone. He could not accept the situation the India. India remains foreign for him and becomes a medium of expression of uncertainty of him own.

*Wenn die Größe der deutschen Dichter darin liegen sollte, dass sie sich mit einem anderen Kulturkreis, in unserem Falle mit Indien, beschäftigt haben, ohne dass ein schroffer Bruch mit der eigenen Tradition stattgefunden hat, so liegt die Größe Indien darin, dass dieses Land mit seiner Gedankenwelt den deutschen Dichtern in einer Zeit der inneren Krise eine brauchbare geistige Entwicklungshilfe geleistet hat- eine Hilfe zur Selbsthilfe -, ohne irgendwelche Bedingungen dabei zu stellen. Auch das sollte in den deutsch-indischen Kulturgesprächen gebührend hervorgehoben werden und zwar ab sofort.*²⁴

Pro. Ganeshan explains his opinion much clearly and there would be no Indian who would not agree with them.

In the year 2005 the German Department of University of Pune has organized a lecture of an Austrian author, Joseph Winkler. He read out some chapters of his novel 'Domra - am Ufer des Ganges'. He had described in his novel Banaras, but especially the last rituals of a dead-person performed according to Hindu customs. He had narrated about the pyres, burning of the bodies on the ghats of Ganges. When asked after the lecture, if there is nothing much interesting in Banaras than these last rituals, his answer was, ' there may be many things but they can't be a theme for my novel'. That means only the things that are different, unknown in this foreign culture or seems to be attractive, are carrying much value for these authors, nor do the realities and their depiction can attract their readers. Whether they portray the real views about India, its society, people, culture in all is not their point of view at times. Only their business of writing and minting money on the name of 'Indian element' should go on.

²⁴ Op cit, p. 150.

In spite of opinions for or against India, about the country, people, society and culture - position of India as the inspiring country for the authors remains untouched even today. Actually 'Indian literature and German authors' can be a theme for a special research. But only prominent similarities are considered here.

2.2 : Definition: Indology

The concept of 'Indology' is actually a creation of Western philosophers. The systematic study about Indian culture began when the Western scholars were acquainted with Indian culture. The scientific study of India and every aspect regarding India has a history of about 200 years.

Indology literary means a systematic study of Indian culture to be understood in a wide sense, comprising "language, ideas, beliefs, customs, taboos, codes, institutions, tools, techniques, works of art, rituals, ceremonies, and other related components".²⁵

The German intellectual quest for India began in the 18th century. The Germans were attracted towards Indian philosophy and then they added the study of philology to it. At the same they were aware of India's role in the spiritual evolution of the mankind. They have defined Indology as follows :

²⁵ The New Encyclopaedia Britanica, 15th Edi. Op. cit, Bhattacharyya, Sibajiban. Indological Studies In India, Progress And Prospects, Indolpgical Studies and Research in India, (Being the proceedings of a seminar held at the Institute on 4th and 5th January 1991), The Ramkrishna Mission Institute of Calcutta, Calcutta, 1992, p. 1.

1 . Indologie : die Wiss. von Indien : Geschichte, Kultur, Kunst, Lit. Archäologie, Philosophie, Religionen und Sprachen; Ende des 18. Jh. von brit. Beamten in Indien begründet. In DH. Stellte als erster F. von Schlegel ein Programm für I. auf F. Bopp rückte das Sanskrit ins Zentrum der vergleichenden indogermane. Sprachforschung.²⁶

2. Indologie : (griech.), Wiss. von Kunst, Kultur, Literaturen, Sprachen und Religion Indiens. Den ersten Lehrstuhl für Sanskrit in Europa hatte in Paris A. L. Chezy ab 1815, in Deutschland (Bonn) folgte A. W. von Schlegel 1818.²⁷

As these German encyclopaedias explain the study of Indology includes the study of Indian history, culture, art, archaeology, philosophy, religions, beliefs and languages etc. These definitions narrate the history of this study in Germany briefly. According to the definition the study of Indology was started by some British scholars in India itself at the end of 18th century, i.e. in 1784 with the foundation of first Asiatic Society in Calcutta. The birth of Indology opened a new era in the intellectual field not only in Europe, but even in India, as till then preserved knowledge, from the fear of getting contaminated, of ancient Indian wise men -Ṛṣis was unveiled before the world, with the English translations of a series of famous Sanskrit books like Bhagvad Gītā (1785), Hitopdeśa (1787), Śakuntalā (1789), Ṛtusañhāra (1792), Manu Smṛti (1794). Then it spread to the remaining parts of Europa. In Germany Friedrich von Schlegel founded a programme for learning Indology. Then Franz Bopp introduced the study of comparative grammar of Sanskrit and European languages. In 1818 University

²⁶ Brockhaus Lexikon, Band 8, dtv. F.A. Brockhaus GmbH. Mannheim, 1988, p. 275.

²⁷ Meyers Grosses Taschen Lexikon in 24 Bänden, Band 10, B. I. Taschenbuch Verlag, Mannheim, p. 171.

of Bonn had introduced a bench for learning Indology.

The Western acquaintance with rich Indian culture, Indian heritage, its classical literature, art and architecture engaged the Western scholars in unfolding the wealth of this sub-continent, which led towards a systematic study and originated a new discipline. It was imported to India like many other technologies as a package of modern higher education.

Though the pioneering work for Indology studies was done by Englishmen, e.g. William Jones (1746-1794), Wilkins (1750-1836), Colebrooke (1765-1836), the German romanticists were impressed and used the 'brand of India' much enthusiastically, for which 'Śakuntalā' of Kālidāsa became the 'brand ambassador', e.g. Herder and Goethe, who were the first to process Indian literature or its literary figures in their works in German or in European languages. Though the first chair for learning Sanskrit was founded in France in 1814, the study of Indology flourished and developed in Germany in later years.

*European Indology did not fail to realise, even at an early stage, that without such contacts their knowledge of several aspects of Sanskrit learning would remain sadly deficient and divorced from reality, particularly because much of that learning had been handed down from generation to generation through oral tradition rather than by means of written word.*²⁸

As R. N. Dandekar has rightly pointed out that the Sanskrit tradition was handed over from one generation to another generation orally. The knowledge was preserved by the sects of 'Gurukula' institutions and had a certain system of preserving and handing it over to further generation. Therefore the Western

²⁸ Dandekar, R.N. Recent Trends in Indology, Bhandarkar Oriental Series No. 11, Bhandarkar Oriental Research Institute, Pune, 1978, p. 6.

scholars found it difficult in early years to gather the ancient Sanskrit texts and to find out the meaning or to translate in their own language. Some scholars sought help of Sanskrit pandits and some preferred to learn the language, which again was a rigorous task.

*By and large, this study was then deeply influenced by the German traditions, for, most of the scholars who had been responsible for the promotion of that study in their respective countries had been trained in German universities.*²⁹

Some French and up to a certain extent British Indologists were loyal in their mission, according to Mr. R. N. Dandekar who tried their best to enlighten the public about the true aspects of India and her civilization. Since 1870 Indian Indologists are working in this field methodically. With the knowledge of English this generation of Indian scholars started to work on their own history with new aspects and views.

To understand the development of Indian civilization and culture, Sanskrit plays a vital role. Sanskrit is an important aspect of Indian philosophy and religion, which gives this philosophy an uniqueness. The fact that Sanskrit and Indology cannot be separated is even today important for Indian and Western scholars. If one denies this fact he would have problems to understand modern India.

According to Mr. R. N. Dandekar the modern Indology shows significant advance over the classical Indology in the matter of methodology. The scholars of earlier generation have hardly visited India and have gathered direct contact with Indian life. Keeping apart from the real life of India the researches were carried forward on culture or religion or philosophy. But now this direct contact and practical active knowledge have become essential. A great importance is given to the

²⁹ *ibid*, p. 6.

close study of original sources by modern Indologists, which is acquired on the spot. The inter-disciplinary works and combine methods are applied for the study.

..., a modern Western Indologist, unlike his predecessor, has a twofold purpose in view, namely, to interpret the relevant sources and evidence so as to be able adequately to understand India and to interpret the India so understood people of the own country.³⁰

One can define the working methods of modern Indologists with its specialities as above. Unless one has understood the country and its people, their life-style, their culture, etc. one can not study the Indology and give justice.

Indology today has gone beyond archeology, historiography, religion, philosophy and linguistics, art and literature that have been its traditional preserves to include its every aspect of knowledge about India from its science to its politics. It has been shaped by different and often mutually opposing world views, liberating and oppressive, colonial and post-colonial, orientalist and occidentalist, canonical and non-canonical high-textual and oral-performative, Brahminical-hierarchical and non-Brahminical-egalitarian, hegemonic and subaltern. Understanding Indology today also means understanding the ideologies that constitute it, and deconstructing it in order to reveal its silences, expose its contradictions and foreground its polyphony often subsumed under or even suppressed by monologic discourse. Indology itself is interdisciplinary, since even to study the structure of an Indian temple, an Indian raga or an Indian poem requires study of Sanskrit, myth, the science of rhythm, ritual usages, iconography history, aesthetics, religion, philosophy, psychology and politics.³¹

³⁰ Op cit, pp. 21-22.

³¹ Satchidanandan, K. Welcome Address, Ed. Bhate, Saroja, Indology: Past, Present and Future, Sahitya Academy, New Delhi, 2002, p. 13.

As Mr. K. Sachidanandan clearly explains in his 'welcome address', today's Indology has many horizons to endeavour. It has gone beyond its earlier limits of various names like archeology, literature, historiography, colonial, oriental etc. The time has come to evaluate these yardsticks, parameters and go beyond them to understand the specialities of the culture within itself.

2.3 : Brief Survey of Indology Studies in Germany

Mit der europäischen > Entdeckung < des Seewegs nach Indien durch Vasco da Gama in den Jahren 1497/98 und dem damit erschlossenen Zugang zu den asiatischen Ursprungsländern von Gewürzen und anderen exotischen Produkten wurde direkter und unmittelbarer Kontakt mit der bis dahin legenden umwobnen Welt des Orients in steigendem Maße möglich. Insbesondere die nachfolgender Versuche der Portugiesen, am Südwestlichen Küstenstreifen Indiens, in Malabar, Handelsniederlassungen zu erreichen, eröffneten dabei auch anderem europäischen Handelszentren die Gelegenheit zur ersten direkten Kontaktaufnahme mit Indien.³²

During the year 1497-98 European countries had renewed³³ their contacts with India once again. India was famous as the land of spices. With the discovery of the sea-route to India by Vasco-da-Gama, who landed on the South coast of India, Malabar became an important place in the trade. Till then India was known

³² Dharampal-Frick, Gita. *Indien im Spiegel deutscher Quellen der Frühen Neuzeit (1500-1750)*, Studien zu einer interkulturellen Konstellation, Max Niemeyer Verlag, Tübingen, 1994, p. 21.

³³ renewed, because St. Thomas had visited India in the first century itself. He died in India in 68 A.D. in Mylapore, near Madras. Vide, Leifer, Walter. *Indien und Deutschen*, pp. 29-30.

to Germans as the land of fairytales or a dreamland.

When in modern times Europeans reached India in greater number to trade, interest in the country and her culture was awakened at the same time. Switzerland, Austria and German never had any colonial aspirations in India, yet scholars from these countries contributed a great deal to Indology.

In the 18th century interest of Germans in India was developed by German missionaries. They were sent to Danish colony, Tranquebar, where they studied Tamil language and literature. During this stay they revised their Christian prejudices towards India and finally were deeply interested and admired Indian thoughts.

Yac-ceshtayā yojanakotidure sthitam mabad Bhāratavarsham etat
Tamahsu mahnam sahapūrvatattvaih punarjanālokapatham prayāti.

(The ancient cultural treasures of India, that vast country lying miles and miles away, having long lain lost in oblivion were once more brought to light through the efforts of [German] scholars.)³⁴

In his book 'Germany Kavya' expresses Raja Shyama Kumar Tagore paid enthusiastic tribute to Germans. This book was published in 1912 in Leipzig. Mr. Tagore was an Indian scholar and a writer, who introduced a sense of poetry to philosophy. G. U. Thite has translated E. Windsch's book 'Geschichte der Sanskrit Philologie' into English for making the job of Indologists easier by taking a detailed overlook of the work done by the Indologists in the 19th century, especially in Europe.

German missionaries, who visited India much early, had contributed to India-

³⁴ Tagore, Raja Shyama Kumar. *Germany Kavya*, & Op. cit. Leifer, Walter. *India and Germans*, p. 118.

studies. Many of them settled in Tranquebar, near Madras and educated themselves for a new thought other than Christianity.

Heinrich Roth (1620 - 1668) endured great hardships travelling to India twice on the overland route. He was one of the first Europeans to learn Sanskrit and the first European to write the grammar of Sanskrit language, a work Max Müller highly thought of.

In Agra, Roth learnt Sanskrit and was able to discuss with Brāhmins in their language. He realised the importance of Sanskrit and wrote a book on grammar between 1660-1662. This book is descriptive and shows great pedagogical skill. The explanations were given in Latin. The grammar is based on Pāṇini. The manuscript was taken to Rome, but it was never printed, although several scholars and even Austrian Emperor wished to have it published. Roth not only studied the language, but was also well versed in Sanskrit literature and Indian philosophy.

Bartholomäus Ziegenbalg (1682 - 1719)³⁵ was one of those missionaries, who studied and mastered linguistics. He is the first of a number of Protestant missionaries and scholars in India, who particularly chose South as their field of action. He was inspired by the simple beauty of India and the intellectual sense of an ancient culture, which was almost locked away from Europeans.

Ziegenbalg came to India as a Lutheran theologian and missionary and decided to settle in Tranquebar, who later gained fame as the first German Dravidologist. He engaged himself in the research of the language and religion of the Dravidians. To this day his work is acclaimed by specialists all over the world. Luther's 'Little Catechism' was translated by Ziegenbalg into Tamil, which was the first one of that sort in Asia. Later he translated a number of Church Hymns and Bible up to the Book of Ruth. He laid foundation of a Tamil Dictionary and wrote Tamil grammar, a study on Malabar deities and wrote translations of Tamil texts. His book 'Genealogie der Malabarischen Götter' (Genealogy of Malabar

³⁵ vide, Leifer Walter, *India and Germans*, p. 57-59.

Gods) was published in 1867 by Dr. Germann in Madras.

His pupil A. H. Francke laid ground work for a successful education system and in 1707 he founded the first school for girls in India. Ziegenbalg's study of Malabarian deities and Malabarian paganism prove that in those days Europeans used the term 'Malabarians' for the entire south of India, including Tamil Nadu and Kerala. Though Indology in Germany has a history of two centuries, the Tamil-German and German-Tamil dictionary is in existence for more than three hundred years.

Friedrich von Schlegel (1722 - 1829)³⁶ is not considered as an Indologist in right sense, but his opinions towards India and his works motivated many scholars to take up the study of Indology. His efforts for the Indology studies in Germany laid the foundations for the chair for the same in German University for the first time. As F. Schlegel wrote from Paris to his brother August Wilhelm about his oriental studies, he had chosen a prisoner-of-war, namely, Alexander Hamilton-a navel officer- as his Sanskrit tutor. As a result of his Sanskrit studies he published in 1808 a book : *Über die Sprache und Weisheit der Inder*, 1808 (On the language and wisdom of the Indians). This book was printed in Heidelberg and had proved to be a direct stimulus for the establishment of Indology in Germany. His brother August was influenced by this book and took up the study of Sanskrit after reading this. He wrote some books about the language, philosophy and historical ideas, e.g. *Ein Beitrag zur Begründung der Alterstumskunde*. He translated some of Indian famous works, like 1. The Beginning of Ramayon 2. Indian Cosmogony from the first book of the laws of Manu 3. On the Bhagwatgita 4. Extracts from the History of Shokuntala according to the Mahabharat. But he never studied Indology for a long time.

To one's surprise the third brother Karl August Schlegel, who was influenced by Indian thought same way, visited India as a officer of Hanoverian-British guards

³⁶ Stache-Rosen, Valentina. *German Indologists : Biographies of Scholars in Indian Studies Writing in German, with a Summary on Indology in German Speaking Countries*, Max Müller Bhavan, New Delhi, 1981, pp . 263-272.

regiment and said to be died somewhere near Madras.

August Wilhelm von Schlegel (1767 - 1785) was the first German Professor for Sanskrit in Bonn University in 1818, when he was of 51 years old. Franz Bopp had introduced August Schlegel to Indian Studies in first place. The pupil was then named as the first Indology professor and then the teacher in 1820 in Berlin. Since 1818 August Schlegel was busy with the development of the new Devanagari script. In 1823 his first book 'Bhagawat -Geeta' was published. It was a Latin translation. Then he tried to publish 'Ramayana' in eight volumes. But in 1829 and 1838 he could publish only one and half volume in Latin. Only 20 lines of the second volume could be translated in Latin. In between he co-published with Lassen 'Hitopadesha' text in 1829 and comments and critics in 1831. These editions marked Schlegel's introduction of the methods and criticism of classical philology to Sanskrit research. He always had an intellectual dialogue with Wilhelm von Humboldt, Schiller, Goethe, Schelling and Hölderlin.

Franz Bopp (1791-1867) at the same time kept himself busy with the studies of comparative linguistics. It was a new branch of Indology. When he was 25 years of age, he had written a thesis showing the relationship between Sanskrit and other Indo-European languages. He is regarded as the founder of Comparative Linguistics. In 1819 he wrote a major Indological work - a Latin translation of 'Nalopākhyāna' from the great epic 'Mahābhārata', 'Nalus, Carmen sanscritum e Mahabharata'. He took the second Sanskrit chair in 1821 in Berlin. His translations of Sanskrit grammar came in 1827 and his comparative grammar appeared in 1833. In the same year his comparative linguistic analysis of numerals was published.

Ottmar Frank (1770 - 1840) was another early Indologists. Many German Universities had added Indology courses in their curriculum, e. g. University of Berlin, Humboldt University, University of Leipzig, where E. F. K. Rosenmüller, E. F. F. Beer, Hermann Brockhaus, Ernst Windisch, Johannes Hertal and Friedrich Weller delivered lectures on Indology, Tübingen University, Göttingen University, where Heinrich Ewald, Theodor Benfey, Franz Kielhorn shared the

department of Indology, München University, Marburg, Hamburg, Kiel University, where Paul Deussen worked. In most of these Universities one can study Indology and Sanskrit even today.

Hermann Brockhaus (1806 - 1877) was specialised in Indian narrative literature and drama. He is best known for his edition of the 'Kathasaritsagara', which was published in Leipzig and Paris in 1839. Brockhaus himself was aware that his edition must contain a number of errors. He had only manuscripts of the text, but no commentaries at his disposal, nor he could get any help of Indian pandit. He wrote two papers on the 'History of the Indian System of Numbers' and on the 'Algebra of Bhaskara' he wrote a number of papers devoted to subjects pertaining to the 'Kathasaritsagara'. These were helpful for the studies of comparative folklore. He printed Sanskrit with Latin letters without using expensive Devanāgarī types. Theodor Aufrecht and H. G. Grassmann had followed this suggestion of using Latin alphabets for Sanskrit texts.

Theodor Benfey (1809 -1881) ³⁷was one of the Indologists to introduce Indian texts and Tibetan documents in Göttingen. Over 400 publications are to his credit. His best known work is of 'Panchatantra'. He combined Sanskrit philosophy and linguistics in a unique manner. His work is considered as to be the origin of the comparative study of fable literature. He published in 1859 'Panchatantra, Fünf Bücher indischer Fabeln, Märchen und Erzählungen' (Panchatantra, Five books of Indian Fables, Fairy tales and stories). After an extensive study of fables he wrote in 1869 'Geschichte der Sprachwissenschaft und orientalischen Philologie in Deutschland' (History of linguistics and oriental philology in Germany). Afterwards he began working on the Grammar of Vedic language, but could not complete it. First part of his work is published as 'Einleitung in die Grammatik der vedischen Sprache, Erste Abhandlung, der Samhita Text'(Introduction to the Grammar of Vedic Language, First part, the Samhita Text) in 1874.

³⁷ Op cit, Stache-Rosen, Valentina. *German Indologists*, p. 263-272.

Theodor Aufrecht (1821 - 1907) was a brilliant Sanskrit scholar and is the author of several catalogues of Sanskrit manuscripts. The most important of these is 'Catalogers Catalogue', which contains notices of all Sanskrit manuscripts of Europe and India known of his days, arranged alphabetically according to the subjects and authors. In 1935 the 'Catalogers Catalogue Institute' in Madras took up this work.

In 1852 he went to Oxford to assist Max Müller in the publication of the Ṛgveda with the Sāyaṇa's commentary. Aufrecht published the text to the 'Rigveda in Roman characters' in 1861-63 in volumes 6 and 7 of 'Indische Studien'. He undertook cataloguing of Sanskrit manuscripts, which appeared in two volumes in 1859 - 64. Aufrecht made tables of contents, gave specimens of the principal works and cited the names of predecessors mentioned in the works. With this a detailed review of classical Sanskrit literature and an outline of chronology was obtained. He published critical editions of grammatical work 'Ujvaladatta's Unadusutras', in Bonn in 1859 and Halāyudha's 'Abhidanaratnamala' in 1861. In order to understand and translate texts, German scholars have used the two Petersburg Dictionaries. Two German scholars O. von Böhtlingk und R. Roth worked on the big Petersburg Dictionary which appeared in 1852 und 1875. It has been translated in English and published in India. O. von Böhtlingk had compiled a shorter Sanskrit Dictionary. Beginners use C. Capeller's small dictionary, that was published in Straßburg in 1887. It is reprinted in 1966. A new dictionary was prepared in Leipzig in 1975 by K. Mylius.

Primers for the introduction of Sanskrit were written by A. Stenzler, G. Bühler, F. Kielhorn and W. Geiger. The most comprehensive description of Sanskrit grammar is J. Wackernagel's 'Altindische Grammatik'. M. Mayrhofer compiled an Etymological Dictionary in 3 Volumes, which was published in Heidelberg during 1956 to 1976. At Göttingen University a dictionary specially useful for Buddhist Sanskrit is in the process by G. von Simson.

G. Lassen was the first to study Prakrit. R. Pischel's 'Grammatik der Prakrit

Sprache' is the best survey of Prakrit literature. H. Jacobi's 'Ausgewählte Erzählungen in Maharashtra' (Selected stories in Maharashtra) was published in 1886 and is reprinted in 1967.

W. Geiger's 'Pali, Literatur und Sprache' is the best introduction to that language. It was translated in English in 1968 (Pali, Literature and Language) in Delhi.

Though former German scholars have kept themselves busy studying Sanskrit. Prakrit and Pali, the interest of modern scholars is developing for other Indian languages, like Hindi, Marathi, Nevari, Malyalam, Tamil, Munda, etc.

Fr. Rosen was the first German scholar, who studied ṚV. But due to his early death in 1837 his task remained incomplete. Max Müller brought the critical edition of the ṚV text in six volumes. G. Grassmann, A. Ludwig and K. Geldner translated the ṚV. The Samaveda edition and translation was done by Thoder Benfey. Albrecht Weber worked on YV. The AV Saṁhitā was the joint product of R. Roth and W. D. Whitney. L. von Schröder edited the Maitrāyani-Saṁhitā. The scholars working on Vedic literature in the 20th century are mainly G. Budruss of Mainz and W. Rau of Marburg.

Albrecht Weber (1825 - 1901)³⁸ was specialist of Vedic literature and at the same contributed in the field of Jaina Studies and Prakrit. He submitted his thesis in Breslau University in 1845 on 'Yajurveda Speciman cum Commentario'. The YV specimen is taken from the ninth Adhyāya of Vājaseniya-Saṁhitā with Mahidhara's commentary. The Devanagari text and roman transcription is used in it. A comparative commentary and etymological explanations are other characteristics of this thesis.

During 1846 - 48 he stayed in England and France, where he collected manuscripts of 'Śuklayajurveda'. He is famous for the edition of ' Śukla Yajurveda' in three volumes. Part I. The Vājaseniya-Saṁhitā in Mādhyandina and the Kāṇva Śākhā with the commentary of Mahidhara. Part II. The Śatapatha

³⁸ Op cit, Stache-Rosen, Valentina. *German Indologists*, p. 69-72.

Brāhmaṇa in the Mādhyandina Śākhā with extracts from the commentaries of Sāyaṇa , Haruswami and Dvivedaganga Part III. The Śrautasūtras of Kātyāyana with extracts from the commentaries of Karka and Yajñikadeva. It was published in Berlin and London in 1852, 1855 and 1859. The second part of this thesis was of special importance. It was the first critical edition of a Brahmana. In this text the procedure of performing various fire sacrifices is discussed in detail. As it was the oldest prose work the linguists were interested in this with their point of view. In 1850 Weber published a translation of the first adhyāya. In 'Sacred Books of the East' the complete translation is published by J. Eggeling.

Weber was interested in legends. He published some legends from India, e.g. 1. Zwei Sagen aus dem Catapatha Brahmana über die Einwanderung und Verbreitung der Arier in Indien nebst einer geographisch-geschichtlichen Skizze aus dem Weißen Yajus, 2. Die Flutsage und die Sage von der Übersiedelung des Videgha Mathava von der Sarasvati nach der Sadanira im Lande der Kosala Videha .(Two legends from the Śatapatha Brāhmaṇa on the immigration and spread of the Aryans in India, together with a geographical-historical sketch from the White Yajurveda; The legend of the flood and the legend of the migration of Videgha Mathava from the Sarasvati to the Sadanira) 3. Eine Legende des Catapatha Brahmana über die strafende Vergeltung nach dem Tode (A legend from the Śatapatha Brāhmaṇa on the retaliatory retribution after death). He wrote on two special sacrifices mentioned in the Śatapatha Brāhmaṇa , 1. Über den Vajapeya (On the Vajapeya) 2. Über die Königsweihe, den Rajasuya (On the consecration of kings, the Rajasuya). He wrote 'Collection über die Kastenverhältnisse im Brahmana Sutra' (Collection on the caste system in the Brahmana Sutra) and 'Zur Kenntnis des vedischen Opferrituals' (On Vedic sacrificial rites). In 1949 Weber had started a journal 'Indische Studien'. Volumes 11 and 12 of this journal contain the edition of the ' Taittirīya Saṁhitā' of the Black Yajurveda with appendices and indices. He wrote 'Über die Literatur des Samaveda', when Fr. Benfey's edition of Samaveda was published.

The result of Weber's study of manuscripts was to catalogue the manuscripts of the Royal Library of Berlin. His catalogue 'Die Handschriftenverzeichnisse der königlichen Bibliothek zu Berlin Band I, Verzeichnis der Sanskrithandschriften', 1853 was a meticulous work, that has set new standards. As an outcome of this work Weber's lectures on Indian literary history were published in the same year. Weber discussed Vedic literature in details. For arranging Vedic literature in a chronological order Weber studied astronomical texts and Pāṇini. He was interested in India's relations with Western world. He brought out a translation of 'Mālavikāgnimitra' of 'Kālidāsa'. Weber took interest in Jain literature, especially in 'Śvetāmbara' sect. He never realise that Jainism is a religion it its own right. He too it as an offshoot of Buddhism.

Alfred Ludwig (1832 - 1912) was a versatile scholar. He is known for his translation of ṚV. At the same he was interested in epic studies. Besides Sanskrit, Latin and Greek Ludwig knew Semitic and Iranian language and was proficient in several modern languages. He has written many papers on comparative linguistics, but his views were accepted neither by his contemporaries nor by another scholars. His publications on literature, history and religion were more successful. He wrote several essays on Rāmāyaṇa. he considered the mythological element in the epic Rāmāyaṇa to be predominant, but he conceded that there might be historical factors as well.

Ludwig's most important contribution to Indology was his translation of the ṚV. The first part of this translation appeared in Prag in 1875. Rest other six volumes were published during the period of eleven years. Ludwig's translation of the ṚV text was accompanied with number of articles and commentaries. The translation is in prose and the technical terms have been retained in Sanskrit, especially the rituals and mythical concepts. The writing style of Ludwig is difficult and he had his own method of spelling. It was not understood easily. He did not use linguistic methods of interpretation. He had used the later Vedic literature and mainly the Brāhmaṇas. He took note of Sāyaṇa 's commentary for the translation.

He compared ṚV with Sāmaveda. According to him SV was more archaic text. He tried to date the Veda's origin, which according to him goes back to 15th century B.C. An English translation of ṚV was found in Ludwig's papers, which was bought by Oxford University.

Paul Deussen (1845 - 1919) was more famous as a history-writer of Indian philosophy and as a promoter of Arthur Schopenhauer. He worked in Kiel University from 1889 to 1919 as the professor of philosophy. As he himself admits, his 35 years of work he has respectfully donated to Indian philosophy. He studied Sanskrit language and literature from 1873 to 1880 and till 1887 he kept himself busy in the study of Vedānta. His book on 'Brahma-Sutra' with the commentary of Śākarācāryā was published in 1887. In 1894 he wrote 'A general introduction and philosophy of Vedas up to the Upaniṣads' and he studied the Brāhmaṇas and Vedic Hymnas thoroughly. Then he concentrated on Upaniṣads and in 1897 his famous translation of Upaniṣads was published - 'Sechzig Upanishadas der Veda mit der Übersetzung'. It was published in two volumes. Afterwards he kept himself busy with the philosophy Post-Vedic period. He wrote in 1908 'Nachvedische Philosophie' and 'Mahābhārata' in four volumes.

This complete series of translations and systematic explanations made the Germans easy for the first time to have a thought overview and idea of Indian philosophy. One finds here the philosophy and philology have mingled in each other.

The student of French Indologist Bruno - Max Müller³⁹ - kept himself busy with the knowledge of ṚV because of his teacher. His research on ṚV was published in six volumes in Oxford university. He worked as a special Indology professor in Oxford since 1868. He took keen interest in getting the West and East part of the world together. His love and affection for India, was an exceptional

³⁹ vide, Chaudhari, Nirad C. Scholar Extraordinary, pp. 124-146.

example in its own. Swami Vivekananda has praised him for that. Max Müller delivered a series of lecture regarding India in front of IAS students, in which he has pointed out the specialities of India. This series of lectures is published under the name 'India - What it can teach us?'

The Purāṇas were the subject of W. Kirfel's⁴⁰ research. He came to conclusion that the most Purāṇas have certain passages in common which belong to the oldest strata of this literature. A. Hohenberger wrote on several Purāṇas, e.g. 'Die indische Flutsage und das Matsya Purana' (The Indian legend of the deluge and the Matsyapurana, Leipzig 1930) and 'Das Bhavisyapurana', Wiesbaden 1967. A. Gail wrote on 'Bhabkti im Bhagavata Purana'.

2.4 : Present opportunities for Indology studies in German Universities.

The German Indological studies of 19th and 20th century was limited to the research of Sanskrit and its rich literature. This was the tradition of the most of the universities of Germany, where new India-studies developed only after Second World War. The it became an independent field of teaching and research. The researches for modern Indian languages were undertaken by many scholars, like on Braj, Punjabi, Hindi, Bengali and Marathi. Pro. Gunther Sontheimer's name is taken proudly in Maharashtra, as he undertook research specially for 'Varkari -Commune and Saints in Maharashtra'.

It took long time until the awareness grew, that Indology studies should not be restricted solely to the study of ancient literature. The University of Bonn is known as the 'Banaras on the banks of Rhein'. In 1945 Ono Spies and Ernst Bannerth published the first book on modern Indian languages in Bonn. P.

⁴⁰ Op. cit., Stache-Rosen, Valentina. *German Indologists*, p. 263-272.

Hacker and Ono Spies had together undertaken research in the field of classical Hindu religion and philosophy. P. Hacker had contributed to question of modern Hinduism and modern Indian languages and their literature. Several important studies on grammatical and terminological questions were published in Bonn. One of the major works amongst them is ' On the function of some auxiliary verbs in Hindi'.

After Second World War Tarachand Roy taught Hindi and Urdu till 1962. Tilak Raj Chopra was his successor for Hindi and Urdu teaching in Bonn University. In 1989 the Ministry of Science in North Rhein Westfalia approved the plan to introduce diploma course on Modern Asian Studies at the University of Bonn. Since 2000 Heinz Werner Wessler teaches Hindi. Ranjit Arora also held courses in Hindi.

In Winter term 2004-05 new study plans have been introduced in the newly established Institute for Oriental - and Asian Studies. Indology Department offers B.A. course in Asian Studies with Hindi or Sanskrit as a first language. For M.A. in Sanskrit the University offers simple and basic Sanskrit language, Vedic texts, Purāṇas, Buddhist texts, Raghuwansha of Kalidas, etc. The University offers Hindi and Malyalam for B. A. course, where one learns Indian philosophy, Buddhism, basic Hindi or basic Sanskrit, or basic Urdu and Indian and South Asian Buddhism.

Phillips University of Marburg offers language oriented discipline that deals with linguistics, philosophy, science of literature and even the Indian culture in general. It offers under Indology studies Vedic Sanskrit, Classical Sanskrit, Middle Indian languages and Modern Indian languages as a main subject. These languages serve as an introduction to the significant areas of Indian thought and religions, i.e. Vedic religion, Hinduism, Buddhism and Jainism, religious and aesthetical philosophy and scientific and technical literature and cultural history. At the same time this university offers courses in Tibetan studies. The main aim of the study of Indology and Tibetology is to acquire a basic knowledge in general and various kinds of texts. The seminars and lectures should enable the students

to deal primary texts independently and critically. A students requires two semesters to get introductory knowledge of Sanskrit and modern Indian language, i.e. Hindi or Gujarati. One can study them together or even separately. But it is basic pre-requisite for participation in philology course, which offers a specific theme and issue depending on the level - basic or advanced. Introductory courses in Vedic Sanskrit and Middle Indian languages (Pali and Prakrit) are offered at a regular intervals.

Indology can be studied as the main subject or as sub-ordinary subject and Tibetan studies as secondary subject. The university offers M. A. and Dr. Phil. (Doctor of Philosophy) in Indology. If Indology is studied as the main subject, the emphasis is given on good command over Vedic Sanskrit, Classical Sanskrit, a middle Indian language and a modern Indian language. If Indology is as a secondary subject, then the emphasis rests on good command of Classical Sanskrit and an acquaintance with a modern or middle Indian language.

University of Frankfurt offers Indology courses at B. A, and M. A. level. The university offers courses to get mastery in linguistics.

Freiburg University conducts courses in Asian archeology and ancient Indian philosophy.

Göttingen University offers Indology courses at B. A. and M. A. level. For B.A. in Indology the student should learn basics of Indian religions, basic knowledge of Hindi and Sanskrit, knowledge of India in general - history, geography, culture, society, people, etc. For M. A. In Indology a semester pattern is followed. Recently in this university a project on the 'Religion of Ṛgveda' has been undertaken. This university has added a special feature in their course of Indology. Since year 2008-2009 the students of Indology can study in India for six to eight weeks. They can opt for a scholarship of DAAD (Deutsche Akademische Austauschdienst) for these studies. In this collaboration programme University of Pune has joined hands. In the year 2009-2010 two students have studied Sanskrit and two Hindi in respective departments of Pune University. In 2010-2011 three students for Sanskrit and one for Hindi studies visited Pune. These

students will acquire extra credits to their B. A. Degree of the Göttingen University according to their performance in the Pune University. Dr. Thomas Oberlies, Director of Seminar for Indology, is in-charge of all these collaboration programme.

The Indology department of Heidelberg university offers cultural and religious history of South Asia. One can study Buddhism or classical Indian philosophy at B. A. or M. A. level. Another courses of M. A. are Health and Environment in South Asia and Culture and Religion's History of South Asia.

Students can learn Puruṣa Hymna from Ṛgveda, Body in Sāṅkhya philosophy, Body in Ayurveda, Embodiment of the Gods, Embodiment of the Buddha, Aesthetic embodiment - Body techniques, Body in Tantrism, (Body) Purity and impurity in Hinduism, Wrestlers in Banaras, the body of India etc. in this university. History of classical Sanskrit literature, Body, mind and personal Identity in Buddhism, Introduction in the language course of Indology- Sanskrit, Pail, Nepali, Tibetan, Singhili, a choice for a simple paper - Gurvāṣṭaka, Śivāpañcaksāra, Pañcatantra, Hitopdeśa, Amar Chitra Katha, Sāvitrī Upākhyāna of Mahābhārata, Guruvāñi of Daudipāda (Buddhist) , the human image of yoga, Jātakmālā of Haribatta can be studied for M. A. level.

Westfälische Wilhelms University of Münster offers courses specially of the ancient Indian language and literature from the ancient Hymens and Ṛgveda. The classical Sanskrit with its special forms of grammar can be studied here. The university offers courses in basic Sanskrit, for which 'Bhagwad-Gītā' is taught. The course for Pali literature is available here.

University of Kiel offers courses in scientific study of Indology. This university gives the opportunity to its students to get the introduction of the Vedic Sanskrit. The students can read the abstracts of certain critical editions of the Indology texts, can get more information about the tolerance of ancient and modern Hinduism, can get introduction of Hindi and can converse in Hindi. They can learn short history of the present situation of India. Even Sanskrit and Āyurveda studies are the part of some

courses here.

The Indology department of München University deals with various subjects regarding Indology, i.e. languages, religions, philosophy at the same time history, arts and archaeology of India. The multi cultured character of India, the vast history with many of its branches of the subcontinent and whose literary expression dates back to 2nd century B. C. forces an aimed research and teaching.

The university offers various courses, e.g. 1. A course related to Vedic Sanskrit and Vedic texts, Brahmanas literature and the Hinduism. 2. A course for Buddhist literature in various languages and dialects of earlier Buddhist 's monks in India, Central Asia, Sri Lanka (especially Sanskrit, Pali and Tibetan). 3. A course regarding Jain religion of India. 4. The philological, contextual, critical or contempt interpretation of earlier philosophical streams and the classical system of Indian philosophy. 5. Nowadays two new Indo-Aryan languages are introduced as a regular course, i.e. Hindi and Sighili

During these courses the students get the basic knowledge of Sanskrit, by which they can understand simple Sanskrit texts. After that they can develop the knowledge of Sanskrit to understand Vedic language. They can learn also Pali and Prakrit. Once they have acquired this knowledge they have to develop the language skills till the middle stage. They can develop the language skills with self-study method through Indian sources and the secondary literature and with the scientific (proper) helping material and with various methods of developing language skills. At the end of M. A. level they should be able to understand classical Sanskrit and atleast one more language like Pali or Prakrit or Vedic Sanskrit, so that they can understand the difficult texts in Sanskrit. At the same time the students should work in the field of ancient Indian religious, philosophical literature and up to some extent drama, epic and poetry. The deep knowledge of Buddhist texts can be acquired by learning Tibetan language, in which the authentic literature is preserved. The university offers M.A. and Dr. Phil degrees in Indology.

The Tübingen University offers many courses in Indology. The main attractions of them are 1. Religion and philosophy. Vedic religion, Buddhism, Jainism, Hindu

religion and the six philosophies regarding them. 2. History and rights (law). Political history, social history and Dharma Śāstra. 3. Literature and Art. Anonymous literature (Epics, Purāṇas, Āgamas and Tantras), Dramas, artistic novels, stories, scientific literature, commentaries, religious and world poetry, modern literature, history of arts, iconography. The university offers M. A. and Dr. Phil. in Indology.

University of Köln concentrates its courses of Indology only in the field of Tamil and Malyalam languages. They offer languages like Bengali and Singhili.

Where as Leipzig University deals with Tibetology and Mongolise. They offer courses like B.A. and M.A. with language and culture of South and Central Asia.

University of Würzburg offers two ways to study Indology, either the students can concentrate their studies of modern India, but at the same time they should have certain knowledge of ancient India, or they can concentrate on classical period of India and acquire knowledge of India in the modern era. The students can learn history, geography, religion, culture, society and languages of India during the course.

The speciality of this course is that the students can visit India in the duration of the course. The knowledge of history, languages, religions, literature and society of India can be obtained by study trips or student's visit programme, during which the deep information about India is acquired. A dialogue with Indians and the understanding the present India is made easy. For B. A. course approximately 4 weeks stay in India is included in the practicals. The University offers courses to increase the level of Hindi for students. For M. A. Course the excursion to India lasts for approximately 6 weeks.

The cultural study is the main research field in this university. The students can also learn Kannada here. The aim is that the students can have good communication with the people, who speak these languages as mother tongue. Even the knowledge of modern languages open a new horizon of literature before them. This knowledge of modern language opens a inter-cultural dialogue. The pre-requisite for this indology course is good command over English.

At present one can learn Indology or various branches of Indology at various

universities in Germany like: Berlin, Bockum, Bonn, Frankfurt, Freiburg, Heidelberg, Halle, Hamburg, Kiel, Köln, Leipzig, Mainz, Marburg, München, Tübingen, Göttingen, Würzburg, etc. This is a summary of the different courses offered by these universities, mainly at B. A., M. A. and Dr. Phil. degrees.

2.5 : Limitations of this work

This overview of Indology studies in Germany gives a brief account of achievements and opportunities in this field. The area and scope of Indology studies is vast, that includes many subjects and details regarding India, like history, geography, languages, literature, fables, fairy tales and anecdotes, culture, philosophy, philology, religions, mythology, architecture, archeology, herbal medicines, Āyurveda, art, music, etc.

It is difficult to understand India and its real colours for a common Indian also, who is born and brought up in a peculiar situation of multi cultural, multi religious and multi lingual society and country. The studies of Indology, its area and scope can be compared with a legend, that would explain the difficulties in understanding this uncomparable situation, in which it is described how some blind men went to 'see' an elephant, that came to their town. Each one of them touched only one part of its body and had a quarrel amongst themselves. Finally a wise man came to rescue and the problem is solved.⁴¹ Likewise it is difficult to understand the vast scope of the Indology with its all aspects. But easier is to stick to a small branch of this vivid field of knowledge.

Hence certain limitations are necessary for the research in the field of Indology. Here the research is dealing with the study of Indology in Germany and the special

⁴¹ vide Kolte, V.B.(Edi.). *Mhaimbhat Sankalit Shri Chrakradhar Lilacharitra*, Second edition, Maharashtra Rajya Sahitya Sankriti Mandal, Mumbai, 1982, pp. 456-457.

emphasis of the study lies on the Yajña (Opferfeuer - Fire-worship) and its effects on the surroundings, men, plants, etc and its importance in the daily life of every person. These researches are undertaken in Germany and -with the collaboration of German scholars and scientists - all over the world, like in Peru, Chile, Brazil, Argentina, America, Yugoslavia, Czechoslovakia, Venezuela, Spain, Australia, Poland, Switzerland, Austria and also in India - since many decades. The relevance of this basic ritual in common-man's daily life in the modern IT age is an important aspect dealt in this work. The main stress is laid to find out, how far is it possible to overcome various problems of daily life-struggle of the common man through the practice of morning and evening sacrifice.

... ..

3. The Ṛgveda

Veda is primarily 'knowledge' in general, and among the Indians designates knowledge ...-the sacred knowledge,- the sacred writings, of which a brief survey follows.¹

With these words German philosopher Adolf Kaegi begins his research regarding the ṚV. He adds further that Friedrich Rosen had recognised the value of the rich manuscripts collection which had come to London, in part through the efforts of Colebrooke. Colebrooke took a valuable survey in his paper on the Vedas - The sacred writings of the Hindus- of the Vedic literature. He was the first man to light the torch of Vedic studies in Western countries. Almost twenty years later Friedrich Rosen recognised the value of Vedic literature. He understood the need of making this knowledge accessible to European scholars and took up the great ordeal of editing the oldest most part of the knowledge, ie. the ṚV. But only the first eighth part was published - Ṛgveda Samhitā über primus Sanskrit er Latin.

Rosen's efforts were followed by those of U. Burnhof, who took efforts to spread Vedic learning in Europa. He produced many Sanskrit scholars. He was the pioneer and path-maker of Sanskrit philology.

Rudolph Roth gave much enduring and epoch-making impulses to the readers with his publication 'Zur Literatur und Geschichte des Weda', which was published in Stuttgart, 1846. This book charged a movement of Veda-studies amongst the Sanskrit-scholars of the West. He was one of the main pupils of Burnhof. His Sanskrit Wörterbuch, a Sanskrit -German lexicon, published in

¹ Kaegi, Adolf. The Rigveda : The oldest Literature of the Indians, Arrowsmith, R. (Tr.), Authorised Translation with Additions to the Notes, Amarko Book Agency, New Delhi, First Ed., 1972. Introduction, p. 2.

seven volumes in St. Petersburg. In 1852 Royal Library of Berlin aided for the purchase of Sanskrit manuscripts. A. Weber was enabled to do a detailed survey of the Vedas with these manuscripts. His 'Indische Studien' researches in all the branches of oriental studies like Veda, philosophy, grammar, lexicography etc. His 'History of Indian Literature' was a pioneering work in the field of history-writing on Indian literature. His 'Vorlesungen über indische Literaturegeschichte' were helpful in later times to Max Müller for writing 'History of Ancient Sanskrit Literature'(1859). Max Müller was a disciple of Burnhof and class-mate of Roth. Under the guidance of his teacher he edited the ṚV Samhitā with the commentary of Sāyaṇācārya for the first time in 1849.

Due to the progress of Vedic studies and the ṚV studies in Western countries several works like lexicons, indices, dictionaries and concordances were compiled. Karl Geldner wrote the translation of the ṚV in German.

While explaining the importance and necessity of learning Indian culture, literature and philosophy Aurther A. Macdonell wrote:

When the Greeks, towards the end of the fourth century B.C., invaded the North-West, the Indians had already fully worked out a national culture of their own, unaffected by foreign influence. And in spite of successive waves of invasion and conquest by Persians, Greeks, Seythians, Muhammadans, the national development of the life and literature of the Indo-Aryan race remain practically unchecked and unmodified from without down to the era of British occupation. No other branch of the Indo-European stock as experienced an isolated evolution like this. No other country except China can trace back its language and literature, its religious beliefs and rites, its domestic and social customs, through an uninterrupted development of more than three thousand years.

A few examples will serve to illustrate this remarkable continuity in Indian civilization. Sanskrit is still spoken as the tongue of the learned by thousands of Brahmans, as it was centuries before our era. Nor has it ceased to be used for literary purpose, for many books and journals written in the ancient language are still produced. The copying of Sanskrit manuscripts is still continued in hundreds of libraries in India, uninterrupted even by the introduction of printing during the present century. The Vedas are still learnt by heart as they were long before

the invasion of Alexander, and could even now be restored from the lips of religious teachers if every manuscript or printed copy of them were destroyed.²

The Veda is primarily knowledge. The word Veda is originated from the root 'vid', which means knowledge or wisdom. There is little difference between knowledge and wisdom. Knowledge is time bound by ideas, impressions, circumstances, memories of past, etc, whereas wisdom is eternal, immutable, universal, beyond the limits of the time and superterial. Veda also means the sacred knowledge, based on internal vision and institution of seers. It is the name given to certain ancient literary workds forming the foundations of the early religious beliefs and philosophies of the Hindus. Traditionally Vedas are considered to be of divine origin and have existed from eternity. The inspired seers (Ṛṣis) received them directly from the Supreme Creator through their austerities. It is a literary rich in religious, philosophical, psychological, political, mythical, astronomical and linguistic lore. 'Ṛk' means the verses to praise the gods. 'Ṛk' designates 'sacred lore' as a branch of literature. The word also had the restricted meaning of 'sacred book'. the ṚV is the verses full of eternal knowledge with proper metres, which are mainly prepared to praise the gods.

Veda is eternal, unperceivable, all pervading, all-comprehensive, exceedingly subtle, un-decaying, without beginning and without end entirety of wisdom though receptivity, reflection and constant meditation. It is what Dr. Whitehead designates 'as something which is real and yet waiting to be realized; something which is remote possibility and yet the greatest of present facts; something that gives meaning to all that passes; and yet alludes apprehension; something whose possession is the final good and yet beyond all reach; something which is ultimate ideal and the hopeless quest'. Veda is Wisdom of the

² Macdonell, Auther A., A History Of Sanskrit Literature, Motilal Banarasidas, New Delhi, 1965. pp. 6 & 7.

unknown and not the Knowledge of the known.³

These are the words, which N. D. Sonde quotes of Whitehead, who tries to define Veda in his article in 'Science and the Modern World'. He adds further the Vedic scriptures are the aggregate knowledge of fragments of wisdom. Wisdom is constant and continuous awareness like an ocean, vast and deep and yet ever turbulent.

Der Ṛgveda, das bei dem weitem älteste literarische Dokument des alten Indien, in dem "die kultgebundene Dichtung der urindoiranischen und indogermanischen Sprachepoche" fort lebt, ist eine Sammlung einstmals weit verstreuter Lieder.⁴

The Veda is not only Indian, but also one of the ancient most literature of the world. Chronologically the ṚV is the oldest books in Hindu and at the same in world literature. It is a collection of thousand or more hymns.

As far as the word ṚV is concerned, Max Müller stated, "as long as the mountains endure and rivers flow on the earth, so long the greatness of the ṚV will be recognised". Max Müller has expressed his feelings in these words towards the ṚV in the preface to the second edition of the ṚV volume IV.

The word Veda therefore mens consideration, discussion and experience also.

The cognate roots of the term Veda are also found even in European

³ Sonde, Nagesh D. *Rigveda. A study of the forty hymns*, Nagesh d. Sonde Publisher, Mumbai, First Ed., 2006, p. 3.

⁴ Oberlies, Thomas. *Die Religion des Ṛgveda*, Vol. XXVI, Institute für Indologie des Universität Wien, Wien, 1998, p. 152.

languages. Thus - Oida in Greek, Videre in Latin, Wissen in German and wit in English. If the word Veda is related to video or wisdom or vision, it would mean DARŚANA. Etymologically also, the Vedas, therefore are seen internally by the Seers. The word ṚV is also sometimes derived from the root दृश् to see.⁵

The Vedic mythology is an important part of the world history. It is the ancient most source of the history of religion.

Vedic mythology occupies a very important position in the study of the history of religion. Its oldest source presents to us an earlier stage in the evolution of beliefs based on the monument of the world.

To this oldest phase can be traced by uninterrupted development the germs of religious beliefs of the great majority of the modern Indians, the only branch of the Indo-European race in which its original nature worship has not been entirely supplanted many centuries ago by a foreign monotheistic faith. The earliest stage of Vedic mythology is not so primitive as was at one time supposed.⁶

The study of the Vedas enables the research of the history of mankind, admits B..G. Tilak, like A. Macdonell. This study offers new dimensions to the historical developments of mankind.

The Veda is the oldest book that we now possess, and it is generally admitted "that for a study of man, or if you like, for a study of Aryan

⁵ Dharmadhikari, T. N., *Vedas- A Broad Perspective, Samvijñānam*, Felicitation Volume of Dr. T. N. Dharmadhikari, Pune, 2006. p. 106.

⁶ Macdonell, A.A., *Vedic Mythology*, Motilal Banarasidas, New Delhi, Reprinted 1981, p. 2.

humanity, there is nothing in the world equal in importance with it".⁷

The ṚV is one out of four collections. Besides the ṚV there are YV or Veda of sacrificial formulas, Sāmaveda or Cātaveda and AV or Veda of popular religion. These four Vedas are connected with each other. Being the most ancient and the basic work the ṚV has influenced the other three Vedas and all their sub-divisions. The four Vedas are a fourfold presentation of the primitive Veda, in some such way as the four Gospels are a fourfold presentation of the primitive Gospel.⁸

As per the hoary tradition by the Hindu orthodoxy the sage Kṛaśṇa-dvaipāyana gathered all the extant Vedic Mantras of his times and divided them into four groups. Due to this work he was honoured by the name of Vedavyāsa or Vyāsa. When Vyāsa collected the hymns from diverse sources he arranged them with a remarkable insight and imagination so that a continuity and consistency of thought is maintained. To see them disparately would be to miss the essence of the Vedic vision. The division he made was necessary for the practical needs felt in the performance of the sacrifice.

We have in the Rig-veda, - the true and only Veda in the estimation of European scholars, - a body of sacrificial hymns couched in a very ancient language which presents a number of almost insoluble difficulties. It is full of ancient forms and words which do not appear in later speech and have often to be fixed in some doubtful sense by intelligent conjecture; a mass even of the words that it has in common with classical Sanskrit seem to bear or at least to admit another

⁷ Tilak, B. G. *The Orion. Or Researches In The Antiquity Of The Vedas*, Cosmo Publications, New Delhi. 1984, p. 1.

⁸ vide. Griswold, H.D. *The Religion of The Rigveda*, Motilal Banarasidass, New Delhi, First Ed., 1971, p. 54.

significance than in the later literary tongue; and a multitude of its vocables, especially the most common, those which are most vital to the sense, are capable of surprising number of unconnected significances which may give, according to our preference in selection, quite different complexions to whole passages, whole hymns and even to the whole thought of the Veda.⁹

All the mantras to invite the various deities to a sacrifice, that were canted by the priest or hotā were collected together and called the ṚV. Each of the mantra is known as Ṛc.

Theodor Benfey, A. Weber, R. Roth, Whitney and Aufrecht took efforts to translate and study important texts of Vedic literature, printed them and these allowed investigations in the field of history, philology, etymology and unexpected world of philosophical thoughts.

It is interesting to understand, that while researching on Vedic literature, Max Müller collected various manuscripts of the ṚV from different parts of India, ie. from Kashmir to Kanyakumari and from Baluchistan to Assam. The speciality of these manuscripts is that every single detail, Sanskrit spellings are exactly the same from all of them. He used the Śākala Saṁhitā of the ṚV for the research. He knew that though all the details of the ṚV are same, there are certain special variations of intonation (pāṭhbheda) all over India of this Saṁhitā. He tried to gather them from Indian pandits. Vedic pandits of India of that time understood the importance of Max Müller's work. They honoured him with a special prize, which was a pair of scared thread (heilige Scnur), that was a precious gift according to him.

As long as man continues to take an interest in the history of his race and as long as we collect in libraries and museums the relics of former ages, the first place in that long row of books which contain the records

⁹ Sri Aurobindo. The Secret of the Veda, Sri Aurobindo Ashram, Pondicherry, Third Reprinted Ed., 1990, pp. 1 & 2.

of the Aryan branch of mankind will belong forever to the Ṛgveda.¹⁰

These are the words of Max Müller, while he is praising the Vedas. In 1845 F. Max Müller went to Paris to work under the guidance of Burnhof, the French Sanskrit scholar. He was editing the manuscript of the ṚV. Due to the habit of hard work and devotion Max Müller got a chance to work on the project. But before that he had to take an oath in front of Burnhof that he will not smoke while making the critical copy of the ṚV. Secondly while editing the commentary of Sāyaṇacārya he will not omit any single word or even any letter of Sāyaṇacārya and will not write anything before leaning the Vedic mantras by heart. Müller promised his 'guru' that he would donate his life to Vedas. He followed his promise religiously during his lifetime, for which even Swami Vivekananda praised him by saying :

And what love he bears towards India ! I wish I had a hundredth part
of that love for my own motherland !
(Und welche Liebe trägt er in sich gegenüber Indien. Ich wünsche, ich
besäße den hundertsten Teil jener Liebe zu meinem Vaterland.)¹¹

3.1 : Fixing the date of the Veda

¹⁰ Müller, Max. Ancient Sanskrit Literature. Op.Cit, Karambelkar, V.V. Sanskrit Sahityach Sopapattik Etahas, Shri Sharada Prakashan, Nagpur, 1993, Second Edition, 1993, p. 57.

¹¹ Swami Vivekananda. On Professor Max Müller. The Complete Works of Swami Vivakananda, Vol. IV. Kalkutta. Advaita Ashrama. 14 th repr. 1992, pp. 279-281. & Müller, Max. India What can it teach us ?, Pinguin Books. India. NewDelhi,2002, p. Viii. & Leifer,Walter. Indien und die Deutschen, p . 188.

As for the orthodox traditions the Vedas are not books, but a body of knowledge revealed by the Creator at the beginning of each cycle of creation. Therefore the other name of Vedas is Śruti, the knowledge that was heard at the beginning of the world.

The oldest and most valuable of these collections, the foundation of the whole Vedic literature, is composed of songs, in which, in primeval times, at the first stage of their history as an independent nationality, still at the threshold of the land which they afterward filled with their culture,- more than 1000 years before the expedition of Alexander the Great in the same regions, centuries before the production of the Indian Pantheism or of the gods Brahma, Viṣṇu, Śiva,- in which that people in childlike simplicity praised and entreated their gods, with which they accompanied their sacrifices and strove to propitiate the revered ruler of their destiny, to gain for themselves and their flocks prosperity and secure habitations.¹²

While fixing the date of the Vedas it is desirable to take Indian history and archeology into consideration. Yet there is no unanimity amongst the scholars concerning the age of the ṚV. Often the Indian traditions are compared with that of European or Greek. India or its knowledge is not investigated at an separate entity, actually that is necessary to understand its unique values.

(1) The date of Zoroaster is now generally fixed at B.C. 660-583 by e.g. Geldner, West and Jackson; and since there is only a dialectic difference between the language of the ṚV and that of Avesta, there can be no great interval in time between the two works...

(2) The change in the language between the Ṛgveda and the Upaniṣdas is not greater than that between Chaucer and Milton, and hence it is fair to suppose that about 200 years would suffice in the one case as well as the other. The two hundred years within which Hopkins and Jackson place the bulk of the Ṛgveda hymns are B.C. 800-600.

¹² Kaegi, Adolf. The Rigveda : The oldest Literature of the Indians, Introduction, pp. 2 & 3.

(3) The Ṛṣis who composed the hymns may very well have been in large measure contemporary with one another, and certain differences in vocabulary and style may be accounted for simply by variety of authorship. According to this view, then, the Ṛgveda is roughly contemporaneous with the bulk of early Hebrew literature.

At the opposite pole from Hopkins and Jackson stand Tilak and Jacobi, who on the basis of astronomical calculations would carry the period of the composition of the Ṛgveda back beyond 2500 B.C. as far at least as 3500, and according to Tilak farther still. Jacobi places the Vedic age within the period 4500-2500 B.C. Apart from the assumed astronomical date, however, Jacobi urges that norm of European progress cannot be applied to India on account of its isolated position and the consequently independent character of its development. The late Professor Bühler was of the opinion that the conquest and brahmanization of India requires a much earlier date than 1200-1000 B.C. Following him, Winternitz declares that from the standpoint of Indian history there is nothing against the view that Vedic literature goes back to the third millennium B.C. and the beginning of Indian culture to the fourth millennium B.C.

The third group of scholars stands between these extremes. Their convictions are based upon considerations of the time necessary for the linguistic, literary and historical development of India. It was Max Müller who suggested the chronological system ...

1200-1000 B.C. - the Chhandas period, when the earlier hymns of the Ṛgveda were composed.

1000-800 " - the Mantra period, when the later hymns were composed and the Samaveda and Yjurveda were completed.¹³

Most of the British and European scholars followed this opinion. But a large number of scholars differ in the opinion. They opt for the earlier date and do think that the positive dates are yet lacking for determining the chronology of the Vedic period.

In 1859 Max Müller based on his knowledge of language studies and archeological documents of Middle East assumed four periods of Vedic literature as Mantras, Chandas, Brāhmaṇas and Sūtras. He allotted

¹³ Griswold, H. D. The Religion Of The Rigveda, pp. 67-70.

intervening period of 200 years. This meant that the ṚV hymns were composed later than the war in the MB. Haug, scholar of Chinese literature assigned 500 years instead of 200 years of Max Müller. According to him the date of the ṚV was 2400 - 2000 B.C. S. B. Dixit with the reference of Śatapaṭha Brāhmaṇa assigned the date as 2400 B.C. In 1893 Hermann Jacobi and Lokamanya Tilak independently of each other assigned 4000 B.C. as the period of the ṚV.

1. Aditi(preorion) period - 6000 B.C. - 4000 B.C. during which the sacrificial fomulae, eithets and feats of deities were in vogue. Hymns were unfinished, there is no mention of this period in Greek or Parsi literature.
2. Orion period - 4000 B.C. - 2500 B.C. Many Sūktas and legends were formed. The verses were sung. Hellenic Āryans, Iranian Āryans lefgt the original home. It must be remembered however that the Ṛgveda saṁhitā was completed later by Maharṣi Vyāsa and by that time some hymns or verses were lost or imcomprehensible hence omitted.
3. Kṛttikā period - 2500 B.C. - 1400 B.C. during which time four Veda saṁhitās and Brāhmaṇas came into use or were composed. Certain words and their exact meaning were not properly understood. Sacrificial rituals agained prominence and the priestly class attained importance. Chienese borrowed Indien nakṣatra system.
4. Pre-Buddhist period - 1400 B.C. - 500 B.C. Kalpasūtras. Certain philosophical systems, Vedāṅga Jyotīṣa, Nirukta etc. came into use. The beginning of the year was made from new Moon to new Moon instead of full Moon to full Moon.¹⁴

This chronology defined by B.G. Tilak is based on astronomical grounds at the same time it refers to Śatapaṭha Brāhmaṇa (Verse 2.1.2) and Vedāṅga Jyotīṣa.

The Cambridge Professor of Sanskrit says,"the very word history has

⁴ Tilak, B. G. The Orion, pp. 206 - 220.1

no corresponding Indian expression. For the very earliest ages down to the present time, the Hindu mind seems never to have conceived such an idea as an authentic record of past facts based on evidence."

Hindu writers framed their chronology, like their geography and astronomy, out of their own heads. It was as easy to write a crore of years as a century, and the former was the more marvellous.

There is no date in India known with certainty till the time of Chandragupta, about 300 B.C., which was ascertained through the Greeks. The precise time when the Vedas were written cannot, therefore, be known with certainty. Indeed, their composition probably extended over several centuries. Max Müller estimates that they were composed, such as we now have them, about 1500 B.C. (India, What it can teach us) In his Hibbert Lectures, he expresses the opinion that the Samhita (collection) was closed about 1000 B.C. The Brahmanas may date from 800 to 600 B.C. The Sutras may range from 600 to 200 B.C.¹⁵

However most of the scholars have based their research findings wholly or primarily on a few assumptions like the evolution of the language of the ṚV, certain astronomical data which may not have been proved beyond all doubts, noticeable changes in social and political systems, etc. There are various assumptions while fixing the date of it, but none of these can be said to be true.

Ṛgveda pre-supposes nothing of that which we know in Indian literature. While on the other hand, the whole of Indian literature and whole of Indian life pre-suppose the Veda.¹⁶

While explaining the difficulty of fixing the date of Vedas, Ludwig explained his views in these words. On the same issue Winternitz commented:

¹⁵ Acharya, Sankara. The Vedas and Brahmanas, Caxton Publishers, Delhi, Reprinted 1988, pp. 20 & 21.

¹⁶ Karambelkar, V.V. Sanskrit Sahityach Sopapattik Etihās, p. 71.

It is far better to show ten different layers of thought that produced ten Vedic religions and this to give an approximation of its long growth than to attempt to measure years or centuries which can never be more than guess work. ...

The only thing certain about this question is that every thing is uncertain.¹⁷

The view of Whitney was :

All the dates given in Indian literary history are but nine pins set up as it were only to be bowled again.¹⁸

The period of the ṚV is still the subject of vague and uncertain speculations. This is a question which has baffled the ingenuity of many of ancient or modern scholars. As they have taken either Euro-centric views or the colonial approaches to look into this matter.

3.2 : Method of preserving the Vedic knowledge amongst Indians

The immortal practice shows that the beginning of Indian poetry and science go back to a time when writing was unknown and a system of oral tradition, such as referred in the ṚV was developed before writing was introduced.

¹⁷ ibid. p. 74.

¹⁸ ibid. p. 74.

The palaeographical evidence of the Aśokan inscriptions, in any case, clearly shows that writing was no recent invention in the third century B.C., for most of the letters have several, often very divergent forms, sometimes as many as nine or ten. A considerable length of time was, moreover, needed to elaborate from the twenty-two borrowed Semitic symbols the full Brāhmi alphabet of forty-six letters. This complete alphabet, which was evidently worked out by learned Brahmans on phonetic principles, must have existed by 500 B.C., according to the strong arguments adduced by Professor Bühler. This is the alphabet which is recognised in Pāṇini's great Sanskrit grammar of about the fourth century B.C. and has remained unmodified ever since. It not only represents all the sound of Sanskrit language, but it arranged on a thoroughly scientific method, the simple vowels (short and long) coming first, then the diphthongs, and lastly the consonants in uniform groups according to the organs of speech with which they are pronounced.¹⁹

According to Macdonell the Indians were far ahead of the Europeans in various knowledge fields, including writing skills.

The main important point about the imparting of Vedic knowledge is that, the ancient educational system of India was having a great prejudice against learning from the books. The greatest importance was attached to handing down the Veda intact. Various devices were discovered and employed for securing this aim, such as the various modes of repeating the Veda only in Padas, in the krama, jaṭā and other formations.²⁰ Great care was taken to preserve the proper accentuation of the Vedic texts. For there should be no change in the original Vedic mantras ancient sages have used various tricks. By creating Prātiśākhya and Śikṣā they have prepared rules to utter the Vedic mantras and swaras. According to the assumption of the sages, if any single

¹⁹ Macdonell, Auther A., A History Of Sanskrit Literature, pp. 13 & 14.

²⁰ vide. Kane, Pandurang Vaman. History of *Dharmaśāstra* (Ancient and Medieval Religious and Civil Law), Vol II, Part I. Second Edition. Bahandarkar Oriental Research Institute, Poona, 1974, p. 347.

swara is missed or mispronounced while saying the Vedic mantras, the meaning is destroyed. Hence they asserted the importance of uttering the mantras with proper swaras. Even while saying any mantra, if it is missed or wrongly uttered, it becomes the Vajra (the weapon of Lord Indra) and kills the host. This is emphasised in the Pāṇinīya- Śikṣā. Thus the main importance while singing the Vedic mantras is given to the swaras, i.e. proper rhythm. After pronouncing a specific swara, a typical rhythm is formed. Due to which that word gets a special power (Swara-Siddhi). This is called the power of a mantra. To keep this power of the mantra one has to follow certain rules while singing them. The Vedas was to be recited not only with proper modulation of the voice to convey the accents, but the accents were indicated by the movements of fingers.

To preserve the Vedic texts intact, the sages have used one another trick also. By preparing the Vikṛatī of the Vedic mantras, various Padapāṭha are formed for various Vedic Saṁhitās. Even with the help of these Padapāṭhas, Vikṛtis like krama, jaṭā, ghana etc. are prepared. While uttering Vedas clockwise or anti clockwise the Vikṛtis are helpful. If the Vedic mantras are said at the proper time, at the proper place and by the proper person then the hidden meaning of them comes to light.²¹ There are a number of rules even to how the education of Vedas is taken and offered, e.g. the student should be obedient, should concentrate on the studies, he should follow certain behavioural rules properly, e.g. while beginning the studies one should start with saying 'Om', before starting the studies take a bath, should sit folding one's legs, one should not move one's head or legs while saying the mantras. These rule are mentioned in the Dharmaśāstras and Smṛtis. Following these rules and learning accordingly is called education.

The teacher has to follow certain rules at the same. He should not take any fees or salary while teaching. The ideal was that the dakṣiṇā (fee) offered to

²¹ vide. Joshi, Mahadeoshastri. Bharatiya Sanskritēe Kosha, Bharatiya Sanskritēe Kosha Mandal, Pune 2005, p. 70.

the teacher at the end of study was simply for pleasing or propitiating the teacher and was not a complete equivalent of or compensation for the knowledge imparted. This tradition was followed since ancient times. Parting knowledge is highly respected and pious job. According to Manu Smṛti(II 245-246) the student need not give anything to the teacher till his Snāna, when he is about to return home. He may offer his guru some wealth, gift of a field, gold, a cow, or a horse, or even an umbrella, a seat, corn, vegetables or clothes. The Smṛuti declares that even if the guru teaches a single letter to the pupil, there is nothing in this world by giving which the pupil can get rid of the debt he owes.

Oral instruction was the cheapest and most accurate method of imparting knowledge. Whether the writing skills were known at those times is a question of great controversies. But handling the written material was not easy or even written texts could have been costly. Therefore the method of oral instruction was resorted to and having been hallowed by the lapse of thousands of years it has been persisted in the present day. Even in the 21 century after writing has been known for not less than 3000 years according to scholars like Bühler (as he wrote in is 'On the origin of the Brahmi alphabet' that the writing skills were not known to Indians and they borrowed Brahmi alphabets for literary purposes) there are hundreds of brāhmaṇas, who learn not only the whole of the Ṛgveda by heart, but also the pada text of the ṚV, the Aitareya Brāhmaṇa and Āraṇyakas and other Vedāṅgas.

Max Müller had explained this teaching method in detail.

It was learnt by every Brahman during 12 years of his studentship or Brahmacharya. This, according to Gautama, was the shortest period, sanctioned only for men who wanted to marry and to become Grihasthas. Brahmanas who did not wish to marry wer allowed to spend 48 years as students. The Prātisákhyā, gives us a glimpse into the lecture-rooms of the Brahmanic colleges. 'The Guru,' it is said, 'who himself formerly been a student, should make his pupils read. He himself takes his seat either to the east, or to the north, or the north-east. If e has no more than one or two pupils, they sit at his right hand. If he has more, they place themselves according as there is room. They then embrace their master and say, 'Sir, read!'. The master gravely says, ' Om', i.e. 'Yes'. He then

begins to say prasna (a question), which consists of 3 verses. In order that no word may escape the attention of his pupils, he pronounces all with the high accent, and repeats certain words twice, or he says 'so' (iti) after these words'.

" it does not seem as if several pupils were allowed to recite together, for it is stated distinctly that the Guru first tells the verses to his pupil on the right, and that every pupil, after his task is finished, turns to the right, and walks round the tutor. This must occupy a long time every day, considering that a lecture consists of 60 or more prasnas, or of about 180 verses. The pupils are not dismissed till the lecture is finished. At the end of the lecture, the tutor, after the last half-verse is finished says, 'Sir', the pupil replies, 'Yes, sir'. He then replies the proper verses and formulas, which have to be repeated at the end of every reading, embraces his tutor, and is allowed to withdraw.' ...

Years were spent in learning the books by rote. Some selected certain books; others different ones; so that, in this way, hymns were preserved from generation to generation. ²²

Though the written manuscripts of Vedas were available, they were not used, as using written Veda-knowledge was a sin. The oral tradition of the Indian Vedic literature is continuing even today.

Since the Vedic mantras were continually revealed to the great sages in their mystical states and since they had to be kept in memory for transmitting them orally to the next generation, a saturation point was fast approaching, endangering the storing and transmission of Vedic wisdom itself.

While explaining British students of civil services exam, Max Müller in his lecture said :

Now the R̥gveda alone, which contains a collection of 10 books of hymns addressed to various deities, consists of 1017 (1028) poems, 10,580 verses, and above 153,826 words. However these poems composed - for they are composed in very perfect metre- and how, after having being composed, they were handed down from 1500 Before Christ to 1500 After Christ, the time to which most of us are best Sanskrit manuscripts belong ?

²² Müller, Max. Ancient Sanskrit Literature, Hibbert lectures, &c., &c., pp. 503,506, Op.cit., Acharya, Sankara. The Vedas and Brahmanas, p. 23.

Entirely by memory. This may sound startling, but - what will sound still more startling, and yet is fact that can easily be ascertained by anybody who doubts it -at the present moment, if every manuscript of Ṛgveda were lost, we should be able to recover the whole of it - from the memory of the Srotriyas in India. These native students learn the Veda by heart, and they learn it from the mouth of their Guru, never from a manuscript, still less from my printed edition, and after a time they teach it again to their pupils.

I have had such students in my room at Oxford, who not only could repeat the hymns, but who repeated them with the proper accents (for the Vedic Sanskrit has the accents like Greek), nay who, when looking through my printed edition of the Ṛgveda, could point out a misprint without a slightest hesitation.²³

The learning of Vedic literature was carried on under a strict discipline. It was considered as a sacred duty. The student teacher relation carried some special importance in the complete process of this type of learning. The teacher is expected to make the student understand whatever is taught. After the treading ceremony a student should learn the Vedas. In ancient times treading ceremony was done for girls also. To practise the fire worship everyday was a resolution to be followed after the treading ceremony. In some Upaniṣads the procedure of ancient learning methods is described. It starts approximately at the age of 12 and the student is said to have mastered the Vedas at the age of 24. According to some Gr̥hya and Dharma - sūtras one has to study each Veda for 12 years. There were many options either to study all four Vedas for 48 years, three of them for 36 years, or the student was clever he may finish the study of three Vedas in 18 years or in 9 years or he should devote as much time as he would require for learning one Veda or more.²⁴ A boy, who is to be taught the ṚV, should be of 8 years and had to

²³ Müller, Max. India, What can it teach us?, Bhave, H.A, (Tr.), Bharatakadun - Aamhi (Englandne) kay shikave?, Varada Prakashan, Pune, 2000, pp. 266 -268.

²⁴ vide. Manu III. 1-2 and Yaj. I. 36. Op. Cit. Kane, Pandurang Vaman. History of *Dharmaśāstra*, p. 351.

spend 8 years at his guru's house for learning. He would learn there ten books, i.e. ṚV, Brāhmaṇa, Āraṇyaka, the rules of domestic ceremonies, pronunciation, grammar, etymology, metre and astronomy. These ten books contained approximately 30,000 lines, in each of these lines there are around 32 syllables. A student learnt every year excluding the holidays for 360 days in a lunar year. That means 2880 days of his eight years stay, from which 384 days of holidays when it was not taught, every day about 12 new lines were be learnt. Every day he had to revise what he had learnt earlier. This is how the tradition of learning Vedas and Vedic literature was carried forward.

The Gopatha Brāhmaṇa declares that the period of studenthood for learning the Vedas is 48 years. That period is distributed in four portions among the Vedas. Studenthood for mastering each Veda is 12 years. Some of the gṛhya and dharma sūtras follow the same tradition. Either the studenthood should remain for 48 years for learning all four Vedas or it should last until one has learnt one or more Veda.

The Varāha-gṛhya sūtra refers to different preparations for different people, e.g. a yājñīka had to study mantra and Brāhmaṇa, kalpa (vedic ritual) and mimāṃsā and one could study at his option grammar, the Smṛtis and vaktra and the Śrotriya committed to memory the Vedas.

The study of Vedas was essential for the performance of the various Vedic sacrifices. Jaimini had expressed it with much importance that he who knows the Vedas is entitled to perform sacrifices.

It is difficult to understand the hidden meaning of the Vedas, without leaning them properly. Much importance is given to understand the meaning of the Vedic mantras. Every Ṛk convey high valuable and eternal truths. All deities follow these truths. If one does not understand this hidden meaning, how will one understand any Ṛk. Those, who know this, get the valuable happiness through this knowledge. A student should not only learn the Vedas by heart, but he should do swādhyāya to understand the hidden secret meaning. The rules he had followed while learning the Vedas, had to be followed while doing

swādhyāya. To preserve the Vedas and their knowledge should become the lifetime aim or lifetime job. One has to think repeatedly over the knowledge of the Vedas. Yāskācāryā in his Nirukta (I-18) condemn in very strong language, that the one who only commits to memory the Veda and does not know the meaning, that man is indeed a tree, a stump, a mere carrier of load, he alone who knows the meaning secures all happiness, his sins being shaken off by knowledge, he reaches heaven. Understanding the meaning of the Vedas is important for the sake of Karma. The usage of Veda- mantras is meant for chanting them in various Yajñas. At the same in the prose form, the information of how the Yajñas are to be performed is given. By the proper knowledge of Śrauta-processes the secret meaning of Veda- mantras can be acquired.

Numerous grants and inscriptions testify the provision made by the kings and well-to-do donators for all branches of study.

3.3 : Division of the Vedas

Ancient Hindu tradition has divided the ṚV in two different ways. The first is the Aṣṭaka method and the second the Maṇḍala method. In the Aṣṭaka method to make the memorisation easy. The number of mantras is mostly equally divided and in the Maṇḍala method the subject is more important.

The Vedic mantras used be handed down by oral tradition. What teacher would chant, the student had to attentively listen and repeat. The Vedic Ṛṣis had evolved a wonderful system of orally teaching and learning these mantras to preserved them correctly, especially the swaras or intonations and transmitted to the posterity. They are known as samhitāpāṭha, padapāṭha, kramapāṭha, jatāpāṭha, ghaṇapāṭha, mālāpāṭha, śikhāpāṭha, dhvajapāṭha, daṇḍapāṭha and rathapāṭha.

Realising this, Vedavyāsa divided the extant material into groups and taught them to his four chief disciples: Paila, Vaiśampāyana, Jaimini and Sumantu. This was the first division of the Vedic mantras into four groups that have come to be recognised as the four Vedas : ṚV, YV, SV and AV.

Each of these four disciplines had their own disciplines with some minor alterations and readjustments had to be made by them while teaching the Veda they had learnt from their teacher, Vedavyāsa. This was done mostly by rearrangement of the mantras to suit their local or ritualistic modes. Such modified forms came to be known as Śākhās.

Though ṚV is said to have had 21 Śākhās, only 5 have survived. They are: Śākala, Bāṣkala, Āśvalāyāna, Śāṅkhāyana and Māṇḍūkeya.

Obviously these have derived their nomenclatures from the sages of those names as Śākala and Bāṣkala. These five Śākhās were subdivided by the same process. The VP (3.4.21,22) declares that the Ṛṣi Śākala created five more Śākhās and gave them to his five disciples - Mudgala, Gālava, Vātyāyāna, Śāliya and Śaiśirlya.

Each of the four Vedas has again been subdivided internally into two parts: Mantra and Brāhmaṇa. This division is raised to four, adding two more sections, the Āraṇyakas and the Upaniṣads. The Mantra section is more commonly called the Saṁhitā. The word Veda is used to indicate the Saṁhitā part. Thus, ṚV means the Ṛgveda-saṁhitā. The three sections of ṚV that are available today are : 1. Brāhmaṇa : Aitareya Brāhmaṇa and Kauṣītaki Brāhmaṇa. 2. Āraṇyakas : Aitareya Āraṇyaka and Śāṅkhāyana or Kauṣītaki Āraṇyaka. 3. Upaniṣad : Aitareya Upaniṣad.

According to the tradition as preserved by the Vedāṅga Jyotiṣa, the mantra and Brāhmaṇa of the Vedas are utilised for Sacrificial performances. Brāhmaṇas generally comment on the mantras of its own Saṁhitā and give directions for their utilisation in the sacrifice.

Āraṇyakas are partly the appendices of the Brāhmaṇas. Most of them include the supplementary portions of cayanās. In addition they contain the portions

of Svādhyāya, Brāhmaṇa, Piṭṛmedha etc. Traditionally Āraṇyakas are studied in forest. They speak mysticism and symbolism of the cosmic sacrifices and discuss the points related to the Ātman. Hence it is difficult to separate Āraṇyakas from Brāhmaṇa and Upaniṣads.

Upaniṣads are the treatises on philosophy with discussions, debates and dialogues on Ātman, its realisation and related subjects. Schopenhauer has described them as the solace of life and solace after the death.

Vedic literature was further extended to the Khilas and Pariśiṣṭas and was studied along with its aṅgas, i.e. Śikṣā, Kalpa, Vyākaraṇa, Nirukta, Chandas and Vedāṅga Jyotiṣa . The kalpa is further divided in Śrauta, Gṛhya, Dharma, Śulba and Piṭṛmedha. Much of this ancillary literature has been lost.

The ancient commentators and compilers of subsidiary vedic treatises sometimes classify these Ṛṣis into various groups. They are ṣatarcins and maharṣis. Several kulas of Vedic Ṛṣis have been noted, especially in the Purāṇas. The originators of these kulas are : Bhṛgu, Aṅgiras, Kaśyapa, Atri, Vasiṣṭha, Viśvāmitra and Agastya.

3.4 : The language of the Ṛgveda

The ṚV is not only the oldest scripture in the world, but also the oldest literary masterpiece. The entire work is in verses of various metres. The paramount importance of the ṚV is after all not as literature but as philosophy. Its mythology represents a clearer thought and religious development.

Though the total number of metres used is fifteen, only seven are used more commonly and prominent. The selection of appropriate words and the ease with which they have been used are really admirable. Since large compound words have been totally avoided, the verses are easy to comprehend. The

number of letters and the spelling of a specific letter of a specific place define the Vedic metres. Generally in one sūkta all the Ṛcaḥ are in one metre. Many a times the last Ṛk is in a different metre to show the end of the sūkta. These Vedic metres are the foundations of the science of metres in later period. In ṚV the verses are in Gāyatrī, Anuṣṭubh, Uśnīka, Kukubha, Bṛhatī, Satībṛhatī, etc meters. But the use of some of these metres is not to be seen in later period and certain metres are not found in the verses of ṚV that are present in later Vedic literature. Especially the language in the tenth Maṇḍala is relatively closer to the later Vedic language. One can observe the differences in various sūktas on the basis of language, vocabulary, style, grammar, thought and metre. Even approximate time of compilation of the sūkta can be assumed.

The Ṛcaḥ are to be sung while performing Yajñas. The sūktas depict various emotions, eg. the language of Uṣas-sūktas is fresh, of the agni-sūktas create the homogenous atmosphere, the Indra-sūktas depict the strength, whereas the Varuṇa-sūktas are melancholy mood and even they are full of philosophical thoughts.

Due to the difference of thoughts, circumstances, time-period and use of the ancient language, the Vedas appear to be difficult to understand. The Vedas give the original knowledge of religion, rituals, history, literature, philosophy, culture, arts, sciences, etc.

To understand Vedic language one should learn the padapāṭha and swara. These both characteristics of the Vedas allow the reader to understand the meaning. There are three types of swara, ie. 1. Udātta 2. Anudātta 3. Swarita.

Of the 40,000 lines of the Rigveda about 5000 are repeated lines ... Not far from 2000 verse-lines occur two, three or more times ... This collection as a whole is the last precipitate, with a long and tangled past behind it, of a literary activity of great and indefinite length ... Every part seems to be conscious and assimilated to every other part. ...

The Rigveda Collection itself is a composite consisting largely of the same material disposed in various ways ... the hymns are founded on older material, the wreck of which has been utilized in constructing new poetic buildings, just as many of the temples of India are to a great extent build of the material of older demolished temples.²⁵

The Ṛṣis are the seers of a single truth and use in its expression a common language. They differ in temperament and personality. Hence the ṚV is one in all its parts. Whichever of its ten Mañḍalās one chooses, one finds the same substance, the same ideas, the same images, the same phrases.

The speech of Ṛv may be called Vedic to distinguish it from the elaborate and artificial form given to the language by the grammatical canons of Panini (circa 350 B.C.) . The main difference, then, between Vedic and Sanskrit is the difference between an earlier and relatively unpruned popular speech and a later pruned and polished speech. ... The language of Ṛv, then, was in its time as truly a vernacular speech as the Hebrew of the Old Testament or the so-called 'Biblical' Greek of the New Testament; at the same time, as the hieratic speech, it was "the first literary dialect of India". There are of course other differences between Vedic and Sanskrit. Vedic is much richer in conjugational forms, having numerous subjunctive, infinitive and aorist forms, which do not occur in Sanskrit. Phonetically there is little difference between the two.²⁶

Some of the Ṛṣis use Vedic symbolism and some give voice to their spiritual experiences. They might be using any language the unity of spiritual experience is same everywhere in the ṚV.

While writing about the language of the ṚV Griswold adds his opinions as further :

²⁵ Griswold, H. D. The Religion Of The Rigveda, pp 61 & 62.

²⁶ Op cit, p. 65.

The language of Ṛv is closely skin to that of the Avesta, the Bible of the Zoroastrian religion. In fact, as already shown ; Vedic and Avestan are simply dialects of the same Indo-European speech. Entire passages of Avestan can be rendered into Vedic and vice versa merely by making the necessary phonetic changes. And a knowledge of Vedic is the best preparation for the study of Avestan.

But Vedic, as we have seen, is related not only to Avestan, but also to Greek, Latin, Celtic, Teutonic and Slavonic. It is, in other words , a member of the great Indo-European family of languages, the only rival of which in historic importance is the Semitic family. ... Thus, Vedic belongs to that potent and widely conquering family of languages which more than any other (except possibly the Semitic) has furnished literary vehicles bound up, to a large extent, with the future linguistic destiny of mankind. Vedic, as the Indian branch of the Indo-European family, has shared with the other branches in the common tendency to spread and conquer. What was first simply the dialect of district became the language of a caste and a religion, and afterwards (in the form of Sanskrit) the language of religion, politics and culture throughout India.²⁷

Sanskrit language is ancient. This language is related to various languages and origin of many modern languages. Sanskrit stands as the eldest sister of the Indo-European languages. The Vedic Sanskrit is little different than the present day.

3.5 : Various commentaries on Ṛgveda

The Sanskrit language of the Ṛv is highly archaic and arcane. Without the help of ancient commentaries it is difficult to decipher them. The Nighaṅṭu - a Vedic dictionary of hoary antiquity and its commentary - the Nirukta of Yāska of 800 B.C., are the earliest sources of interpretation of the Vedic

²⁷ Op cit, p. 66 & 67.

names and concepts. It is the oldest Indian treasure of Etymology, Philology and Semantics. Yāska had defined 600 Ṛcaḥ of 14 Adhyāyas of his own book Nirukta, some of them partly and some completely. While using all the commentaries of his time for writing his definitions, Yāska had shown a scientific view and a detachment with his own views. He had made complex words simple and had given the various shades of the meanings for explaining difficult words. He had referred to history and the society of his times, wherever it was necessary.²⁸ This being the commentary on the Nighaṅṭu. Collection of obscure words which tradition also ascribes also to Yāska, follows the threefold division of the content of Nighaṅṭu. The three sections in the Nighaṅṭu are : - 1. Nighaṅṭuka Kāṇḍa - lists in which Vedic words are collected under certain main ideas. 2. Naigama Kāṇḍa or Aikapadika - list of ambiguous and particularly difficult words of the Vedas. 3. Daivata Kāṇḍa - classification of deities according of three regions : earth, sky and heaven. In other words Nighaṅṭuka Kāṇḍa deals with synonyms, Naigama Kāṇḍa with homonyms and the Daivata Kāṇḍa with deities.²⁹ According to Yāska, the Sacrifice is a flower and knowledge of deities is its fruit (Nirukta. I.20).

The Nirukta refers to some very ancient schools of Vedic interpretation as adhidaivatapaddhati, ākhyāna-samayapaddhati, yājñikapaddhati, naidānapaddhati and vaiyākaraṇapaddhati.

In 1852 Rudolf Roth brought out Nirukta, in Göttigen. At that time European scholars were finding their way through Vedic and Sanskrit literature. Even the ṚV text was not available, though two volumes of Max Müller with Sāyaṇacārya's commentary were published. Vedic Grammar of A. A.

²⁸ vide. Sharma, Umashankar 'Rishi'. Sankshit Sahitya ka Etihās, Chaukhamba Bharati Academy, Varanasi, Second Ed., 2004, p. 109.

²⁹ vide. Sarup, Lakshman. The Nighaṅṭu and The Nirukta, The Oldest Indian Treatise on Etymology, Philology and Semantics, Motilal Banarasidas, New Delhi, Reprint 1998, p. 18.

Macdonell and Vedic Concordance of Bloomfield was not yet published. There was not even a good Vedic Dictionary available. Hence Roth's achievement was remarkable. He first found out that the Nirukta was handed down in two forms - one shorter and one longer. Hence preparing a critical edition was a tedious job his edition talks of critical judgement. The first Indian edition of Nirukta was published in Calcutta by Sāmaśrama from 1882 -91. Due to various reasons this edition is critically not trustworthy.

The earliest commentary on the ṚV available now is that of **Skandaswāmin** - 630 A.D. He was from Valabhī. His disciple Hariswāmin wrote on Śatapatha Brāhmaṇa of Śuklayajurveda. But his incomplete commentary is available now.

Veṅkaṭamādhava - 11th century A.D. - had written commentary on whole of the ṚV, which is available. His commentary is very brief and printed. **Madhvācārya** (Ānandatīrtha) - 1238-1317- has written commentary on first forty sūktas. It is known as Ṛgbhāṣya. Jayatīrtha -14 century A.D. has written a gloss on it, called Sambandhadīpikā.³⁰

The famous commentary on the ṚV is of **Sāyaṇacārya** (1315-1387 AD). Yāska had written his commentary on ṚV almost 2000 years before Sāyaṇacārya. Amongst many other commentators of Vedic literature Sāyaṇacārya is important. His mother called Śrīmatī and father's name was Māyaṇa. The King of Vijaynagara had given the job of writing commentary on Vedas to Madhvācārya, the elder brother of Sāyaṇa. He took inspiration from his 'guru' Madhvācārya. His commentaries on Vedas, Brāhmaṇas and Āraṇyakas are famous. He wrote commentaries on 18 Vedic texts. They are: 1. Taittirīya Samhitā, 2. ṚV, 3. Sāmveda, 4. Kāṇva samhitā, 5. Athrvaveda, 6. Taittirīya Brāhmaṇa, 7. Taittirīya Āraṇyaka, 8. Aithareya Brāhmaṇa, 9. Aithareya Āraṇyaka, 10. Śatapatha Brāhmaṇa, 11. Eight Brāhmaṇas of

³⁰ vide. Swami Harshananda. *The Ṛgveda, A Brief Study*, Ramakrishna Math, Banglore, First Ed., 2003, pp. 24-26.

Sāmaveda - Tāṇḍya, Śadvinśa, Sāmvidhān, Ārṣeya, Devatādhyāya, Upaniṣada, Samhitopaniṣad and Vanśa Brāhmaṇa. He had used every sūkta and its translation for the use of Yajña. The meaning of the Veda is the procedure of Yajña, was his basic assumption. He believed that the meaning of Vedas is helpful only for Yajña. Wherever necessary or where the meaning was not allowing he took the side of 'Advaita-Vedānta'. He had given various examples from Purāṇas, History, Smṛti, Kośas, Nirukta, Vyākaraṇa, Kalpasūtras, Brāhmaṇas and MB etc. to prove his opinion.

Some of the western philosophers do not agree with the opinions and views of Sāyaṇacārya. He has given various meanings for a single Vedic word. Fixing the proper meaning and grammatical explanation are the specialities of Sāyanabhāṣya. Each time this commentary gives the historical references. He gives more importance to explain the meaning on the basis of karmā theory.

Sāyaṇacārya has used various quotations from Yāska's Nirukta and Nighaṇṭu and from the rules of Pāṇini. He had faith in both of them. According to Sāyaṇacārya : Vedas are originated by god and there are references for themselves. They are self explanatory. According to him four Vedas are published by four Ṛṣis - like the ṚV by Agni, YV by Wind (Vāyu), SV by Ādityā and AV by Aṅgira.

The mantras are not recited for the unseen, but for the meanings. The sound, as many of the people think, is not more important than its meanings. If the meaning of any Vedic mantra is not clear by itself, the hidden meaning of it should be considered.

चत्वारि शृंगा त्रयो अस्य पादा, द्वे शीर्षे सप्त हस्तासो अस्य ।
त्रिधा बद्धो, वृषभो रोरवीति महो देवो मर्त्याँ आविवेश ॥

This description - as it is in the ṚV 4.58.3 - of the Agni or Deity of Yajña is

as he has four horns, three legs, two heads, seven hands, he is bond by three ropes and he roars like a bull. But the Yajña is not a bull having four horns. The meaning should be like they are four Vedas, that are meant only for Yajña.

Actually experts interpret this mantra in more than two dozen ways, only one of them is referred here. Even sometimes the Vedas are compared with father or mother. Here one should take the motherly or fatherly affection for the Vedas into consideration. Vedas are not created by any human being and are immortal and universal. The knowledge of the Vedas can be applied anytime, by anyone and sitting in any corner of the world(or universe). Hence the study of the Vedas is necessary. Same way the remaining words are used as symbols. Seven hands are equal seven chandas in which the Ṛcaḥ of all the Vedas are composed. It has two heads means two important transitions times of day - the sunrise and sunset. The three legs are Bhūḥ, Bhuvaḥ and Swā hā, ie three worlds and the loud noise that Lord Agni makes is compared with that of roaring of a bull. Here bull is also a symbol of power. He is the Almighty Father of the universe, who helps to overcome the fear of death.

The western philosophers are of the opinion, that his explanations are not to the point. Rudolf Roth was of the opinion that the Vedic period and Sāyaṇa period are totally different, therefore what Sāyaṇācārya wrote or his views do not even reach nearer to the real meaning of the Vedas. Roth insisted since the beginning that none of the commentaries should be considered as main guidelines. He felt that the views of the composers were important in understanding the theological books and rituals. According to him European scholars would be successful in interpreting Vedas than the Indians, as they would be having freedom of judgement as they had no barriers of traditions. The main hindrance in understanding Sāyaṇācārya's commentaries for the western philosophers is that the various uses of Sanskrit words. Most of the Sanskrit words have multiple equivalent meanings. Then the problem occurs which one would be exact or expected. Some of the western philosophers are of the opinion to use only one meaning of one word. Because according to them ṚV is just a product of a particular period. Hence the meaning of the

word should remain same for one chapter. But Sāyaṇacārya is not satisfied with just one meaning and gives various meanings and then the problem rises.³¹

Sri Aurobindo explains the importance of the commentary of Sāyaṇacārya in his work. He writes :

Nevertheless, if Sayana's work has been a key turned with double lock on the inner sense of the Veda, it is yet indispensable for opening the antechambers of Vedic leaning. All the vast labour of European erudition has not been able to replace its utility. At every step we are obliged to differ from it, but at every step we are obliged to use it. It is a necessary springingboard, or a stair that we have to use for entrance, though we must leave it behind if we wish to pass forwards into penetralia.³²

Further he explains the difference in the interpretations theories of Sāyaṇacārya and the Western scholars.

The ritualism which Sayana accepted as part of a divine knowledge and as endowed with a mysterious efficacy, European scholarship accepted as an elaboration of the old savage propitiatory sacrifices offered to imaginary superhuman personalities who might be benevolent or malevolent according as they were worshipped or neglected. The historical element admitted by Sayana was readily seized on and enlarged by new renderings and new explanations of the allusions in the hymns developed in an eager hunt for clues to the primitive history, manners and institutions of those barbarous races. The naturalistic element played a still more important role. The obvious identification of the Vedic gods in their external aspects with certain Nature-Powers was used as the starting-point for a comparative study of Aryan mythologies; the hesitating identification of certain of the less prominent deities as Sun-Powers was taken as a general clue to the system of primitive myth-making and elaborate sun-myth and star-myth theories of comparative mythology were founded. In this new light the Vedic hymnology has come to be interpreted as a half-superstitious, half-poetic allegory of Nature with an important astronomical element. The

³¹ vide. Sharma, Umashankar 'Rishi'. Sanksrit Sahitya ka Etihās, pp. 110-111.

³² Sri Aurobindo. The Secret of the Veda, p. 21.

rest is partly contemporary history, partly the formulae and practices of a sacrificial ritualism, not mystic, but merely primitive and superstitious.³³

Still at the same time a group of western philosophers praise Sāyaṇacārya, as the main source of the various definitions is his commentary. At certain stage they show their indifference with his views. Wilson has translated the ṚV with the commentary of Sāyaṇacārya. Roth and Bothlink did not understand the importance of Sāyaṇacārya. But the philosophers of the next generation like Pischel, Geldner, McDonell etc. have understood his importance.

3.6 : The physical appearance of Ṛgveda

The Ṛigveda deserves to be called 'the most important' of the Vedas, because it is the oldest and the largest collection of Vedic hymns and the source of much of the material found in the Saman, Yajus and Atharvan. Of the 20,000 metrical stanzas in Vedic literature (omitting variants) about 10,000, or fully one-half occur in the Ṛik. Of the 1549 stanzas of the Sāmaveda 1474 are derived from the Ṛik, and also one-fourth of the matter of the Yajurveda. Besides a considerable portion in prose, the Atharvaveda contains about 6000 poetic stanzas, one-fifth of which, namely 1200 stanzas, occur also in the Ṛv. The Ṛigveda then, is a great documentary source for the other three Vedas, very much as the Gospel of Mark is as important source for the Gospels of Mathew and Luke.³⁴

The ṚV contains 1017 hymns and of 1028 if the supplementary Vālakhilya hymns are added. As it is mentioned earlier the tradition has divided the ṚV

³³ Op cit, p. 23.

³⁴ Macdonell. Sanskrit Literature in Imperial Gazetteer of India, Vol. II, 908, pp. 209, 227-229. Op. cit. Griswold, H. D., The Religion Of The Rigveda, pp. 56 & 57.

in two different ways : 1. The Aṣṭaka method 2. The Maṇḍala method.

In the Aṣṭaka method the number of mantras to each section is more or less equal. In this method there are eight sections. The subdivisions are called as Adhyayas and Vargas.

The subject is more important in the Maṇḍala method. Hence the number of mantras differ. This method has ten sections of ṚV. The subdivisions of this method are Anuvākas and sūktas. The ṚV contains 10,552 mantras, 1028 sūktas.

Der Rigveda, das bei weitem älteste literarische Dokument des alten Indien, in dem 'die kultgebundene Dichtung der urindoiranischen und indogermanischen Sprachepoche' fortlebt, ist eine Sammlung einstmals weit verstreuter Lieder. Diese Wiederhaltend von 'Waffenlärm und Rinderraub' erstanden innerhalb einzelner Familien, von denen sie dann einige Zeit tradiert wurden, eine diese separaten Überlieferungen zu einer Liedersammlung zusammengefaßt wurden. Dieser wiederum rein mündlich überlieferten Sammlung wurde dann Weiteres angegliedert, 'kleinere Familiensammlungen und Nachlese'.³⁵

The Samhitā of ṚV is arranged in ten books or Maṇḍalas. Six of the Maṇḍalas are given each to the hymns of a single Ṛṣi or family of Ṛṣis. Thus the second is devoted to the sūktas of Ṛṣi Gṛtsamada, the third and seventh similarly to Viśvāmitra and Vasiṣṭha, the fourth to Vāmdeva, the sixth to Bhārdwāja. The fifth is composed by the hymns of the house of Atri. In each of these Maṇḍalas the sūktas addressed to Agni are first, followed by those of which Indra is the deity, the invocation of other gods, Bṛhaspati, Sūrya, the Ṛbhus, Uṣas etc. close the Maṇḍalas. A whole book - the ninth - is given to a single god Soma. The last sūkta is identical in style, manner and spirit with the tenth and they can all be taken together as a single block of hymns one in intention and diction.

A certain principal of thought development can be observed from the

³⁵ Oberlies, Thomas. *Die Religion des Rgveda*, pp 152-153.

arrangement of these Vedic hymns. The opening of Maṇḍalas seems to have been designed in such a manner that the general thought and the Veda gradually unrolls itself under the cover of established symbols. At the same it represents the voices of certain Ṛṣis. The last tenth book consists of the description of the sacrifice of Purūṣa and the great hymn of the creation. The language of this book is modern. Modern scholars are of the opinion that the origins of the Vedantic-philosophy lies here.³⁶

Ṛṣis who have compiled Ṛgvedic-Ṛcaḥ are 300. Some of them are brāhmaṇas, some are kṣatriyas, some vaiśyas. Even it is said that the sūkta no 10.175 is compiled by a śudra Ṛṣi - named Ūrdhagrava. It is said that the sūkta no 10.46 was composed by vaiśya Ṛṣis - Utsapi and Bhalananda. Some of the Vedic pandit ladies have compiled certain Ṛcaḥ. They are Juhu, Śacī, Ghoṣā, Lomeśā, Lopāmudrā, Viśwavarā, etc. To recognise who has compiled which sūkta, there are certain śloka-endings, that are repented (drupad), of every Ṛṣi family.

There is a particular rule of singing the sūkta. At the beginning of every sūkta, one has to say its Ṛṣi, deity, metre and the use. It is built around a science of sound which comprehends the meaning and power of each letter. Most aspects of Vedic science like the practice of yoga, meditation, mantra and Āyurveda can be found in the ṚV and still use many terms that come from it. While originally several different versions or rescensions of the ṚV were said to exist, only one remains. Its form has been structured in several different ways to guarantee its authenticity and proper preservation through time.

⁶ vide. Sri Arobindo. The Secret of the Veda. pp. 54 - 56. 3

3.7 : The Deities of Ṛgveda

The ṚV serves mainly the purpose of the Devayāna; its hymns, collected from various priestly families, serve only the higher gods; therefore so many other beings are excluded whom we encounter in the Gṛhyasūtras and in the AV. and whom we should find in the ṚV also, were it not compiled under one aspect, for one specific purpose only.

The ṚV does not intend to present a systematic arrangement of gods; it serves its own specific purpose; not our own. At the same time, it offers us an instruction worth remembering that the lower mythology is not a preliminary stage of the belief, but a different chapter altogether, even in the earliest period of Indian mythology and the so-called Indo-Iranian mythology, that is to say, in times older than the sources of other mythologies the necessity to establish that the cult of the higher gods is as old as the worship of the Manes and demons does not exclude the possibility that occasionally gods turn into demons and demons into gods. The bridge between the two realms is crossed again and again, and one should determine in each case from which area a god or a demon originated.³⁷

The ṚV is the important document regarding Vedic deities. As per the tradition of chanting the Vedic mantras, especially the ones from the ṚV, a knowledge of the Ṛṣis, the devatā and the chandas is absolutely necessary. Most of the sūktas of the ṚV are hymns of prayer addressed to the various deities. These deities are generally enumerated as thirty-three: eight Vasus, eleven Rudras, twelve Ādityas, Indra and Prajāpati. A few other deities find an important place. They are : Agni, Aśvins, Sūrya, Varuṇa, Vāyu, Viṣṇu, Viśvedevas and Yama. There are several female deities like Uṣas, Rātri, Vāc, Saraswatī and Pṛthvī. These gods are usually classified into three groups depending on their areas of operation.

³⁷ Hillebrandt, Alfred. *Vedic Mythology*, Vol. I., Sarma, Sreeramula Rajeswara (Tr.), Motilal Banarasidas Publishers, New Delhi, 1999, p. 8.

For my part I always come to this theme in the spirit of scientific elation. You know from preceding statements what I meant by transparent gods. They are the gods who are at one and the same time nature object and person. In other words, they are mythic formations whose personification is arrested; by the continued action and the vivid memory of the very qualities which lead to personification. Figuratively speaking, just when the chemical is about to precipitate or to crystallise into something unrecognisable, and fare removed from its elements, it is shaken and dissolved anew. We are spared the labour of a qualitative and quantitative analysis.³⁸

As Bloomfield writes the Vedic deities represent the nature objects, thus it becomes difficult for Western scholars to understand the real meaning and appearance of them. One finds references of main 33 deities in ṚV. Yāskācārya has divided all these deities in three different groups- like deities on the earth, in the skies and in the water. The number of all the deities is in the multitude of 33. The philosophy that is strongly expressed in the Upaniṣads - Ekam sat viprā bahudhā vadanti (ṚV 1.164.46)- has its foundation in the ṚV itself.

I could not even answer the question, if you were to ask whether the religion of the Veda was polytheistic, or monotheistic. Monotheistic, in the usual sense of that word, it is decidedly not though there are hymns that assert the unity of the Divine as fearlessly as any passage of the Old Testament, or the New Testament, or the Koran. Thus one poet says : ' That which is one, sages name it in various ways- they call it Agni, Yama, Matarisvan,'

Another poet says : ' the wise poets represent by their words Him who is one with beautiful wings, in many ways'.

And again we hear of a being called Hiranyagarbha, the golden germ (whether the original of that name may have been), or whom the poet says: 'In the beginning there arose Hiranyagarbha; he was the one born lord of all this. He established the earth and this sky. Who is the god to whom we shall offer our sacrifice?' That Hiranyagarbha, the poet says, ' is alone God above all gods- an assertion of the unity of the Divine which could hardly be exceeded in strength by any passage from the Old Testament.

³⁸ Bloomfield, Maurice. The Religion of the Veda, The Ancient religion of India. (From Rig- Veda to Upanishadas), Indological Book House, Delhi, 1972, p. 151.

But by the side of such passages, which are few in number, there are thousands in which ever so many divine beings are praised and prayed to. Their number is sometimes given as 'thrice eleven' or thirty-three, and one poet assigns eleven gods to the kay, eleven to the earth,, and eleven to the waters, the waters here intended being those of the atmosphere and the clouds. These thirty-three gods have even wives apportioned to them, though few of these only have as yet attained to the honour of a name.

These thirty-three gods, however, by no means include all the Vedic gods, for such important deities as Agni, the fire, Soma, the rain, the Maruts of Storm-gods, the Asvins, te gods of Morning and Evening, the Waters, the Dawn, the Sun are mentioned separately; and there are not wanting passages in which the poet is carried away into exaggerations, till he proclaims the number of his gods to be, not only thirty-three, but three thousand three hundred and thirty nine.

If there must be a name for the religion of the Rig-veda, polytheism, would seem at first sight the most appropriate. Polytheism, however, has assumed with us a meaning which renders it totally inapplicable to the Vedic religion.

Our ideas of polytheism being chiefly derived from Greece and Rom, we understand by it a certain more or less organised system of gods, different in power and rank and all subordinate to a supreme God, a Zeus or Jupiter. The Vedic polytheism differs from the Greek and Roman polytheism, and, I may add, likewise from the polytheism of the Ural-Altaic, the Polynesian, the American, and most of the African races, in the same manner as a confederacy of village communities differs from a monarchy. There are traces of an earlier stage of village-community life to be discovered in the later republican and monarchical constitutions, and in the same manner nothing can be clearer, particularly in Greece, than that the monarchy of Zeus was preceded by what may be called the septarchy of several of the great gods of Greece. The same remark applies to the mythology of the Teutonic nation also.

In the Veda, however, the gods worshipped as supreme by each sep stand still side by side. No one is first always, no one is last always. Even gods of a decidedly inferior and limited character above all other gods. It was necessary, therefore, for the purpose of accurate reasoning to have a name, different from polytheism, to signify this worship of sigle gods, each occupying for a time a supreme position, and I proposed for it the name of Kathenotheism, that is a worship of one god after another, or of Henotheism, the worship of single gods. This shorter name of Henotheism has found more general acceptance, as conveying more definitely the opposition between Monotheism, the worship of one only God, and Henotheism, the worship of single gods; and, if but properly defined, it will answer its purpose very well.

However, in researches of this kind we cannot be too much on our guard against technical terms. They are inevitable, I know; but they are

almost always misleading.³⁹

while explaining the Vedic gods and their specialities Max Müller had used a special word, i.e. Henotheism. Many deities are praised one after the other, they are becoming super power and then they become a part of the super most power or the Almighty Father. They are been personified with various feelings and even then are having benevolent powers. This speciality is found only in Vedic religion. The explanation is in the Vedas itself, where the deities are praised as the super most, one after the other.⁴⁰ In the prayers sometimes Indra is powerful, sometimes Varuṇa is emperor. At times it is said that Varuṇa and Aśvins work under the leadership of Viṣṇu. Indra, Varuṇa and Aśvins cannot go beyond the powers of Sāvitya. Sometimes according to the power of the deities two deities jointly make use of power against the enemies, e.g. Agnāmarutau, Indraśomī.

There is diversity of names, but no diversity in meaning. Indra, Mitra and Pūṣan differed from each other not in their nature, but in their origin; they could have emerged from the cults of individual Gotras (or whatever one would like to call the individual centres of religious worship) as different aspects of the same phenomenon, and, with the progressive integration of just as the gods of Egypt emerged out of different local cults and different names of the same being.⁴¹

The concept of Viśvedevā is above all or combining the powers of all the deities. It is emphasised that the one and only one 'Sat' element is governing

³⁹ Müller, Max. *India, What can it teach us?*, Bhave, H.A, (Tr.), Bharatakadun - Aamhi (Englandne) kay shikave?, Varada Prakashan, Pune, 2000, pp. 194 -196.

⁴⁰ Op. Cit. Swami Vivekanand Granthavali, Vol. 4, Swami Vivekanand Shatavarshik Jayanti Smarak Granth, Ramakrishan Math, Nagpur, 1991, pp. 262-263.

⁴¹ Hillebrandt, Alfred. *Vedic Mythology*, Vol. I., p. 15.

al, which is known by various names (RV. 1.164.46; 10.82.3; 10.121.8). Agni plays an important role among all the deities. He acts as the mediator between gods and ordinary people.

The one and only powerful god is named as Prajāpati, Hiraṇyagarbha and Puruṣa by the Vedic Ṛṣis (RV. 10.121.1).

हिरण्यगर्भः समवर्तताग्रे भूतस्य जातः पतिरेक आसीत् ।
स दाधार पृथिवीं द्यामुतेमां कस्मै देवाय हविषा विधेम ॥
[RV 10.121.1]

This god was there in the beginning and became the emperor of all creations. He carries earth, skies and space. He is the ruler of everything. To get his blessings the offerings are made especially for him in the Yajñas.

According to Griswold the gods have their timings of rising and setting like sun, and when they reach the zenith of their influence they begin to wane importance.

... , like the sun, the Vedic gods have their times of rising and setting. They appear above the horizon, go on waxing until they reach the zenith of their influence, then begin to wane in importance, and finally reaching 'the twilight of the gods' pass away for ever. The gods of the Rigveda are all to be found somewhere within these various stages. Indra, Agni and Soma are at the zenith. Veruna has just passed the zenith. Vivasvant and Trita are distinctly waning gods. Prajapati, the chief god of the Brahmanas is just appearing above the horizon. Viṣṇu and Rudra (Śivā), destined to such a distinguished career extending even to modern times, have not yet reached the zenith of their influence.⁴²

According to him with the geographical, climatic and ethnological changes there are naturally changes in the gods. The changes in the environment and experiences reflect in the gods. Even as an earthly ruler even the god keeps

⁴² Griswold, H. D. The Religion Of The Rigveda, Motilal Banarasidas Publishers, Delhi. First reprinted Edition, 1999, p. 87.

increasing his domain. He gives example of Varuṇa, this majestic of the ṚV became later a night god and finally the god of lakes and pools and completely loose his sovereignty.

We should not object to the fact that the ṚV gives preference to the gods of light. It is neither a book of folklore nor a primer composed with the intention of giving us an idea of the whole range of beliefs of that period. On the contrary, it owes its compilation to a particular tendency. No doubt, the tribes of the Vedic period had their rich share of demon-beliefs and spirit-cults. We find Piśācas, Yātudhānas and a great variety of magic in the ṚV also and a small Yamasamhitā in the book of addition. We encounter traces of the cult of the Manes⁴³

With the gods the ṚV mentions even the demons. The elements causing draught, darkness, etc. are called demons. Vṛta is the main in them. Others are Śuśṇa, Bala. Indra removes people from the claws of these demons. The demons are described as devourers, eating raw flesh, the flesh of men as well as of cattle and horses. They flourish in the dark. They delight to injure the sacrifice. Demons and sorcerers are alike in ethical quality. They are fools, haters of prayer, evildoers, false accusers, tricky, thieves and robbers. Demons are lovers of darkness and accordingly often appear in the form of night-birds like owls or in the form of dog, cuckoo, vulture, eagle etc. and with strange cries or sometimes in the form of the roots of plants used for the purpose of sorcery. They are both male and female. Agni, the sacrificial fire of the earth and Indra, the lightning fire are the natural enemies of the demons of darkness.

We have encountered before transparent gods. "Father Sky" (Dyaush Pitar), who comes from oldest times, and does not grow in the Veda into anything like the personality of Greek Zeus Pater, but is there submerged by other formations that have gained ground at his

⁴³ Hillebrandt, Alfred. Vedic Mythology, Vol. I., pp. 7- 8.

expense.⁴⁴

As the deities and demons there are references of the Pitṛa-Loka in the ṚV. These forefathers are respected as the deities. The special form of their worship is followed. The Dakṣiṇa-fire represents the Pitṛ-Loka.

3.7.1 : Agni

This is the god of the Fire-Sacrifice. In the ṚV and in the YV this god carries the most importance, as he occurs in 256 sūktas. They occupy almost 1/5th part of the ṚV. Agni is the most popular god according to Vedas. According to Vedic Ṛṣis the god Agni is immortal (ṚV 1.58.1; 2.10.1, 2).

The word Agni originates from the root 'aja'. The appearance of this god is in reference to Yajñas.

The fire cult has maintained its position among the Hindus up to the present day. A basically uninterrupted tradition joins the oldest Vedic clans with the hereditary Agnihotrians among the "Pañca, Drāvira, or Dakṣiṇi Brāhmaṇas" in present day India, about whom we find more detailed information in the writings of Crooke Custom and law have surrounded the preservation of the cult with rules of all kinds. An utṣṛṣṭāgni, i.e. one who gave up the fire cult, should not be invited to the feast in honour of the dead (Gautam Dharma Śāstra XV.16) and certain demands are made on him who has once installed the fires (Manu III.282 ; IV.27ff) ⁴⁵

⁴⁴ Bloomfield, Maurice. The Religion of the Veda, p. 152.

⁴⁵ Hillebrandt, Alfred. Vedic Mythology, Vol. I.. Pp.48 & 49.

The references of Agni are found since ancient times. The Latin word for agni is 'ignis', Lithuanian word is 'ugnis' and English verb 'ignite' can explain the etymology of the word. In Italian and Greek communities many people offer various things in Agni.

Comprehending the nature of the Vedic fire god appears very simple, but a close study shows that it is one of the most difficult problems of Vedic mythology. Our sources do not, by any means, project the same picture everywhere. From the oldest parts of the ṚV to the mysticism of the Brāhmaṇa period with its fondness for interpretations various ages and attitudes have had their impact on this picture of Agni and left their confusing traces on it. There are two problems in particular the solution of which raises difficulties. Agni, it is said, had run away and hidden himself in water: his birth out of water is often recalled. Which Agni is meant by this ? The majority of the Vedic scholars adheres to the view, prevalent since the beginning of the study of mythology, that the Agni born out of the water the lightning. This view is supported by the explanations of Indian commentaries, which occasionally see the lightning as a form of Agni. ⁴⁶

For the Western scholars, it becomes difficult to understand the exact and correct image of various Vedic gods. Hillebrandt makes it clear, by saying that the two forms of Vedic fire god - Agni leave him in puzzle. The water born Agni or the Agni that has hidden in waters are the same or different. The concept of Vaḍavānala is not easy to understand for Western scholars. Even he had mentioned further, whether the sacrificial fire, ordinary fire, forest fire and the lightning as a form of fire are the same. Hence he has discussed various types of Agni in details - like Dakṣiṇa Fire, Āhavanīya Fire, Sabhya Fire, Mātariṣvana.

Though agni is an Indo-European word (Lat. Igni-s, Slavonic ogni) the worship of fire under this name is purely Indian. In the Indo-Iranian period the sacrificial fire is already found as the centre of a developed ritual, tended by a priestly class probably called Athrvan; personified and worshipped as a strong, pure, wise god, giver of food, offspring,

⁴⁶ Op cit, p. 49.

intellectual power, fame; friendly to the house, but a destroyer of foes; probably even thought of as having different forms, like lightning or the fire produced from wood. The sacrificial fire seems to have been an Indo-European institution also, since the Italians and Greeks, as well as the Iranians and Indians had the custom of offering gifts to the gods in fire. But the personification of fire, if it then existed, must have been extremely shadowy.⁴⁷

Macdonell has rightly said that the worship of fire is a product of India, as the modern historical evidences elaborate the same. Further more in ancient Roman, Greek and Indian rituals offerings in Agni - sacrificial fire, are very common.

His flames are like the roaring waves of the sea (1.44.14). His sound is like the Wind or the thunder of Heaven (5.25.8; 7.3.6). He roars like the thundering Dyaus (10.45.4), or Parjanys (8.91.5), or a lion (3.2.11). He bellows like a bull when he invades the forest trees and the birds are terrified at the noise when his grass-devouring sparks arise (1.94.10-11). He cannot be checked any more than the sound of the Maruts, an army let loose, or the bolt of heaven (1.143.3).⁴⁸

In this way Macdonell describes the god Agni. But some additional as well as important points should be considered, like - he has four horns, three legs, two heads and seven hands.

According to Griswold, the ṚV recognises a threefold division of the universe into heaven, mid-air and earth, in connection with each of which a form of fire is found. The altar- fire on earth, the lightning in mid-air and the sun in the heaven are the same in nature but in different location, function and circumstances.

Avesta believes that Agni (Ātar) is the son of Ahura Mazda. Corresponding to the three Vedic fires there are in the Avesta a house-fire, a village-fire and

⁴⁷ Macdonell, A.A., *Vedic Mythology*, p. 99.

⁴⁸ *Op cit*, p. 90.

a community-fire. As Agni is called 'house-lord' in the ṚV, Ātar is called the 'house-lord of all houses' in the Avesta.

..., since the doctrine of Agni as sacrificial mediator is the central doctrine of the sacrificial fire. In and through Agni men offer sacrifice to the gods (I.26.6) and in and through Agni (II.1,14; I.94,3) the gods eat the sacrifice and are exhilarated(VII. 11,1,5). Thus Agni is the mouth of the gods(II.1,14). Ghee as a drink of the gods is poured into the fire with a spoon and so agni is called spoon-mouthed. Then he mounts up towards heaven, bearing in flame and smoke the oblation to the gods(I. 12,6; VII. 11,5; VIII. 80,4); and the flames of Agni crackle and roar, calling out to the gods, as it were to come to the sacrifice(I. 58,1; VII. 11,1,5).⁴⁹

The important adjective used for him is 'Ghṛatapraṣṭha', whose body has been fed with the help of the pure ghee. His teeth are sharp, Dranṣṭā. Gods take their share of offerings in the Yajñas through the mouth of the agni. He works as the mediator between various gods and the Hōṭṛ or Adhvaryu of the Yajñas. Hence he is called Havyavāhana. He is compared with many animals and birds. He takes his food two times daily, which includes pure ghee and fire-wood. He eats soma - juice or plant.

His smoke rises up and fills the skies (ṚV 7.16.3). Hence his one of the names is Dhūm-keṭū. He is also called Gārhyapatya, Atithi, Ṛtvija, Vipra, Adhvaryu and Hotā. He lives in the human beings as their guest (ṚV 1.44.4). Though he is the most ancient, he is always the young, dynamic and enthusiastic.

He is always shining as Sūrya. When he shines the darkness of all types - physical and spiritual disappears (ṚV 3.5.1).

Agni is a benefactor of his worshippers. He protects them with a hundred iron walls (ṚV 7.3.7, 16.10,). He protects them from

⁴⁹ Griswold, H. D. The Religion Of The Rigveda, p. 162.

calamities or takes them across calamities as in a ship over the sea.⁵⁰

He protects the host from the demons. Piśācas and Yātudhānas (ṚV 10.87.1). The adjective used for him 'Rakśohaṇa' is meaningful. Those who worship him, he protects them from various difficulties and bestows wealth and well-wishes upon them (ṚV 3.20.4 ; 1.68.10).

According to the ṚV 6.16.13 Ṛṣi Atharvaṇa has created Agni for the first time by friction of two araṇīs. He is called the father of Agni and the son of the āraṇīs. The speciality of Agni is that immediately after the birth, he eats up his both the mothers (or mother and father - ie. araṇīs) (ṚV 10.79.4). Agni is created by friction, for this friction ten fingers of the host of Yajña are used (ṚV 1.95.2). Therefore it is said that ten young ladies give birth to him. For the friction of araṇīs power is needed, so Agni has got the name Sahasaḥsūnuḥa. Agni is also called the son of Heaven and Earth. He is called the generator of the two worlds, his ordinance is being followed by heaven and earth.

Agni is more closely connected with human life than any other god. His association with the dwellings of men is peculiarly intimate. He is the only god to whom the frequent epithet gr̥hapati, 'lord of the house', is applied. He lives in every abode (7.15.2), never leaving his house (8.49.19). The attribute 'domestic' (damūnas) is generally connected to him (1.60.4). This household deity probably represents an old order of ideas; for in the later elaborate ritual of the three sacrificial fires, the one from which the other two (the āhavanīya or eastern and the dakṣiṇa or southern) were taken, is called the gāṛhapatya or that which belongs to gr̥hapati. In this connection it is interesting to observe that even as early as Rigvedic times there are traces of the sacrificial fire having been transported. For Agni is led round (4.9.3, 15.1) strides round the offerings (4.15.3) or goes round the sacrifice three times (4.6.4-5, 15.2); and as soon as he is released from his parents, he is led to the

⁵⁰ Macdonell, A.A. Vedic Mythology, p. 97.

east and again to the west (1.31.4).⁵¹

Agni is situated in every house and is the master of the house. He is called Gr̥hapati (ṚV 5.8.2). In the ṚV he is described as father, mother, brother, son and friend of everyone.

According to Macdonell, Agni is a divine monarch and strong as Indra. His greatness surpasses that of mighty heaven. He is greater than all the worlds. He is superior to all the gods in greatness. Indra is closer to god Agni rather than any other deity. He is celebrated and worshipped by Varuṇa, Mitra, the Maruts and all the gods. Agni has a special position in the ṚV and many sūktas depict this reality.

अग्ने नय सुपथा राये अस्मान्निश्वानि देव वयुनानि विद्वान् ।
युयोध्यऽस्मज्जुहुराणमेनो भूयिष्ठां ते नम उर्वितं विधेम ॥

[ṚV 1.189.1]

This prayer says 'Oh, Lord Agni, lead us on the right path. You are the knowledgeable Seer. You can forbid our sins and will not let us commit any sins. You can give us wealth.

This prayer explains the secret of fire-worship. Agni is said to be the highest god. All the other deities praise and worship Agni. He is inclusive of all deities and all the deities are included in Agni. He is the doner of 'Satya-dharma' - the truth. He is the master and ruler of the world . He knows the right path of 'karma' and is the viewer of every person's karma - every action. This Agni

⁵¹ Op cit, p. 95.

has to be worshipped by all the human-beings, order the Vedas. This will lead them towards a better life. They will get the happiness, wealth and benefits of the benevolent powers of Agni.⁵²

3.7. 2 : Soma

This deity has two forms - plant and Yajña-god. Hence this deity is not humanised. The Vedic Ṛṣis have depicted the Soma-plant, as well as soma juice. The name of this god has derived from the foot 'su' means to press or to hammer hard. It is a main and central god of Yajña.

Since the Soma sacrifice forms the main feature of the ritual of the ṚV; the god Soma is naturally one of the most important deities of that Veda. All the 114 hymns of the ninth besides 6 in other books, are dedicated to his praise. He is also celebrated in portion of four or five other hymns and as a dual divinity with Indra, Agni, Puṣan or Rudra, in about six more. The name of Soma, in its simple form and in compounds, occurs hundreds of times in the ṚV. Judged by the standard of frequency, Soma therefore comes third in order of importance among the Vedic gods. Soma is much less anthropomorphic than Indra or Varuṇa ; the constant presence of the plant and its juice setting limits to the imagination of the poets who describe its personification. Consequently little is said of his human form or action. The marvellous and heroic deeds attributed to him are either colourless, because common to almost all the greater gods, or else only secondarily belong to him. Like other gods, he is, under the name of Indu as well as Soma, invoked to come to the sacrifice and receive the offerings on the strewn grass.⁵³

⁵² Op. Cit. Joshi, H.N., Agni Upasaneche Rahasya, Panchasadhan, 17 May 1977, p. 4.

⁵³ Op cit, p. 104.

There is a complete book in praise of this god - ie. the ninth book or the ninth Maṇḍala. Even there are 120 more sūktas in the ṚV regarding this god.

During Yajña the juice of Soma plant is distracted. It is mixed with milk and honey. Three mixtures of soma-juice are famous. 1. Gavāśira - mixture of soma and milk. 2. Dadhyāśira - soma and curds mixture. 3. Yavāśira - soma and java-flour mixture. These mixtures are the glowing clothing of Soma.

The Soma plant is an āyurvedic medicine and is called the king of all medicines. With the help of this plant patients can be cured. Blinds can see, lame can walk (ṚV 8.68.2 ,10.25.11) . It purifies the voice. It inspires the poets, therefore it is called Vāgdevā. This god is very intelligent. He is successful and victorious, hence it is used in the wars. `

In the post-Vedic literature Soma is a regular name for the moon. In the Brāhmaṇas the Soma is identified with the moon. In some of ṚV hymns also he is identified with moon.

Hillebrandt , however, in his 'Vedische Mythologie' not only claims this identification for a number of other passages in the ṚV., but asserts that in the whole of ninth book Soma is the moon and nowhere the ordinary plant, the ninth book in fact being a book of hymns to the moon. Soma, he maintains, means, in the earliest as well as the latest parts of the whole ṚV., only the Soma plant or juice on the one hand, and, as a deity, only the moon on the other. According to his view, the moon is a receptacle of Soma or amṛta and is the god whom the worshipper means when he presses the draught, which is part of the lunar ambrosia. Hillebrandt goes even further than this complete identification of Soma and the moon in the ṚV. He also asserts that the moon-god as Soma forms the centre of Vedic belief and cult, being the creator and ruler of the world much more than the sun, while the Indra is most popular Vedic god only next to moon.

In opposition to this hypothesis, it has been argued that, in the vast majority of the references to Soma in the ṚV., the character of the god as a personification of the plant and juice is clear and obvious. On the other hand, while the identification of Soma and the moon is perfectly clear in the later literature, there is in the whole of ṚV. no single distinct and explicit instance either of the identification or of the

conception that the moon is the food of the gods.⁵⁴

Due to the fact that Soma is the name of a plant, some of the Western scholars are in a weird situation. For them the identification of Soma with the moon becomes difficult to understand.

The procedure of the special Yajña - Soma-Yāga, mentioned in the ṚV is same as the Haoma in Avesta. In Avesta also the Soma plant and its juice is very important and both is offered in the Agni.

More information regarding Soma-Yāga will follow later in this work.

3.7. 3 : Indra

Indra is the favourite national god. The name of this god is derived from the root 'id', which means wealth. Almost the 1/4 portion of the ṚV describes this god. He is the emperor of the material world. He is the god of the rain and war.

He kills the drought or the Vṛṭra. He frees the water from the power of Vṛṭra. His body colour, hair and beard are hari. He holds a weapon - called Vajra, in his hand. The skilled labour of gods - Tvaṣṭra has prepared his Vajra. It has thousand sharp edges and the metal is of gold. Hence he is called the Vajrabāhū or Vajrahasta. Sometimes he hold another weapon - Añkuśa in his hand. His chariot and the horses are of hari colour. Ṛbhus have made his chariot. He has got another name - Somapā. His father is Dyauhu and brother is Agni. His wife's name is Śacī and Marut is his friend. Hence he is called Marutvan.

He kills Vṛṭra with the help of Agni, wind, Viṣṇu and Soma. His body is huge.

⁵⁴ Op cit, p. 113.

He has got a lot of power. His other names are Śakra, Prāchivaṇta and Śatakratu. Śatakratu means one who performs hundred sacrifices.

Agni is Indira's twin brother (ṚV 6.59.2) and Pūṣanā is another brother (ṚV 6.55.5). Though the sons of Indra are mentioned, their exact names are not known.

He is a generous god. Therefore he is called Medhavana. He is called friend of his worshippers, sometimes brother, sometimes father and even mother.

It has been maintained by Roth followed by Whitney that the preeminence of Varuṇa as belonging to an older order of gods was in the course of the Rigvedic period transferred to Indra. This view is based partly on the fact that not a single entire hymn in the tenth book is addressed to Varuṇa, while Indra is celebrated in forty-five.⁵⁵

3.7. 4 : Varuṇa

Varuṇa as it has been depicted in the ṚV, stands by the side of Indra and is one of the greatest gods.

From the root vṛ the name of Varuṇ has derived. There are 12 sūktas for this god in the ṚV. He is the god of moral and material power. He has drawn the rule of the nature. They are called 'ṛt'. Earth and skies live according his rules. He bestows upon the polite people and punishes those, who do not follow the rules.

He is surrounded by his spies (ṚV 1.24.13). He is called the emperor (ṚV 1.4.7,8) of men and gods, of the whole world and of all that exists. He has other names like - Kśatra, Asura, Dhṛatavrata. In Varuṇa-sūkta there is the prayer to withdraw oneself from all sins (ṚV 7.86)

⁵⁵ Op cit, p. 65.

Macdonell writes that Varuṇa is often spoken of as a regulator of water. He is the cause of flowing of rivers, they pour their streams into ocean. Varuṇa and Mitra are the lords of the rivers. He adds further :

Varuṇa's power is so great that neither the birds as they fly nor the rivers as they flow, can reach the limit of his dominion, his might, and his wrath(1.24.5). Neither the skies nor the rivers have reached (the limit of) the godhead of Mitra and Varuṇa (1.154.9). He embraces the All and the abodes of all the beings (8.41. 1,7).⁵⁶

According to Grisswold, Varuṇa inflicts disease as a reminder and punishment of sin. Fellowship with Varuṇa is broken by sin. He is a merciful and gracious god. Sin is the transgression of the law of Varuṇa. As omnipresent and omniscient, Varuṇa is a witness of the deeds of men. He grants protection and happiness to his worshippers. Varuṇa as the Lord of the Ethical Order is a holy God.⁵⁷

3.7. 5 : Uṣas

From the root *vaṣa*, i.e. to shine, the name of the deity is originated. The description of Uṣas occurs in 20 sūktas. She is the most graceful goddess adorning the Vedic heavens, according to Alfred Hillebrandt. She is young, beautiful, maiden (RV. 5.80, 5.6). She bestows upon her devotees wealth, money, son, fame etc. Hence she has got another name Maghonī.

⁵⁶ Op cit, p. 26.

⁵⁷ Op. cit. Grisswold, H. D. The Religion Of The Rigveda, pp. 122-131.

The maiden coming again awakens before all the world (1.123.20. Ever shortening the ages of men, she shines forth, the last of the dawns that have always gone, the first of those to come (1.124.2). Like a wheel she revolves ever anew (3.61.3). She awakens the creatures that have feet and makes the birds to fly up: she is the breath and life of everything(1.48.5,10; 49.3)she awakens every living being to motion(1.92.0;7.77.1)⁵⁸

Uṣas wards off the evil spirits and the darkness. She is closely associated with the sun. The sacrificial fire is kindled at dawn. Agni is naturally often associated with Uṣas. Agni appears before or even with the dawn.

According to the description of Bloomfield Uṣas appears as follows :

Eternally young and beautiful, ageless in distinction from the withering race of man, she appears as a lovely maiden displaying her charms to the world. While doing this she caters at the same time to interests which are the reverse of poetic. She starts the day of sacrifice, her face set towards very practical performances. She secures rewards for pious men and their agents with the gods, namely the priests. Yet, on the whole, the poetic possibilities of this loveliest of nature sights gain the day. She releases from service her sister Night as she rises from the darkened East higher and higher to flood heaven and earth with her waves of light. To the Sun-God she is a bride, opens for him her bosom's splendor. Or, she loves the two Aṣvins, the Dioscuri, with whom she travels on their car drawn by birds. Divine and gracious maiden, but yet no more than one of nature's splendors, she is the type of many a heaven-born story, could we but read it aright.⁵⁹

Uṣas is described as the sister of other gods, like the night, the sun god and

⁵⁸ Hillebrandt, Alfred. *Vedic Mythology*, Vol. I, p. 47.

⁵⁹ Bloomfield, Maurice. *The Religion of the Veda*, p. 152.

the moon. She is sometimes as an enemy of the night or is made beloved of the sun god, who follows her as a gallant youth. Along with her dark sister or even alone, she becomes the wife, the mother or the daughter of the sun.

In the Uṣas hymns, the dawn of each day is described. Ludwig and Krichenbauer go beyond this theory. They are of the opinion that Uṣas is primarily and originally the first dawn of the New Year.

The use of majority of Uṣas sūktas is basically at the Prātarānuvāka of the Soma-sacrifice, which is called Agniṣṭoma. This is celebrated every year. According to various proofs the Agniṣṭoma or Soma-sacrifice takes place in the spring.

*Its morning litany begins with Āgneya Kratu, the cycle of hymns for Agni this is followed by the hymns of Uṣas, arranged according to the metre. The selection of the hymns is different in the two Sūtras available to us and they are followed by the hymns to the Aśvins.
From the fact that three hymns occur at the beginning of one of the greatest sacrifices, we may conclude that the ritual treats them as the New Year's hymns that hail the most important day.⁶⁰*

According to Śrauta-Sūtras, Uṣas is the dawn of the New Year. They assign a fixed position to the Uṣas hymns. In the Gṛhya-Sūtras the place of Uṣas is observed from seventh to ninth day in the dark half of the month Māgha. Other texts explain it as it occurs in the dark halves of the months in Hemanta and Śiśira, ie. Mārgaśirṣa to Phālguna.

Sometimes Uṣas is referred in singular and sometimes in plural. They are the three dawn-lights : white, red and yellow, according to Hopkins. Hillebrandt, same as Ludwig and Zimmer, connects these three forms of Uṣas with three seasons, as the Vedic year had three seasons. An allusion to the three seasons can be seen in the expression of RV 1.164.2 and in AV. ix.9.2.

⁶⁰ Hillebrandt, Alfred. *Vedic Mythology*, Vol. I., p. 22.

3.7.6 : Rudra

According to Macdonell Rudra occupies a subordinate position in the ṚV. The name of Rudra has originated from the root rudra, which means to shout loudly.

The colour of this god is Babhṛ. He carries a bow and arrow. He is super powerful, young, immortal. Hence is called Balī, Jagatpitā, Iśān, Mōdhavasa - means liberal.

The relationship of Rudra with Maruts is most frequently mentioned. He is their father (ṚV 1.114.6 - 9). Sometimes the reference is that they are his sons and several times are called Rudras or Rudriyas. He carries a thunderbolt in his hand. He is strong and swift (ṚV 7.46.4). Everyone is feared of his arrows. He cures with calmness.

Malevolence is frequently attribute to Rudra in ṚV., for the hymns addressed to him chiefly express fear of his terrible shafts and deprecation of his wrath. He is implored not to slay or injure, in his anger, his worshippers, their parents, children, men, cattle, or houses (1.114.7-8) , but to spare their horses (2.33.1), to avert his great malevolence and his bolt from his worshippers, and to prostrate others with them (2.33.11,14), he is besought to avert his bolt when he is incensed and not to injure his adorers, their children, and their cows (6.2.87; 4.6.2-4) , and to keep from them his cow-slaying, man-slaying missile(2.33.1). His ill-will and anger are deprecated(1.69.1), and he is besought to be merciful to the walking food (10.169.1). His worshippers pray that they may be unharmed and obtain his favour (2.33.1,6).⁶¹

There are only 3 complete sūktas for this god in the ṚV. Rudra is one of the several gods identified with Agni. Rudra is often used as an adjective for Agni.

⁶¹ Macdonell, A.A. Vedic Mythology, p. 75.

Weber expresses the view that this deity in the earliest period specially designed the howling of the Storm (the plural therefore meaning the Maruts), but that as the roaring of fire is analogous, Storm and Fire combined to form a god of rage and destruction, the epithets of the Satarudriya being derived partly from Rudra - Storm and partly from Agni = Fire. H. H. Wilson thought that Rudra was 'evidently a form of either Agni or Indra'. L. v Schroder regards Rudra as originally the chief of the souls of the dead conceived as storming along in the wind. Oldenberg is of opinion that Rudra probably represented in his origin a god of mountain and forest, whence the shafts of disease attack mankind.⁶²

Macdonell makes the readers aware of various opinions of Western scholars regarding Rudra in his book by mentioning them. According to him the etymology of the word rudra is 'somewhat uncertain' as regards the meaning. He adds further that the meaning 'to cry' is an Indian interpretation. Whereas Grassmann has connected it with a root 'rud' means 'to shine' or according to Pichel 'to be ruddy'. Thus Rudra would mean the 'bright' or the 'red' one.

3.7.7: Savitā

The name of this god is derived from the root 'su', means to encourage. There are 11 sūktas for this god in the ṚV. This deity is golden in colour, his eyes, hands, tongue is golden. He is called god shining with golden glory (ṚV 3.38.8; 7.38.1). His chariot is also golden, that has white horses. This glorious golden god rises in the East.

He kills all the sins (ṚV 3.62.10). He gives salvation to the pious persons. Some specific rituals are performed to pray this god, eg. recitation of Gāyaṭrī mantra (ṚV 3.62.10).

⁶² Op cit, p. 77.

3.7.8: Sūrya

From the root 'swar', the name is originated. This god is the spy of the universe. He can see all good and evil deeds of everyone. He is the central energy of the universe. He is the destroyer of darkness.

Bloomfield describes Sūrya in the following words :

Next Surya (Sol, Helios) appears upon the stage. He is the Sun-God treated as transparently as possible. He is styled the sun of Dyaus, the Father Sky; Dawn is his bride, or, is another miid, the Dawns are said to be his mothers. On a car drawn by seven tawny steeds, his course is guided by other great gods, the old Ādityas, Mitram Varuna and Aryaman. Again, he is the eye of Mitra, Varuna, or Agni(Fire). He is the preserver and soul of all creation, of everything that stands or moves. Enlivened by him men pursue their vocations. He is far-seeing, man-beholding , takes note of the good and bad deeds of mortals. They in turn look up to him, rejoicing I the security and the inspiration which his light affords.⁶³

There are 10 sūktas for this god in the ṚV. He increases the life of everyone and kills the illnesses and sorrow. He has other names like - Viśwakarmā, Asūrya, Purohiṭa.

According to Grisswold God Mitra is none other than God Sun.

As the Avestan Mitra had a luminous character, so had the Vedic Mitra. Both ultimately were identified with the sun, Mitra in the later Avesta and Mitra in the younger Veda. The first texts clearly indicating the identification of the Vedic Mitra with the sun are AV. XIII. 3,13 and IX. 3,18, according to which Mitra at sunrise is contrasted with Varuṇa in the evening, and Mitra is asked to uncover in the morning what has

⁶³ Bloomfield, Maurice. The Religion of the Veda, p.153.

been covered up by Varuṇa. Certain Ṛgvedic passages also may be cited which point more or less clearly in the direction of this ultimate identification, e.g. X. 8,4, Agni at the head of the dawns generates Mitra for himself; III. 5,4 and V. 3,1, Agni when kindled becomes Mitra; V. 81,4, Savitar becomes Mitra because of his laws; Vāl. 4,3, Viṣṇu took his three steps by the laws of Mitra.⁶⁴

3.7.9: Aśvins

Aśvins are the twins. They are doctors amongst the gods (ṚV 3.39.3 ; 10.17.2) . Only a couple of times they are alone, otherwise the reference is of twins. Srañū and Vivaswān are their mother and father.

Though they hold a distinct position among the deities of light and their appellation is Indian, their connection with any definite phenomenon of light is so obscure, that their original nature has been a puzzle to Vedic interpretations from earlier times. This obscurity makes it probable that the origin of these gods is to be sought in a pre-Vedic period.⁶⁵

Aśvins are young, bright, lords of lustre (ṚV 8.22.14; 10.93.6). They cure everyone with their magical medicinal power. They use power of their nose, hence are called Nāsatya. They withdraw all the sorrows, pains and illness. There are 50 sūktas for this god in the ṚV.

According to Macdonell, Hillebrandt had found out traces showing that the Aśvins were at first excluded from circle of the Soma-worshipped gods.

The opinion of Bergaigne and others that the various miracles attributed to the Aśvins are anthropomorphised form of solar

⁶⁴ Griswold, H. D. The Religion Of The Rigveda, p. 120.

⁶⁵ Macdonell, A.A. Vedic Mythology, p. 49.

phenomena (healing of blind man, thus meaning the release of the sun from darkness), seems to lack probability.⁶⁶

Macdonell feels that even the Ṛṣis have not understood them properly, as the language describing them and their physical appearance is very vague. He adds, even the opinion of Yāska is obscure. Some regard them as Heaven and Earth, others say that they are day and night, or even sun and moon.

Roth thinks he means Indra and the sun, Goldstücker, that he means the transition from darkness to light, which represents an inseparable duality corresponding to their twin nature, and agrees with this view. This is also the opinion of Myriantheus as well as of Hopkins, who considers it probable that the inseparable twins represent the twin-lights or twilight before dawn, half dark, half light, so that one of them could be spoken of alone as the son of Dyaus, the bright sky. Other scholars favour the identification of Aśvins with sun and moon.

Oldenberg following Mannhardt and Bollensen believes the natural basis of the Aśvins must be the morning star, that being the only morning light beside fire, dawn and sun. The time, the luminous nature, and the course of the Aśvins round the heavens suit, but not their duality. Finally Geldner thinks that the Aśvins do not represent any natural phenomenon, but are simply succouring saints (Notheilige) of purely Indian origin.⁶⁷

The time of their appearance is always the early dawn. They descend to earth and receive the offerings of the worshippers. They not only come to the offerings in the dawn, but also at the noon, at morning, and sunset.

3.7.10 : Pūṣan

⁶⁶ ibid, p. 53.

⁶⁷ ibid, p. 53.

There are 8 sūktas in the complete ṚV and 5 sūktas in the 6th Maṇḍalā of the ṚV.

Etymologically the word means 'prosperer' as derived from the root puṣ. He is the lord of prosperity, of great wealth, and his prosperity is connected with light. Pūṣan is the beneficent power of the sun manifested chiefly as pastoral deity, remarks Macdonell.

He can see every thing. He is the husband of Sūryā (ṚV 10.85). He has folded his hair in a plat. The description of his leg and right hand are found (ṚV 6.55.2)

He protects everyone from the enemies. He wanders between earth and skies. His chariot is driven by goats (ṚV 1.138.4; 6.55.3,4). His weapon is sword.

3.7.11 : Ṛbhu

A group of three gods together is called Ṛbhu. They are three brothers. Their names are Ṛbhukṣan, Vāja and Vibhavan. 11 ṚV sūktas describe them. Their father Sudhanvā was a skilful labourer. They reached the level of god with surprising skills. Originally these three were human beings. They are mystical beings and not having divine nature fully or originally.

They are said to be the children of Manu. They have created the weapon of Indra, called Hari (ṚV 4.33.10). Their chariot was run by steeds.

The ṚV explains that five of their skills made them to god (ṚV 1.161.9; 3.60.2). 1. They prepared a chariot without horses, and reinless which has three wheels. This chariot could wonder and find its way in the skies. 2. They created horses for god Indra. They created the two bay steeds for Indra, which waft him (ṚV 4.33.10) . 3. They created a cow, who gives amṛata

instead of milk. 4. They rejuvenated their parents (ṚV 1.20.4,11,1;4.35.5).they made these two old persons young again. 5. The most important deed is that they made four parts of a camas, which was made of tvaṣṭa (ṚV 9.20.6 ; - 110.3 ; 4.35.2 ,3 ; - 36.4). They have got right to drink Soma with gods.

3.7.12 : Āpaḥ

These goddess are called mother deity. They appear in Yajñas and bestows everything good upon the people. They follow the rituals of gods. Āpaḥ are glorious and material - of both types. Their dwelling place is the ocean. They stay where gods, Varuṇa and Mitra stay. Motherly affection is their speciality. These goddess cleanse and purify and bear away defilement. They even cleanse from moral guilt, the sins of violence, cursing and lying (ṚV 1.23.22; 10.9.8). They destroy ugliness, evil-deeds, bad things and make the atmosphere pious. They watch over men's health in the house. They bestow health, strength, wealth and immortality upon their followers.

They are the goddess of water. Agni is often described as dwelling in waters, he is said to have entered in them. As the mothers they produce Agni (ṚV 10.91.6).

3.7.13 : Maruta

This is a group of deities. There are 33 sūktas in the ṚV praising them. The number of this group is either 60 x 3 (ṚV 8.85.8) or 7 x 3 (ṚV 1.133.6). They are called the sons of Rudra. They are of the same age, live at a same place and are of a same mind set (ṚV 1.165.1).

The brilliance of Maruts is referred many times. They are golden and bright like sun, like blazing fire and ruddy. They are brilliant like Agni. They are self luminous. Like lightning they shine with rain. Their noise is referred many times which is called thunder and is also roaring of the wind. All creatures are afraid of them. They can cause the mountains to quake, as well as earth or the worlds to tremble. Their main function is to shed rain.

A. Kuhn and Benfey held Maruts to be personifications of the souls of the dead and with this view Meyer and Schroeder substantially agree.⁶⁸ But there are no references in the ṚV in support .

3.7.14 : Yama

The first dead human being is Yama. There are references of his sister in the ṚV, called Yami. The dialogue between this brother and sister teaches moral values of human life (ṚV 10.10). In the Iranian mythology there is a brother and sister - Yima and Yimeh.

The 3 sūktas of the ṚV describe god Yama (ṚV 10.14.135 and 154). Vivswāta and Sarṇyū are his father and mother (ṚV 10.14.2). His messengers are Ullūka and Kapita. The path, that leads toward him, is protected by the two sons of Saramā dog (ṚV 10.14; 12).

3.7.15 : Tvaṣṭā

The god who created the origin or the skilful worker is called Tvaṣṭā. He prepared the Vajra of Indra (ṚV 5.31.14). He gave the form to all animals (ṚV 10.110.9). He forms husband and wife for each other. He has given to the heaven and earth and to all things their form. He is the bestower of

⁶⁸ Op.Cit. Macdonell, A.A. Vedic Mythology, p. 81.

blessings and is possessed of abundant wealth and grants prosperity. In later times he is regarded as one of the Adityas.

3.7.16 : Parjanya

Parjanya is described in 3 sūktas in the ṚV. He the god of months of rain. This god is the personified form of 'rain-cloud'. The shedding of rain is his most prominent characteristic. Thus the might of Agni is said to resound as Parjanya.

His appearance is like a bull. He make the earth and plants run. He is connected with the wind and thunder storm. He is the father of them (ṚV 7.101.3 ; 9.82.3). Sometimes he is identified with Indra, being the god of rain.

3.7.17 : Ahirbudhnya

The snake, that lives at the bottom of the ocean, is called Ahirbudhnya. There are various imaginary concepts regarding the god - Ajaikapād. But more accepted concept of imaginary and deriving from the lightening snake-god is Ahirbudhnya. He is also called the snake living in the universal waters. According to Macdonell, in post Vedic literature Ahirbudhnya is the name of a Rudra as well as an epithet of Śiva.

3.7.18 : Viṣṇu

Griswold writes ; Viṣṇu is a god of minor significance in the ṚV. He adds, Lord Viṣṇu got primary importance in later history in view of his inclusion in the great triad, the Brahmā, Viṣṇu and Śiva.

The 'three steps' of Lord Viṣṇu constitute his main characteristics. Griswold is of the opinion that these three steps are either three stations, sunrise,

zenith and sunset or three levels sunrise, mid-air and zenith. He adds, Viṣṇu is clearly identified with the position of sun in the zenith. Further more he writes the highest step of Viṣṇu is connected with the idea of life after death. Oldenberg thinks that Viṣṇu was originally an abstract deity - 'he of wide space', having nothing concrete corresponding to his three steps'. According to Macdonell, Viṣṇu is the sun - as personified swiftly moving luminary.

Griswold thinks, Viṣṇu began as an 'Sondergott' and later found concrete content in the sun.

The concept of deities finds a remarkable dimension in the Vedic religion. The stress is more on the adoration of more fundamental and abstract conceptions and natural phenomena such as the sun (Sūrya), and fire (Agni). The reference of these deities are found in the Vedas along with thorough descriptions of the ceremonies that were intended to bring them material benefit in this world for the worshipper. Most of the Vedic deities were to a large extent visualized as having human or animal forms.

Lord Agni has got a prominent position in Vedic philosophy and way of life. Yajña has got a strong foundation in the scriptures. Indians are still known as fire-worshippers. Modern scientists are attracted towards Yajña , its procedure, oblations and its effects on the surroundings as well as on plants and animal kingdom, due to this very fact that Yajña produces benevolent life-energy. German scientists and scholars are the beginners in this field as the scholars were trying their best to find out the philosophical values and meanings of Vedic knowledge. Now the scientists and scholars from almost all over the world are working on this canvas and are contributing their best. In this the scientists of chemistry, physics, biology, bio-technologies , bio-physics, agriculture are investigating the outcomes of the Yajña. Indian scientists and scholars are working with the modern technologies like PIP imaging - the latest human and plant - aura measuring technology, in Pune.

... ..

4. Vedic Sacrifices :

For the study of religious and cultural specialities of any country one has to observe and research the ritualistic performances of the native people. The Western scholars undertook the studies of Sanskrit as a part of Indian lifestyle, in which Vedic literature has most important position. During these Vedic literature studies the ṚV, the language of ṚV, period, culture, the beliefs regarding the deities were studied. After realising the importance of ritualistic performances the studies regarding them became inevitable. The linguistics, etymology, comparative language studies were undertaken. Though there were many difficulties in translating, editing the ancient material and researching, much of the Sanskrit literature is published in many languages of the world today.

Early European scholars general paid scant attention to the deep study of the Vedic sacrifices and endeavoured to understand meaning of the Vedas principally by reference to grammar, comparative philology and the comparison of several passages containing the same word or words. Max Müller put forward a tentative scheme of chronology based mostly on subjective considerations and prompted by great prejudice felt by European scholars generally against admitting any great antiquity for the Vedas. For a through understanding of Vedic sacrifices, several Veda Samhitās, Brāhmaṇas and Śrautasūtras must be carefully studied.¹

The basic ritual according to Vedic tradition is Yajña. For obtaining health, wealth, long life, offspring, cattle, victory, rains, good harvest, freedom from the evil power, total salvation, etc. the offerings are made in Agni- Fire. The sacrifices are the first original and basic dharma according to ṚV (10.90.16).

¹ Keith. Religion and Philosophy of the Veda and Upanishads, vide: Kane, P. V. History of Dharmashastra, Vol. II, Part II, Second Edition, Bhandarkar Oriental Research Institute, Poona, 1974, p. 976.

The Sanskrit word Yajña is derived from the root 'yaj', which means to worship, to sacrifice, to bestow, to offer. The word Yāga also has the same meaning, a worship in the form of offering oblations or a sacrifice for the gods. It is also defined as the Tyāga - giving up or offering - for any specific deity or some deities at the same time.

According to Indian religious traditions the system of Yajña was given by the God himself at the beginning of the creation to human beings. It is a link between the gods and the human beings. The ancient people offered their worship to the God or the supreme creator. Man approached god through Agni or Fire, who invoked Him on their behalf and was known as 'Hota'. The essence of the sacrifice was a proof of one's devotion to the Deity. Vedic ṛṣis conceived of Yajña as a symbol of creation. The famous Puruṣa-sūkta in the ṚV presents the whole process of creation as Yajña. The rules regarding the performance of sacrifices govern the equilibrium of the atmosphere. This concept is known as 'ṛt'.

According to philosophers one has to offer or sacrifice something in Yajña by which a certain deity, who is concerned with this process and the connection between the performer becomes intimate. Western scholars are of the opinion that Yajña is a process of ancient men living in forest, but is a magical practice. One can observe animals, gods and rituals regarding them in the Vedic literature. Due to specific rituals in the Yajña the importance of these animals is understood. They feel ritual of sacrifices, animal gods, rejuvenation of the seed power, offerings for the forefathers have built the concepts of the Vedic Yajña.

The Pūrva-Mimāṃsā explains Vedas as eternal and Apauruṣeya (not created by any human being). Yajña is the main ritualistic practice explained by the Vedas. Hence it is eternal and Apauruṣeya ritual, remarks the Pūrva-Mimāṃsā. This ritualistic religious behaviour has its own impact on Indian people. The religious performance of Yajña explained by the Vedas, the mantras that are to be chanted during the rite are elaborated in the Vedas.

Thus it is called Śrauta- religion. Unfortunately only some part of the original Vedic literature is available now.

Information about the sacrifices has been spread out all over the Vedic literature. In the Brāhmaṇas one can get more details including instructions for their performance. However in the Śrauta-Sūtras and the Śulba-Sūtras, the systematic treatment of the subject is obtained. In the Śulba-Sūtras one finds the complete details of the constructional and engineering aspects of a sacrifice, like the measurement and formation of the Vedi (altar). The Śrauta-Sūtras are the functional manuals for the priests and give the modus operandi of various rites in detail.

As G. V. Devasthali writes, sacrifices as an institution did exist before the gods. The Ṛṣis have handed down the tradition of sacrifice from one generation to the other and kept it alive forever. Thus knowledge and practice of sacrifice in the age of Brāhmaṇas was continuously carried on by oral tradition.

Yajña is being identified with several deities singly or jointly or with sacrificial material or detail or the priest, sometimes two or more things of a sacrifice together being said to form swarūpa of Yajña or some occasions one or more details are identified as the organs of sacrifice, many times metaphors identify Yajña. It is identified with saṁvatsara or the year, Prajāpati, Vāka, mauna and connection with Agni is obvious. Yajña is identified with certain deities like Viṣṇu, Vāyu, Vasu.

The scholars have found many similarities between Vedic and Persian culture. Both the civilizations have a tradition of fire-worship. The references regarding homa-culture in the Persian literature.

There is a very striking resemblance between the Vedic Agniṣṭoma and the Homa ceremony of the Parsis. There are numerous words indicative of the cult of the sacrifice bot in the Vedic language and in the ancient Parsi religious books. For example words like atharvan, āhuti, ukha, barhis, mantra, yajña, soma, savana, ṣṭoma, hotṛ do also occur in the

ancient Parsi religious scriptures.²

Agni or fire is the most important part of Vedic sacrifices. As the deity supervising over the elemental fire, it is looked upon as the carrier of the offerings of oblation to the various Vedic deities like Indra, Prajāpati etc.

Ahitāgnis (those who have ceremonially established the Vedic fire)are to be found even in this 'IT' era.

4.1 : Classification of the Yajñas

Yajñas can be classified into various groups. They are carried out with the help of the mantras in the three Vedas - ṚV, YV and SV. Clarified butter (Ghee), various grains and dried twigs of certain trees are the materials used for oblation. Some of the important firewoods prescribed for Yajña fire are :

1. Butea Frondosa (Palash)
2. Ficus Glomerata (Udumbar)
3. Ficus Religiosa (Pipal or Aśvattha)
4. Ficus Indica (Vata)
5. Aegle marmelos (Bilva).

The sacrifices are classified as nitya, naimittik and kāmya. This is most simple classification of Yajñas. The nitya (regular) type of Yajñas are performed regularly, e.g. Agnihotra. The naimittika (occasional) Yajñas are performed for a special cause or on certain special occasion. The kāmya (with certain wish) Yajñas are performed for the fulfilment of many wishes. In these sacrifices the puroḍaśa (rice cakes), ājya (clarified butter, ghee), curds, soma juice, apūpa (a special sweet made out of wheat flour), jaggery, sesame seeds, roasted rice grains(Lahya) and clarified butter made out of cow milk) etc. is used for offerings.

Though Agnihotra is the basic rite, eventually the fire worship got developed and expanded. Then the Yajñas like Tretāgnisādhana, Darśapūrṇamāseṣṭi,

² Kane, P. V. History of Dharmashastra, Vol. II, Part II, Second Edition, Bhandarkar Oriental Research Institute, Poona, 1974, p. 978.

Cāturmāsya etc. are developed and performed. Some of these Yajñas can not be performed by just one person. Many people or rich persons come together and perform some Yajñas.

Agnihotra did not remain only two oblations rite, but got expanded into three folded form - Gāṛhapatya, Āhavanīya and Dakṣiṇāgni. Those who have done Āgnyādhana were allowed to practice Agnihotra. They were called Āhitāgnis. They had to follow many rules. The Nitya-Yajña performed without indulging in fruit, purify the intelligence and the mind of the sacrificer and create urge in him to realise and experience the eternal truth.

The Yajñas were divided as Śrauta- and Smārta Yajñas. For Śrauta Yajñas one can get the description and explanation in Vedic literature. Different Smṛtis like Manu, Yājñavalkya etc. explain about Smārta Yajñas. These two types of Yajñas are again divided into three more parts like -Nitya, Naimittik and Kāmya.

4.2 : Somayāga

The Vedic texts are interconnected with numerous rituals, their references and ceremonies. In certain cases as the Western philosophers think the exact details of these rituals acts and ceremonies can not be recovered.

Among these references mention is made of a probably simple hot-milk offering, 'gharma' to the Aśvins, the twin gods connected with dawn and sunrise. A Gharma offering to the Aśvins in one of the two main constituents of the Pravargya ritual as described by later texts, Brāhmaṇas, Āraṇyakas and Śrauta-Sūtras. The other constituent is the ceremonial preparation, sacrificial use and solemn disposal of a special vessel, which has several names : Head of Makha, Pravargya, Gharma, Mahāvīra.³

³ Houben, Jan E. M. (Ed.). The Pravargya *Brāhmaṇa* of The *Taittirīya Āraṇyaka*, an ancient commentary on the Pravargya ritual, Motilal Banarasidas Publishers, Delhi, 1991, pp. 1 & 2.

Gonda explains, the references regarding soma-sacrifice are found in ṚV. Complete ninth maṇḍalā of ṚV is for the praising of soma. The procedure of this sacrifice is very complicated and is carried forward by the famous oral tradition from generation to generation.

Obwohl ein Teil des ṚV aller Wahrscheinlichkeit nach unabhängig von dem Opferritual entstanden ist, in Zusammenhang mit dem er in den uns bekannten Texten verwendet wird, steht andererseits fest, daß die Brahmanen zur Vollziehung des sehr komplizierten Opfers insbesondere. Ritus besaßen, der samt allem, was damit verbunden war, auf sehr sorgfältige Weise im Stande erhalten und von Geschlecht zu Geschlecht überliefert wurde.⁴

Somayāga institution consists of seven main Yāgas . They are : Agniṣṭoma, Atyāgiṣṭoma, Uktha, Ṣoḍaśī, Aptoryām, Atirātra and Vājapeya.

Agniṣṭoma is the main Yajña in all seven of them. It includes all types of soma-sacrifices. The person, who has accepted the Agnihotra as a lifelong consecration or who is a practitioner of Tretāgnivistrār-vrata, can be the yajamāna of the Soma sacrifice. In this sacrifice the main celebration is of one day, thus it is called Ekāḥa. Many other rites are performed before the main sacrifice.

With the help of ṚV, YV and SV this Yajña is celebrated. In all sixteen Ṛtvij are required for this sacrifice. They are divided into four groups. Like for ṚV office - Hotā, Mātariṣvāna, Acchāvāk, Grāvṣtuṭa, for YV office - Adhavaryu, Pratiṣṭhāṭā, Neṣṭā and Unnetā, for SV office - Udgātā, Prastotā, Pratihartā and Subrahmaṇya. The remaining four Ṛtvij are not supposed to be of any single office. They are called Bramhā, Brāhmaṇacchansī Āgnidhra and Pōta. But these Ṛtvija should know the work designated to them much properly.

⁴ Gonda, Jan. Die Religionen Indiens I, Veda und älterer Hinduismus, Verlag W. Kohlhammer Stuttgart, zweiste überarbeitete und ergänzte Auflage, 1978, p.10.

Brahmā should have the knowledge of the Veda in particular. He has got right to punish, if nay mistake occurs during the sacrifice. These four Ṛtvija are many times of AV office.

On the first day of Yajña, in the three vedis specially created for the Yajña the fire that has been brought from the two vedis (Dakṣiṇa and Āhavanīya) is kept and the new fire is created. The other method which is followed, is to create fire through Agnimanthana. With the fiction of two Araṇis agni is generated before the sunrise or sunset and is used for the Yajña.

Choosing the capable Ṛtvija is the first rite in the soma sacrifice. At this time the Ṛtvija are honoured and worshipped with honey, milk etc. Then the rite of giving consecration to yajamāna takes place. This rite is very important. Due to this rite the yajamāna is as if reborn and gets the ability to unite with all the deities that are invited during the sacrifice.

The next important rite is of buying the soma plant. (The Pūtikā plant is declared as the soma by Vedic pundits and is used for the soma sacrifice. This plant is available in Khambatki ghat in Maharashtra and in Kannada ghat. In botany this Pūtikā is known as Ephedra-vagi-stigma.) The procedure of soma-buying takes place at the site of the sacrifice, where the seller gets the soma plants loaded in a bullock cart. The trading is done on exchange of different goods like a cow, gold, silver, a piece of land and such other things. The bargaining drama is a part of the sacrifice. Then the soma is brought near the place of the sacrifice. At first it is being honoured by performing a Yajña, called Āthityeṣṭi. The soma should stay in the Yajña-pendal for three days before it is been offered in the Yajña. Then the rite of Tānūnaptra is performed amongst the Ṛtvija, in which they touch a vessel filled with clarified butter while singing some Ṛcaḥ. This rite symbolizes that all Ṛtvija will cooperate in harmony with each other during the Yajña. For the commencing three days the rite of Pravargya is celebrated. In the morning Pravargya is performed, while in the afternoon Upasad Yajña is celebrated. Upasad sacrifice is for Agni, Soma and Viṣṇu. The oblation of clarified butter is offered

for these deities.

Pravargya is as the 'Head of sacrifice', without which Agniṣṭoma does not to yield the desired results. If the sacrificer is a learned Brāhmaṇa, he is allowed to perform Pravargya even at his first sacrifice. According to F. B. J. Kuiper it is 'an old Vedic tradition of meditative practices', which fits in very well with 'mystery' (Geheimlehre) connected with this ritual. As Buitenen writes:

Clearly, when the Pravargya ritual was introduced into the Agniṣṭoma, it did not come obsequiously as one more minor rite, but with high pride of an imperial pretender.

... it is clear that the introduction of Mahāvīra was not of something reluctantly and abrasively admitted, but the introduction of complete establishment, with its own uniquely shaped clay objects, its own ceremonial area, and its own implements.⁵

Buitenen is of the opinion that the tradition of Pravargya rite is firm and is mentioned in various Vedic literary texts.

This seems to have been a firm tradition as several other texts mention the myth of how the sacrifice lost its head. As we have seen, the sacrifice did not in fact 'lose its head', it acquired an additional ritual in the beginning, which formed around the nucleus of the gharma offering, while this itself might originally well have taken place on the pressing-day. But the co-existence of the simple Agniṣṭoma with the mysterious and secretive Pravargya called forth the notion of an originally complete soma sacrifice, which become incomplete and is now once more completed with the Pravargya.⁶

⁵ van Buitenen, J. A. B. The Pravargya (An Ancient Indian Ritual - Described and Annotated), Deccan College Post Graduate And Research Institute, Pune, First Ed., 1968, p. 15.

⁶ van Buitenen, J.A.B. The Pravargya, p. 22.

The ritual is performed by Adhvaryu. (Adhvaryu is the priest of YV.) The specifications regarding this ritual are found in YV texts, Tai Ār Book 5, Ka Ār Book 2 and 3 and ŚB Book 14.

... the *Gharma* or *Pravargya* as described in the *Brāhmaṇas*, *Āraṇyakas* and *Sūtras*, is an optional performance in the context of elaborate soma sacrifice.⁷

The *Pravargya* is performed during the three *Upasad* days of the regular *Agniṣṭoma*. For larger sacrifices it lasts for many days. It is done twice everyday, in the morning and the evening. It absorbs the twice daily *Agnihotra*. A total of five priests are required. The ṚV is represented solely by the *Hotṛ*, the AV by the *Brāhmaṇa*, the SV by the *Prastostṛ*, the YV by the *Adhavaryu* and his acolyte the *Pratiprasthatar*. The *Adhavaryu* is also assisted by the *Agnidh* or *Agnidhra*, who usually classified with the AV, is particularly a *Yajurvedic* acolyte. The *Prastostṛ*'s role is to a large extent optional. The SV priest, the *Udgātṛ* is not invited to partake of the offering.

As *Gharma* consists of a hot-milk offering to the *Aśvins*, *Dadhigharma* consists of offerings to *Indra*, the great god of soma sacrifice.

The normal procedure, as the *sūtras* give it, is that the *Pravargya* is held twice daily during the *Upsad* days of the *Agniṣṭoma*. The paraphernalia of the ritual are taken away after the last performance, which occurs before the *agnipraṇayana* on the third *Upasad* day. This latter rite of carrying forward the fire makes the shift in the *Agniṣṭoma* when the action moves from the *Bamboo Hut*, where all preliminary rites had taken place, to a new area with another system of fire-places and altars, where the rites of the *Soma* sacrifice proper will take place. The order of events is therefore that the *Pravargya* ceremonial is concluded

⁷ Houben, Jan E. M. (Ed.). *The Pravargya*, p.2.

and the remains disposed off, before the soma pressing.⁸

According to some Sūtras Pravargya is performed on the soma pressing day itself. (Āpastamba 15.18.1). The Śrauta-Sūtra of Śāṅkhāyana belonging to ṚV states the same rites. (5.10.35) Āpastamba, Bhāradvāja and Hiraṇyakeśin lay down that if the Pravargya is performed on the pressing day, it is performed only once, while it is performed twice on each of the Upasad days. The Pravargya takes place on the pressing day, in the hut of Āgnidhra priest, after the out-of-doors Laud and Midday-Laud have been chanted.

The Adhvaryu offers clarified butter to Savitr̥, then the vessels are prepared. Then he prepares the main vessel and two spare vessels, then several other minor clay implements are formed.

Pravargya is performed in its special ceremonial quarters - i.e. in a bombo hut- that is facing to east. It is similar to śālā of ancient dwellings. It is basically coalescence of two distinct rites. One is the ceremony of the actual shaping, baking, anointing, adoring and disposing of an artifact, in which god is immanent. The second is an ṚV and AV rite in which a cow or a goat are ceremonially milked, the milk is heated and a libation of the hot milk is offered to the Aśvins.

Oberlies is of the opinion that the Pravargya rite is very complex and explains the complete procedure of it in the following words :

Der Pravargya

Der Pravargya besteh t in späteren Zeiten aus zwei Ritenkomplexen, der Darreichung einer erheizten Milch-Mischung an die Aśvin und der Fertigung des zur Erhitzung der Milch dienenden tönernen Mahāvira-Töpfes. Letzteres scheint eine Neuerung post- ṛgvedischer Zeit zu sein, da im ṛgvedischen Ritual ein Metallkessel zur Erhitzung der Milch verwendet wurde. (āV 5.30.15) Der Topf/Kessel wird mit Rauch der einem Feuer aus Pferdederung entstammt, ausgeräuchert. Dann wird er, bedeckt mit einer Platte (ṚV 1.164.28), über einem Feuer so lange erhitzt, bis er glüht. Jetzt wird frischgemolkene Milch eingegossen, die

⁸ van Buitenen, J.A.B. The Pravargya, p. 2.

in stiebendem Aufwallen als 'Blitz' herausschießt. Weiteres Zugießen-
wodurch starker Dampf entsteht erzeugt eine siedend heiße Milch, den
Gharma - verschiedentlich auch als Soma bezeichnet (äV 8.9.4/7), der
den Aśvin geopfert wird. Ein weiterer wichtiger Bestandteil
des klassischen Rituals ist die Aśvintaradikṣā, eine einjährige Phase des
intensiven Textstudiums, das der Brahmaçarin- für ihn and nicht für
den Yajamāna ist die Avāntaradikṣā bestimmt - absolvieren muß. Daß ein
solches einjähriges Studium der Texte bereits zur Zeit des Ṛgveda in
Zusammenhang mit Pravargya-Opfer durchgeführt wurde, erweist der
Vergleich von ṚV 7.103.1 ... Und aus ṚV 7.103 dem 'Froschlied' geht auch
hervor, daß der Pravargya unmittelbar vor Beginn der Regenzeit
gefeiert wurde und daß das eine Jahr intensivierten >Studium< seitens
der Schüler von einem Pravargya bis zum nächsten währte.⁹

Oberlies writes here about the Avāntaradikṣā, hot milk offering to Aśvins,
Mahāvīra pot, etc. He states that the Pravargya is performed at the beginning
of the rainy season and after the intensive work of one year a student can
complete the studies of the Pravargya.

On the day of Pravargya, while the Adhvaryu, the Brāhmaṇa and the Hotṛ are
reciting mantras, the main vessel is held with the tongs over the Āhavanīya
fire. It is anointed with clarified butter, while Sāman is sung by the Prastotṛ.
Then it is placed on a special golden mound. Then it is anointed with
clarified butter and heated. The vessel is covered with a golden disk and the
fire is fanned by three fans. It is heated till it becomes red-hot. The cow and
the goat are milked. Their milk is pored into the vessel. Then this vessel is
taken to Āhavanīya fire and the offering of hot milk is made to overflow in all
directions. Eventually the participants partake of milk. Then the vessel is kept
back in its respected seat.

Mahāvīra or Large Man is manufactured, worshipped and disposed off during
the introductory days of the Agniṣṭoma. The Mahāvīra Pot is made of clay.
The clay and the water used to make the pot represent earth and heaven and

⁹ Oberlies, Thomas. *Die Religion des Ṛgveda*, Vol. XXVI, Institute für Indologie des
Universität Wien, Wien, 1998. p. 295.

the pot referees the life juice to sacrifice. (ŚB 14.2.253)

Baudhāyana takes much clearly of the shape of Mahāvīra - of three clay balls placed on each other, which would make one span high, with a wide bottom joined in the middle. The broad base is joined with the top segment. This joint is called as 'madhyam'. The top one is hollowed out to provide a receptacle. The Baudhāyana uddhi-shape suggests the rough form of a man sitting cross legged.

ŚB (14.1.4.17) explains the Mahāvīra in similar words.

It (he) measures one span, for a head measures one span more or less. It is indented in the middle, for the head is more or less indented. And on top of it he pinches a mouth of three finger breadths : this mouth he puts on it as a nose.¹⁰

According to Āpastamba - the Mahāvīra is a kind of clay vāyava - a soma beaker made of wood and indented in the middle which is set upon a pedestal of three flat bases.¹¹

This Mahāvīra is encircled by a ring of clay according to Āpastamba. As there is a strict rule that the pot is not to be touched with the human hand after it has been moulded. It is boiling hot when it is used. Tai Ār (5.3.5) describes this clay ring as the collar (parigrīvam) and Baudhāyana and Āpastamba call it a girdle, rāsnā.

It is clear that Mahāvīra is not primarily seen as a pot or cauldron, but an image. For the creation of Mahāvīra many kinds of ingredients are required, which are hard to obtain. The moulding and baking of it requires expertise that an Adhavaryu may not possess. There is a possibility that he may fail to do the same for every sacrifice. Hence Baudhāyana states that the Adhavaryu lets

¹⁰ van Buitenen, J.A.B. The Pravargya, p. 11.

¹¹ vide, van Buitenen, J.A.B. The Pravargya, p. 10.

someone to do it, i.e. a potter should mould and bake it. According to Van Buitenen :

If all this is permissible, the convenient next step was no doubt to save the artifacts for the next time, a step more easily taken since the texts do not decree their destruction. All the formulae and some of the manipulations would be performed every time, but recollections of more ancient customs that these complicated objects were made in "enclosed spaces with northern doors somewhere northeast" would have become shadowy and incidental. Nonetheless we may look upon the fenced-off space- with its door on the north, and presumably unthatched, (since the sun must always shine upon it), as a most primitive but real sanctuary.¹²

Mahāvīra has its own ceremonial place. He has a throne, a simple four-legged stool, shoulder-high with webbed seat of muñja strands. Mahāvīra is rested there with the reserve pots in the intervals between Pravargyas. At the soma-sacrifice it stands east of similar throne on which the bundled and wrapped soma stalks are rested after the purchase. This is a place of honour. Normally after the Pravargya, the material used for it, is disposed off with respect at the Uttaravedi. At that time all the participants sing several Sāmans. The sacrifice is performed on behalf of the yajamāna by the Adhvaryu and his assistant, the Hotṛ, the Prastotṛ, the Āgnīdhra and the Brāhmaṇa. Though the Brāhmaṇa is a silent witness to this performance, his permission must be asked to start the important part of the sacrifice. The yajamāna invites all the priests and bears the expenses. The Śrauta-Sūtras give all the technical details of the ritual. The meaning of every minute detail has importance in the ritual. The knowledge of ritual acts is more important than the performance. According to Buitenen the Pravargya was a special ritual which was added in the Soma-sacrifice afterwards. He is of the opinion that the Pravargya is not performed, if a priest is performing the Soma- sacrifice for the first time. To

¹² van Buitenen, J.A.B. The Pravargya, p. 14.

qualify for performing Pravargya, the priest has to undergo a special year long consecration. He writes :

The Śrautasūtras of the Mānavas gives it the name of an āraṇyaka, which means that a particular mysterious prestige is attached to it which makes the knowledge and performance of it a matter of special election, not instantly available to anyone, who is otherwise qualified for Vedic ritual. There is a general percept that this Pravargya may not be performed at the first Soma sacrifice of patron. In order to qualify for it the priest must undergo a special consecration or dikṣā for the Agniṣṭoma. His period of instruction lasts for one year during which he must submit to a special vrata or like rule. This instruction should not, like ordinary Vedic instruction, take place in the teacher's house in the village, but in the āraṇya, on a piece of wasteland beyond the cultivated acres, from whence the village rooftops cannot be seen.¹³

Pravargya should not be performed to any and every one. According to Egging :

... lest he should do for every one, for the Pravargya is everything; but let him perform it for him, who is known; or to whoever may be dear to him, or who has studied sacrit writ.¹⁴

The Western philosophers have a difference of opinion, about the cause of performing Pravargya. According to Oldenberg, the Pravargya was performed to strengthen the sun, so that it may come safely through the rainy season. According to Lüders, who sometimes seems to have got trapped in his own interpretational theories, the Pravargya had to strengthen not the sun but the 'celestial fluid', represented by the hot milk in the heated vessel. This would have been necessary in the dry and hot times before the rainy season.

¹³ van Buitenen, J.A.B. The Pravargya, p. 1.

¹⁴ Egging, J. ŚB Tranl. 14,2,2,46. Op. cit. Houben, Jan E. M.(Ed.). The Pravargya Brāhmaṇa of The Taittiriya Āraṇyaka, p.16.

Beim Pravargya finden wir übereinander geschichtet Gold, Silber und Erde; es scheint mir zweifellos, daß diese drei Substanzen Symbole der drei Welten sind. Jenseits des Luftraums, diesseits des unsichtbaren Himmels fließt der Strom, der, wie wir gesehen haben, Milch führt. Beim Pravargya steht zwischen dem Gold und dem Silber ein Topf oder ein Kessel mit Milch. Dieser Topf mit Milch kann nur das von den Milchfluten erfüllte Bett des himmlischen Stromes bedeuten.

... soweit der Pravargya ein Zauber ist, dient er also dazu, den Milchstrom zu stärken, genau so wie das Somaopfer soweit es ein Zauber ist, den Zweck hat, den Somaquell in höchsten Himmel immer wieder zu füllen.¹⁵

The author presumes on hypothesis which the Pravargya ritual does not corroborate or even suggest. If this assumption is considered that the Mahāvīra is a representative of the sovereign sun, who needs strengthening of power during rainy days. He is not a symbol for god. Actually in his full power the god is looked upon as the Father of all creation. Hence he is depicted as the Large Man and his fertility is adored and though the wife of the host is ever-absent during the Pravargya rite- is important. Buitenen did not agree with Lüders because 'both the ritual itself as well as the special dikṣā for it show conspicuously in incompatibility of Pravargya and moisture. Kashikar without adding new arguments, chooses for Lüders explanations. According to Houben :

... the Pravargya was mainly directed to the sun. It aimed at giving the participants the power and lustre of the sun. at the same time several elements were built into the rite to protect them against the detrimental effects of too great an absorption of 'solar energy'.¹⁶

¹⁵ Lüders, Heinrich. Varuna, II, P. 366. Op. Cit. van Buitenen, J.A.B. The Pravargya, p. 33.

¹⁶ Houben, Jan E. M. (Ed.), The Pravargya, p.11.

Houben has pointed out the opinion of Gonda in his book, which is important.

When the Pravargya vessel on the fire is red-hot, there is a long recitation by the Hotṛ, which starts with RV 10.177. There are no serious difficulties in following Gonda in his remark that this hymn 'deals with the inner light of the visionary illumination and perception', and that its stanzas 'may have served to destroy spiritual ignorance.

... Gonda's more abstract translation is very defensible : 'the seer (Seer) has unveiled the brahman that had, of old, first come into existence from the well-shining boundary; he has revealed its fundamental (and) highest places, the womb of the existent and of the non-existent' (Version 357). In reference to this verse, Gonda suggests that the 'boundary refers to the borderland between the phenomenal and transcendent which is momentarily crossed by the seer when the light of vision comes to him'.¹⁷

The ritual Pravargya is explained by another phrase 'makhasya śiraḥ'. 'Makha' is an old word for a ritual celebration or a sacrifice. The myth says that the Agniṣṭoma consisting of three times pressing of soma is considered to be incomplete. Agniṣṭoma had only three parts. The ancient notion says that the whole consists of four parts, the three of which may be un-manifest and one manifest or contrariwise. Four is the number of completion. Therefore only a triple sacrifice was composed out of the purūṣa's body, which would be incomplete without its head. Hence the sacrifice remained without head and therefore useless. By restoring head to purūṣa and the sacrifice they are complete. The myth is regarding the Pravargya and the complete soma-sacrifice.

The ritual gives no indication of the season of its performance. The times at which the soma-sacrifices are performed, are hardly relevant since the Pravargya is an adventitious rite, besides those times are inconsistent and depend on the nature of sacrifice : while the Agniṣṭoma is performed in spring, the Vājapeya is performed in autumn.

¹⁷ Op cit, pp. 13 & 14.

In the soma sacrifice, the soma is the object and instrument of the sacrifice. Soma is god and at the same the beverage as oblation to the gods. Soma is moreover a 'secondary instrument' in the form of the soma-stalks. Same way in Pravargya ritual Gharma is the instrument and object of the sacrifice. Gharma is god and even the Gharma beverage is oblation for gods. The gharma is 'secondary instrument' as the vessel in which Gharma is heated is called Gharma. Gharma or Pravargya vessels and Soma stalks receive a wooden throne. The mantras which praise Gharma and soma have much similarities.

Der Agniṣṭoma ist ein Ekāha, d.h. ein Opfer von eintägiger, früh, mittags und abends vollzogener Somapressung : die einleitenden Zeremonien erstrecken sich jedoch über mehrere Tage. Zusammen mit sechs anderen Grundformen, deren Prkṛati er ist, gehört er zu den Jyotiṣṭoma ('Lob des Lichtes').¹⁸

The duration of Soma Yāga is varied. It can be performed in one day, with three pressings, it lasts for five days, twelve days or even for 361 days. It is called 'Gavāmayan-Satra'.

The fifth day of sacrifice is called Sutyah. The rites of this day start early in the morning. Soma juice is pressed three times of the day, ie. in morning, afternoon and evening. Every time soma is pressed (the process is called Somabhiṣava), filled in various vessels like - camasa, graha, etc., and then offered in the sacrifice.

Soma ist eine Pflanze und der daraus beim Opfer gewinnene Saft. Dessen Bereitung ist eine kultische Darstellung des Regenvorgangs; beim Herausschlagen des Saftes aus den Pflanzensprossen wird ein Donnergepolter hervorgerufen, beim Filtern desselben durch ein Wolltuch tritt das tropfende Herabfließen des heiligen Naß aus dem himmlischen Filter in Erscheinung. Soma gibt und ist Regen und Tau. Diese sind die Himmelsmilch, die alle Wesen nährt, sind Inbegriff der Nahrung. Die Feuchte läßt die Pflanzen wachsen, steigt in den

⁸ Gonda, Jan. Die Religionen Indiens, p.150.1

Gewächsen auf; Soma ist der Pflanzensaft, das Lebenselement der Pflanzen ist die Pflanzenwelt überhaupt. Die heilige Somapflanze ist gewissermaßen die Urpflanze, der daraus gewonnen Opfertrank die Essenz alles Pflanzensaftes.¹⁹

Soma sacrifice has a magical aspect in its function as a rain-bringing rite. It is not the main object of the rite. In soma sacrifice, much importance is given to soma pressing and purifying every drop through sieves. According to Houben, these drops of purified soma are treated in the hymns as if they are somehow parallel to the inspired thoughts that arise and are purified in the minds and hearts of the Vedic poets.²⁰

Es gibt Somaopfer, bei denen alle Handlungen, auch der Somakauf am Opfertage selber stattfinden: daher ihr Name Sādyaskras. Die Vedit ist in diesem Fall ein Staat - bzw. Ein reifes Gersten- oder ein Reisfeld, die Uttaravedi eine Tenne oder ein Erdhaufen; eine Pflugdeichsel dient Opferpfasten. Die Yajamāna hat, Geld auf dem Munde, Keuschheit zu üben, während er die Nacht über zwischen den Schenkeln seiner geliebten Gattin liegt, dadurch paaren sich in ihm die Macht der Askese und das Reden der Wahrheit (JB 2,117). Diese Riten unterschieden sich in liturgischen Einzelheiten und hinsichtlich des angestrebten Zwecks: Erlangung des Himmels, Beseitigung eines Nebenbuhlers, Vernichtung von Krankheiten, Beschwörung usw. Auch die Dakṣiṇās unterscheiden sich in bedeutungsvoller Weise: bei dem zuletzt genannten Ritus bestehen sich teils in lahmen Rindern ohne Schwanz und Hörner, teils fieberkranken; im Augenblick der Übergabe sollte man sie mit Dornen zerkratzen.²¹

At every pressing the number of soma filled graha-vessels is different, but the

¹⁹ Oberlies, Thomas. Die Religion des *Rgveda*, p. 165.

²⁰ Op. cit. Houben, Jan E. M. (Ed.), The Pravargya, p. 18.

²¹ Gonda, Jan. Die Religionen Indiens, p.1.

camas are always for seven Hotā (Hotā, Maitrāvaruṇa, Brāhmaṇchansī, Acchavāk, Potā, Neṣṭā, Agnidhra), Udagātā, Brahmā, yajamāna and the member, i.e. eleven in all. After the soma juice is offered in the sacrifice the remaining juice is drunk by above mentioned. Adhvaryu and Pratistātā have the right to drink the soma, but they have to drink it from the camas of Hōtā. Prastotā and Pratihartā should drink soma from the camas of Udagātā. On this day with the soma juice, dhānā, karṁbha, parivāpa, payasyā and puroḍaśa are offered in the sacrifice.

In the soma-sacrifice the oblation of soma was offered in its pure form (ṚV 8.101.10, 10.27.2). Before the soma oblation Udagātā and his members sing Sāman. This Sāman singing is called Stotra. After this Hotā, Maitrāvaruṇa, Brāhmaṇchansī and Acchavāk sing alone some special mantras. They are called Śastra. Five of these kinds of Stotras and Śastras are sung in morning pressing. Same way in midday pressing five Stotras and five Śastras are sung. In third pressing two Stotras and two Śastras are sung. After every group of Stotra and Śastra oblation of soma is offered and remaining soma is drunk. Adhvaryu and his partner members press the soma for morning and afternoon. At this time Gravstut Ṛtvija sing mantras. The oblation of a soma-mixture with cow milk and Yavāgu was also offered (ṚV 2.22.1, 3.32.2, 3.42.1, 3.42.7, 8.92.4, 8.101.10, 9.68.4). The oblation of Puroḍaśa is offered during morning-pressing (ṚV 3.28.1). The oblation of Puroḍaśa to Indra is offered in every pressing (ṚV 3.52.4 - 6). The special reference is of offering Puroḍaśa to Lord Indra during midday-pressing (ṚV 3.28.4). Agni gets the first soma oblation in morning pressing (ṚV 10.112.1). Pure soma oblation is given to Vāyu (ṚV 1.134.6; 1.135.4; 2.11.14). In morning and evening pressing Aśvins get soma oblation (ṚV 2.39.2; 5.77.1; 10.40.1; 10.41.2) during midday pressing Indra gets dadhi-gharma oblation (ṚV 10.179.3). Lord Indra is invited to attend the soma sacrifice in the morning and at midday (ṚV 8.13.13). Ṛbhus are connected with the third pressing according to ṚV and

YV (ṚV 4.34.4; 4.35.6; 4.36.2; 10.35.9). Maruta, Indra and Agni get Apūpa as special oblation (ṚV 3.52.1; 8.91.2). Puṣan gets only Karambha oblation (ṚV 3.52.7).²²

For pressing soma stalks stones are used (ṚV 9.10.76; 94; 175). After pressing soma-juice is purified using a white woolen sieve (ṚV 9.6.1; 9.7.6; 9.107.13). Various types of vessels are used for the procedure of pressing, sieving and collecting soma-juice. The explanation and information regarding them is available in the ṚV, e.g. 6.2.8; 9.28.4; 10.114.5; 10.16.18; 4.35.5 etc. During the soma sacrifice many deities are invited to come and have their respected seat in front of the vedi on the special grass (ṚV 1.117.1). The oblation of clarified butter is also offered in soma sacrifice.²³

In the third pressing new soma is not used, but the soma that is pressed earlier is used to press again. Once again the oblations are offered the same way as mentioned earlier. Then the Prayaccitta sacrifice is performed.

Next day morning Yajñapuccha is performed. The yajamāna, Ṛtvija, the other participants and the spectators go to a nearby lake, pond, stream or river, where all the Yajña vessels are immersed in the water. On the way towards river Prastōtā sings twice or thrice Sāman. Oberlies describes this rite with the following words :

Ihr Adhvaryus, geht zum Wasser, zum Meer, den Sprößling der Wasser veehrt mit Opfergabe. Der soll euch heute die Woge, die schön geläuterte, geben. Ihm preßt den honigreichen Soma . Das ›Kind der Wasser‹ wohnhaft in natürlichen Gewässern, zeigt gleichermaßen Feuer - wie Wassereigenschaften und steht in enger Beziehung vor allem zu Agni und zu Soma. Für das Soma-Ritual spielt dieser Gott eine wichtige Rolle, da er über die Gewässer, mit denen der gepreßte Soma gemischt wird, gebietet. Diese (sog) ekadhanā-Wasser werden im Aponaptriya-

²² vide, Kashikar, C.G. *Śrauta Dharmachi Swarupchikitsa*, University of Poona, Poona, 1977, pp. 12 & 13.

²³ vide, Op cit, pp. 13 & 14.

Ritus am Morgen des Preßtags aus einem in der Nähe des Opferplatzes fließenden Gewässer geschöpft. Daher muß Apām Napāt mit einer Spende besänftigt werden. Es scheint, als das Aponaptriya die ›Ritualisierung‹ eines alten indogermanischen Mythos, der von einem glühenden, im Wasser verborgenen und von einem Wächter behüteten Element handelt, in dessen Besitz zu kommen von Menschen angestrebt wird, bedeutet dies die Macht. Allerdings birgt - so dieser Mythos weiter- ein solches Unterfangen große Gefahren: Versuchen sich daran unautorisierte Personen, kommt es zu verheerenden Überschwemmungen.²⁴

In the ceremony of Avabhṛatsnāna every one present can take part. Yajamāna and his wife bathe in the waters first. For the five days of soma, as they have taken a special dīkṣā, they become powerful as the Lord Agni. It is the belief, that after the Avabhṛatsnāna that all their belongings they have used during the soma sacrifice, including their ornaments and precious clothes are to be sacrificed or given to Ṛtvija. After this rite the yajamān and Ṛtvija return to Yajñabhūmi (premises where Yajña is performed). Then the fire that was ignited on the first day of Yajña is extinguished as the rite of soma sacrifice is complete.

Die Aufrufung des Gottes geht in seinen Preis über: mittels hymnischer Prädikationen und in Aretologien werden seine Heldentaten aufgezählt - meist nur dadurch kurze Erwähnung unter Verzicht auf narrative Kohärenz- seine besonderen Eigenschaften werden in Erinnerung gerufen, seine Macht gefeiert, an seine schon so oft gezeigte Großmut appelliert. Ist er auf diese Weise ›freundlich‹, ›gnädig‹ gestimmt, mag der Verehrer seine Bitte- etwa um Gesundheit und langes Leben, um zahlreiche Nachkommen, um Glück, um Wohlstand in Form von Viehreichtum, um Sieg und Ruhm - vortragen. Alle diese Merkmale kennzeichnen den überwiegenden Teil der ṛgvedischen Lieder, die überdies durch die gleiche kultische Funktion ihrer Verwendung im Soma - und anderen Ritualen, zusammen geschlossen werden.²⁵

²⁴ Oberlies, Thomas. Die Religion des *Ṛgveda*, pp. 176 & 177.

²⁵ Op cit. p. 143.

Oberlies describes here the effects or the benefits of Yajña. It is famous that soma brings rain, but it is not the least. There are many more positive effects of soma sacrifice.

4.3 : Animal sacrifice in the Yajña

The importance of Yajña in the religious ritual performance is incomparable and undoubtable. Yajñas are seen as the benevolent power of the world. The Śāstras according to the Indian philosophy explain that at least five of the Yajñas are to be performed by every human being, if one can not perform Yajña on larger scale.²⁶ There are various types of sacrifices and these days many people think that some of the Yajñas are not complete without animal sacrifice.

Swami Dayanand Saraswati, Shripad Damodar Satavalekar and many others have concentrated on this issue intensively. They have stated their opinions regarding animal sacrifice with various references from the Vedas, the Brāhmaṇas and Smṛtis.

The concept of animal sacrifice came in much later period, due to different impacts like- the political pressure, the poverty of Brāhmaṇas and mainly the changed meaning of Vedic words. Ṛṣis have strongly condemned the act of animal violence in the Yajñas, writes Yudhisthira Mimansaka. He adds, in MB Āśwamedhika-parva adhyāya 91, Śānti-parva adhyāya 337, Anuśāsana-parva adhyāya 115, Matsya-purāṇa adhyāya 143 and Vāyu-purāṇa adhyāya

²⁶ Satavalekar, Shripad, Damodar. *Yajña-Yajñatil Havirdravyancha Vichar*, Da. Haidrabad. Keshavarao Vakil, Su. Da. Cha, Shake 1824.(Prushthe)86,5.3.4.3. Reprinted Mondkar, J.A. , Pune, 1970, p. 2.

57 the story of Upariçara Vasu narrates the same issue. The story says : Indra had used violent practice in Aśwamedha Yajña for the first time. The seers or the Ṛṣis, who could see the future and results of the act, were frightened. They tried to convince him for not doing the act and explained according to the rituals only the seeds that are more than three years old are to be used for oblations, as they have become unfertile. But Indra being strong egoistic did not listen. Both of them - Indra and the seers - asked the son of Uttānapāda - Upariçara Vasu to act as the mediator. He due to the supreme power of the gods gave his decision in their side. The Ṛṣis for giving the untrue and wrong decision cursed him.

According to Vaiśampāyana Āraka-saṁhitā adhyāya 19.4 in the ādikāla there was no place for animal violence during the Yajña. Due to wrong interpretation of Vedic knowledge like - the Vedas order the animal sacrifice. The violent acts started. For example : in Sanskrit there are two different words, 'alaba' and 'alambha'. They have different meanings. 'Alabha' means to touch or to gain, whereas 'alambha' means violence. Due to similar root form of the two they are misunderstood.

In the Śāntiparva of the MB the description of the beginning of animal sacrifice is narrated. It says :

लुब्धैर्वितपरैर्ब्रह्मन् नास्तिकैः सप्रवर्तितम् ।
वेदवादानविज्ञाय सत्याभासमिवानृतम् ॥

[MB Śāntiparva 263.6]

Due to lack of knowledge of understanding the principles of Vedas some cunning and selfish people started sacrificing animals in the Yajñas.

It says further :

धूर्तेः प्रवर्तितं ह्यैतन्नैतद्वेदेषु कल्पितम्।

[MB Śāntiparva]

For certain selfish reasons the meanings of the words are purposely mistaken, writes Yudhishtira Mimansaka and elaborates his point with this mantra from MB. Though some selfish people started animal sacrifices, it is not at all in the Vedas.

This violent act has started in the period of Prushadra - the grandson of Pururava. The Vasiṣṭha-dharma-sūtra 21-13 narrates the same. It says, the human beings were suffering only from three diseases, that were competition, thrust and old-age. But Prushadra by this wrong deed of killing a cow, has invented 98 new diseases. The reflection of the same thought is found in Brāhmaṇa Dhammiya Sutta 28, Kalyāṇakārṇa on page 724 by Jainacharya Upaditya and MB Śānti-parva adhyāya 265, which says, due to the killing of cow 101 new diseases were developed. It adds further, cow has another name 'aghnya', means not suitable to kill. Ṛṣis told Nahuśa that you have killed the cow and the bull - the Prajāpati. We are quite unhappy because of this bad deed of you. Due to this wrong act the human beings will get 101 new diseases. The Ṛṣis called him in front of his subjects as the killer and told him that they will not perform his Yajña. According to Caraka the main disease that was developed after this act was 'diarrhoea'.²⁷

AiB explains human beings, horses, bulls, cows, goat are not be sacrificed or not to be used as libations. The principles and the theories of the Vedas and Brāhmaṇas explain that the sacrifice of animal is not allowed. Only plants and grains can be offered as oblations.

²⁷ Op cit. Mimansak , Yudhishtir. *Mimāṃsā Śābar Bhāṣyam*, Yudhishtir Mimansak, Bahalgadha, Hariyana, first ed., 1977, pp. 166-167.

मित्रस्याहं चक्षुषा सर्वाणि भूतानि समीक्षे ।
मित्रस्य चक्षुषा समीक्षामहे ।

[शुक्लयजुर्वेद YV. 36.18.23]

The YV explains, I see to every living being as my friend. This mantra emphasises the same principle.

बीजैर्यज्ञेषु यष्टव्यमिति वै वैदिको श्रुतिः ।
अजसंज्ञानि बीजानि छागं नो हन्तुमर्हथ ॥
नैष धर्मः सतां देवा, यत्र वध्येत वै पशुः ।

[MB Śāntiparva 324.4-5]

This conversation in Śānti-parva, MB explains ‘Yajña is to be performed with aja, is the saying and aja here means the goat and no other animal. On which the Ṛṣis said : Perform Yajña with the seeds, is the saying of the Vedas. Aja means the seeds, hence do not interpret it as goat. If the animal violence is performed that is not the dharma -way of life- of wise men. ‘Aja’ is the name of one type of grain. It is used as oblation. But one is not supposed to sacrifice a goat in the Yajña. Killing animals is not the real practice and rite.

The Vāyu-purāṇa says, O Gods ! Perform Yajña with the seeds, where there will be no violence. In addition to that use the seeds that are three years old, which have no capacity of reproduction. The Jain literature reflects the same thought. In Syādvādamañjirī one gets further more information about the age of various seeds, that can be used in the sacrifice, like Vrihī should be of three years old, masur of five years old, kanku of seven years old, etc.

Pañcatantra says, the Yajña performers, who kill the animal for sacrifice are idiots. They do not know the true meaning of the Vedic sayings. The Vedas say perform Yajña with aja. Aja means seven years old vrihī and not the goat.

According to Yudhishtira Mimansaka the main reason of beginning of violent acts in the Yajña as it has a basis in the story of Uparicara Vasu, is the wrong interpretation of the words that had a relation with the Yajña and its oblations- as the meaning of aja or alabha and alambha etc. He interprets the 'aja' as the one, who is not born.

Bhagavān Buddha has always protested the wrong practice of animal sacrifice in the Yajña. He explained strongly and repeatedly, that this wrong practice is against Vedas.

The Upaniṣads explain that the real religion is helpful to purify the mind and body. For the purification of mind and body Yajña should be performed. The violent deeds lead to impurity of the mind. The violence in the Yajña does not purify the mind, but spoils it. Hence avoid it strongly.

While explaining Satavalekar has searched if any term, any word regarding the animal-sacrifice has occurred in the Vedas and the literature regarding the Vedas. He refers to Nighaṇṭu for the different names of the Yajña at first place.

Yajñaḥ | Venāḥ | Adhvaraḥ | Meghaḥ | Viḍḍhaḥ | Nāryaḥ | Savanamḥ |
Hotrāḥ | Iṣṭiḥ | Devatāḥ | Makhāḥ | Viṣṇuḥ | Inḍuḥ | Prajāpatiḥ | Dharmāḥ |
Iti Pañcadaśa Yajñanāmāni | (Nighaṇṭu 3.17) ²⁸

With the help of these names Satavalekar had explained the meaning of the word Yajña. He adds further that in many texts 'Nārī' is also one of the names of the Yajña. All the meanings of these different names of Yajña are discussed by Satavalekar in details.²⁹

1. Yajña : to have respect and honour for pundits, knowledgeable persons, intelligent persons and co-operative persons, to understand their qualities and

²⁸ Satavalekar, Shripad, Damodar. *Yajña- Yajñatil Havindravyancha Vichar*, p. 2.

²⁹ vide, Satavalekar. *Yajña*, pp. 2-8.

have love for them and their work. To sacrifice or to help or to give (dāna) is also one meaning. Hence there is no meaning of this word that gives any reference of the meaning as 'to kill' or to do any violent action.

2. Vena : to improve, to prosper, to get felicitated, to felicitate someone, to acquire knowledge of languages and Śāstras, to get fulfilled one's ambition, to become glorious, to have plenty of food, grains, etc., to acquire knowledge, to collect students and teach them, to demolish the disastrous things and happenings.

3. Adhvara : Nighaṇṭu (2.19) explains the meaning of the verb 'dhvarati' as 'killing'. When it gets the prefix as 'a', which has a negative meaning. That means 'where no kind of killing is done' is 'Adhvara'. This word not only opposes the killing but also expresses that in the Yajña any type of violence is not allowed. When Adhvara is one of the names of the Yajña, it explains very clearly that in the Yajña no animal sacrifice is done and the one who never does any killing of animal sacrifice is called 'Adhvaryu'- the main Ṛtvija of the Yajña. This meaning explains that there is no place to do violence or to sacrifice any animal.

4. Megha : The author of the Nirukta has taken special efforts to introduce the meaning of this word, as one may mistake and take the meaning of the root form of the word, which may have a meaning as killing. But according to Nirukta 'Medhā' is also called the intelligence. He has taken keen efforts so that the meaning is not to be connected with 'killing'. At the same Dev-Rajayajva has explained the word as - the action that destroys the sins, bad deeds or calamities. Here he has taken the meaning of the word 'Medh' as to destroy or to spoil and not as to kill. According to him this word has only two meanings - intelligence or to do the work of intelligence or to inculcate love or collectiveness and oneness and to demolish everything that is bad.

5. Viḍḍha : to gain knowledge or to impart knowledge, to ask for or to search, to gain or to give the gain, to be or to become important, to inspire, to write history or to tell history, to dwell. It has no relation with violence as per the meaning.

6. Nārya : to obey the rules or to let others obey the rules (of ṛt). The obeying rules is not only connected with personal life, but with the nation.
 7. Savanama : to gain prosperity, to enhance prosperity.
 8. Hotrā : to give or to take. According to Nighaṅṭu it means to learn language. Nighaṅṭu says leaning language is a kind of Yajña. Aitareya Brāhmaṇa (5.4.5) expresses the same opinion.
 9. Iṣṭi : to felicitate the elders, to have devotion towards deities, love, favour, prosperity and development and wish are the various meanings of this word.
 10. Devatātā : to have wish to win, sports, business, happiness, pride, rest, skin, inspiration, dialogue, to make someone happy, rubbing.
 11. Makhā : The action in which the deities are worshipped.
 12. Viṣṇu : to get special happiness, spread or propagate, scope, special experiment.
 13. Indu : to soak or to make something wet.
 14. Prajāpati : to protect the subjects, to enrich and lead the prosperous life of subjects, to nourish and up bring the subjects.
 15. Dharmā : to demolish, to destroy bad things and to increase good deeds.
- Hence according to Nighaṅṭu and Nirukta the different names of Yajña do not mean violence of any kind. If the violence was important, the names describing the Yajña might have included some name regarding it. But at the same 'Adhvar'- non violence is one of the names of Yajña. Thus in Yajña any type of violence can not be included.
- The references of the Vedas tell the same thing, that they do not allow any kind of violence in the Yajña. As the Ṛk of the ṚV says the Yajña, that is performed according to the rules and without any violence is benevolent for the whole mankind.

अग्ने यं यज्ञमध्वरं विश्वतः परिभूरसि ।
स इद्वेषु गच्छति ॥

[RV 1.1.4]

For explaining the issue Gangaprasad Upadhyay has used many quotations from RV and has tried to elaborate the hidden meaning behind the Ṛcaḥ used for 'Aśwamedha' and 'Gomedha' Yajña. He writes, the word 'Aśwamedha' comes in RV as a 'taddhita' form Āśwamedha five times. But it does not come in relation word Yajña. These Ṛcaḥ are 5.27.4, 5.27.5, 5.27.6, 8.68.15, 8.68.16. For throwing more light on the meaning he refers to Sāyaṇacārya. He writes according to Sāyaṇacārya Aśwamedha is a name of a rājarṣi. For using name of his son a special noun is used that is Āśwamedha.³⁰

According to YV the first mantra prays Lord : Please, protect the animals of the yajamāna.(WYV 1.1). The same saṁhitā tells further : Do not kill cow. Do not kill two legged or four legged animals. Do not kill horses as they are useful in the war. O Lord! Do not kill cows , as the cow supplies clarified butter and also the animals like cow. Please protect animals having fur on their back, the camels in the forests and two legged and four legged animals. (Obviously do not follow violence at all.)(WYV 13.43; 47-50).The prayer says do not even touch the skin of any one of them. Then the question of killing them does not even arise. If they are killed the human beings are at a great loss.

Further more in the WYV there is one mantra saying : O! Medicines ! Protect them O weapon! Do not kill them (4.1). But unfortunately this mantra is used while sacrificing an animal. Those who practice the violence do not care for the real meaning. The line that says do not kill any animal is used, while an animal is killed.³¹

³⁰ vide, Upadhyay, Gangaprasad. Sayan aur Dayanand, Satyarth Prakashan Nyas, Kurukshetra, 2008, pp. 99-119.

³¹ op. cit. Satavlekar, Shripad, Damodar. *Yajña- Yajñatīl* Havirdravyanchar Vichar, p. 12.

If one concentrates on the Nirukta regarding this issue, there is a story of 'Kautsa' (Nirukta 1.15) , in which Yāskācāryā says : if a blind person cannot see a pole in his way and bangs on it, it is not the fault of the pole but of the person. Same way if people using a mantra, that respects non-violence, for the violent act, the mantra is not at fault.

AV in its mantra (9.6.9) says, the cow-milk is very teasy and sumptuous. 'Have only that. Do not have meat of the cow. Only the milk is to be taken and not the meat. Same rule is for the oblation in the Yajña. Even the mantras of the MB say : the best quality of 'Payasa' (milk and milk products) are to be sacrificed in the fire. Further more AV explains three meanings of the word 'Aja' (AV 9.5.7), which is mostly mistaken. 'Aja' is the name of one type of grain. It is used as oblation. But one is not supposed to sacrifice a goat in the Yajña. Killing animals is not the real practice and rite.

The meaning of 'Aja' as explained by the Vedas is like :

अहेळमानो ररिवाँ अजाश्व श्रवस्यतामजाश्व ।

[RV 1.138.4]

These meanings of 'Aja' according to the Vedas are overlooked and the normally used meaning as 'goat' is derived.

अजो अग्निरजमु ज्योतिराहुरेजं ।

अजस्तमांस्यप हन्ति दूरमस्मिंल्लोके ।।

[AV 9.5.7]

'Aja' means agni, the flame of agni, the ray of sunlight that leaves apart or demolishes the darkness amongst the people. According to Nighaṅṭu the meaning of 'Aja' is the sunray. (Nighaṅṭu 1.15) The Ṛc of the ṚV (1.138.4) expresses the same meaning. Thus the word 'aja' in the Vedas means : the fast moving and bright rays of the sun, which remove the darkness of all

kinds. The word 'Aśwa' in the same Ṛk means very fast moving. When the actual sense of these words is much different, those who take a superficial meaning are wrong and not the mantra.

According to AV (9.5.20-21) the meaning of 'aja' is much different. It says the Lord- who is not born like others. Satavalekar, while explaining the meaning of the mantra, states, that 'aja' is the Lord himself and his body parts.

While clarifying the meaning of 'paśu' - animal, he writes, the root 'dṛśya' is given order to see 'paśya' and the word is created 'Paśyati iti paśu', i.e. the one who sees everything, who is present everywhere, seer. Another word, that occurs many times with the reference of Yajña is 'paśu'.

According to Brāhmaṇas the meaning of it is food grains or medicinal plants or 'Paśyati iti paśuḥ' keeping this etymology aside one has derived the meaning of the word. The one, who can see beyond, who is present everywhere and all the while. For this great person, ie. God, the libations are offered to express the gratitude and respect towards Him. The Brāhmaṇas have explained the words like blood, meat, bones, skin etc. They are as the skin of the grain(skin), pieces of the grain(bones), medium grinded floor (meat), fine grinded floor(blood).³² Agni, Wind and Sun are the Seers, they see everything happening. Thus Yajña is performed for them.³³

The word 'kratu' is used many times in connection with Yajña. According to Nighaṇṭu it means action and intelligence. The word is derived from the root 'kr'. Though violence is an action, it is not suggested by the religion, not it is any kind of nature of helping others or serving others. The word Yajña means felicitation, love, favour. All the names of Yajña, listed under the title Yajña, never mean violence by any means, became all these names denote the above mentioned three meanings.

The Ṛtvija, who perform Yajña have special names. If the meanings of these

³² Kulkarni, E. D. Vedatvatdashaka - Ahimsa, Panchasadhan, 17 July 1977, Pune, p. 4.

³³ op.cit. Satavalekar, Shripad Damodar. Yajña- Yajñatil Havirdravyanchara Vichar, p. 17.

names are sought one can find out if there is any relation of Yajña with violence. The names are as follows :

1. Hotā - the person, who does the sacrifice or gives oblation. The other meaning is doing favour.
2. Brahmā - Master of all four Vedas. He is felicitated as Brāhma, as he is a knowledgeable person.
3. Adhvaryu - He performs Yajña without any violence. He is the main person of the sacrifice and his intention or purpose of work is not to follow action of violence.
4. Pratistātā - He sits at a stable place and does all the work regarding Yajña.
5. Āgnidhra - He ignites the fire or creates the fire.
6. Maitrāvaruṇa - He sings the sūktas for Mitra and Varuṇa and does the work in connection with them.
7. Brāhmaṇacchansī - He gets the knowledge from the Brāhmaṇas or from the knowledgeable persons and tells others or brāhmaṇas.
8. Potā - He purifies everything.
9. Neṣṭā - He takes others with or he leads others.
10. Acchavāka - He studies the Acchavāka- sūkta specially, understands it properly and then recites it.
11. Grāvastut - While pressing the Somaplant with the help of stones, some sūktas are recited. He is the person, who sings these sūktas.
12. Subrahmaṇya : He sings the bestowing sūktas. He is very intelligent.
13. Unnetā : He helps in offering oblation and all concerned action.
14. Udagātā : He sings the Ṛcaḥ from the SV regarding Yajña in a melodious rhythm.
15. Prastotā : He sings mantras regarding Yajña from YV.
16. Pratihartā : He takes all the things used in Yajña near the altar.
17. Sadasya : He examines if the rites of Yajña are performed according to the norm.

18. Upadraṣṭā : He examines and observes the complete action of Yajña.

19. Somapravāka : He learns the specialities of Soma juice and examines.

20. Camasādhvaryu : He performs oblations with the help of a special vessel.³⁴ One can notice here, that the names of these various Ṛtvik do not denote any violence. Their names explain the special task, that every person has to follow in the course of Yajña.

The Brāhmaṇas explain that some specific plants are medicinal. Hence they can be used for oblation in the Yajña.

Manu Smṛti makes the issue much clear, so that no doubt should arise. It says (5.51) : The one, who gives the permission to kill; the one, who cuts it; one, who kills; one, who sells the meat; one, who buys the meat; one, who cooks it; one, who takes it; one, who eats it; all these are dangerous. They are violent persons. They gain the sin of eight different types for their violent deeds.

In the Śāntiparva of MB (336.5 -10) the story of Aśwamedha Yajña is narrated, where Bṛahaspati was the Ṛtvija. According to this story in this Yajña there was no violent action committed and not a single animal was killed. Many kings were present to celebrate this Yajña. Further more explains Śāntiparva (337.4 - 5) according to the Vedas grains are to be used for oblation. 'Aja' is the name of a grain. Hence use that grain for oblation in a sacrifice. Killing goat is not allowed for you. Killing any animal is not the right deed according to the religion.

The ViṣṇuP explains , (1.6.23 -25) there are fourteen medicinal things grains or plants, that can be used in a sacrifice as an oblation. They are Rice, Jav, Urad, Wheat, Aṇu, Sesame seeds, Priyangu, Kuḷith, are eight grains and Śāmak, Nīvāra, Jartila, Sagavedhuk, Veṇuyava and Markataka are six medicinal plants, that grow in forests. If one uses these special things as an

³⁴ vide, Kulkarni, S.K. *Paramapuruṣa*, Pune, 2008, pp. 168 - 169. And Satavlekar, Shripad Damodar. *Yajña-Yajñatil HavirdravyanCHA Vichar*, pp. 8 - 10.

oblation, one gets the positive effects through the sacrifice. In the seventh part of the ViṣṇuP (1.7.32 -34) the mantras narrate not ot do any type of the violence in the Yajña. For the explanation the symbolic words and relations are used. Through these symbols the vast scope of damage and danger, caused because of the violence in the Yajña, has been explained. The ViṣṇuP is the greatest amongst all the 18 Purāṇas and the MB is called the fifth Veda. Hence the due references are used to show that the violence in the Yajña is prohibited. The importance of Soma violence. Non-violence is the best religion. Still commit violent actions and are able to gain sin. These actions include 1. To make someone angry 2. To disturb or to harm someone 3. To create disease 4. To take out blood 5. To interfere in others business 6. To exhibit other's weakness and faults 7. To think of doing harm to someone 8. To make others unhappy 9. To prohibit others 10. To kill or to murder.

Thus one can find out from the list of minute details, that it is very difficult to understand the religion. The commandments of eternal religion function or manifest at a subtle level. plant used for sacrifice, is explained in the ŚivaP. (Vāyavīya 2.27.27 -28, 30 -31). According to it soma is benevolent and peace giving energy. The sacrificial sticks should be of some specific trees, like -Palāśa. One should use clarified butter, Java, Sesame seeds, Lāhya (rosted rice) for the oblation. Sacrificial sticks of Audumbara, Aśvattha and Śamī; can also be used for oblation. AgniP has explained that to harm, to disturb, any one is also violence. Non-violence is the best religion. Still commit violent actions and are able to gain sin. These actions include 1. To make someone angry 2. To disturb or to harm someone 3. To create disease 4. To take out blood 5. To interfere in others business 6. To exhibit other's weakness and faults 7. To think of doing harm to someone 8. To make others unhappy 9. To prohibit others 10. To kill or to murder.

The digestive system of the human beings is not meant for non-vegetarian food. It is similar as the animals eating fruits and roots. Many references can be found in the Vedas, that are available at present and also in the various Brāhmaṇas and Śrautasūtras. According to Yudhishtir Mimansak the

violence in the Yajña was added in the 'uttarkala' and according to the Jaiminiya Nyaya this act should be prohibited.

Thus one can find out from these minute details, that it is very difficult to understand the religion. The commandments of eternal religion function or manifest at a subtle level.

4.2 : Darśapūrṇamāseṣṭi

Full-moon day and New-moon day are the stages of moon or the ultimate limit of increasing and decreasing light. These are the transition periods. The sacrifices that are performed on Full-moon day and New-moon day are called Darśapūrṇamāseṣṭi. They are performed sometimes to fulfill some wishes. Hence they are also called Kāmya-Yajñas. The Yajña that is performed on New-moon day is called Darśeṣṭi and on Full-moon day Pūrṇamāseṣṭi is performed. On Darśeṣṭi the Yajña is performed for Agni and Indrāgni and on Pūrṇamāseṣṭi for Agni and Agniṣoma deities. If the yajamān has performed Somayāga then for one year he has to perform Darśeṣṭi for Indra and Mahendra deities. According to some Sūtras the Pūrṇamāseṣṭi is performed for Viṣṇu and Prajāpati. Clarified butter and puroḍaśa are used for the oblations. Approximately five to six Ṛtvija take part in the whole procedure.³⁵ In these sacrifices 13 to 14 main oblations are offered. Milk and curds is used for offerings, says Jaiminīya in his Sankarsh-Kand (2.2.30) the same details are found in Pūrva-Mīmāṃsā (10.2.30). It says further that 14 oblations are given on full-moon day and 13 on new-moon day. This Yajña is to be performed for the lifetime as Agnihotra. It is stated by Śabarswāmi the writer

³⁵ Op.Cit. *Vedaśāstradīpikā*, Hirak-Mohotsava-Smarak-Grantha, Vedashastrottejak Sabha, Pune, pp. 59-60.

of Mīmāṃsā-Śabarbhāṣya (2.4.4). This sacrifice is performed before or after Somayāga also. According to Kashikar the Yajña is performed with the wish of obtaining heaven. The mantras from ṚV and YV are used for these sacrifices. There is a difference of opinion on the issue of duration or for how many years consistently this sacrifice is to be performed. ŚB writes in details that one can perform the Yajña for 30 years and leave it (11.1.2.13) or a Yajamāna, who performs a Dākśāyana yāga with this particular Yajña. He can stop doing it after 15 years (11.1.2.13). Actually in this procedure, doing 2 sacrifices on full-moon day and 2 on new-moon day for 15 years, the number of sacrifices performed is the same as the sacrifices performed in 30 years.

4.3 : Vyāhṛtiḥoma

Another Naimittik sacrifice is Vyāhṛtiḥoma. This sacrifice can be performed on different special occasions. It consists of four oblations. It requires very little time and can be performed easily. Clarified butter is used mainly as the oblation. At the time of marriage, threading ceremony, house warming etc., this sacrifice is performed. In this Yajña a connection is built between the earth and the heaven through the energy media of fire and the sun.

The mantras for this Yajña are as follows :

भूःस्वाहा, अग्नये इदं न मम ।

भुवः स्वाहा, वायवे इदं न मम ।

स्वः स्वाहा, सूर्याय इदं न मम ।

भुर्भुवःस्वः स्वाहा, प्रजापतये इदं न मम ।

[Taitt. Up. 1.5]

While reciting this mantra one at a time oblation of clarified butter is offered in the fire, each time when the word Swāhā is recited, i.e. four times ghee is offered. This homa is performed in the same vessel, in which Agnihotra is performed.

4.4 Havan

To acquire peace and purified atmosphere Havan is performed on many occasions. For this Havan clarified butter, sesame seeds, dried twigs of specified trees, lahya, grass shoots (durva), etc. is used as oblation. During the Havan some Vedic mantra is chanted. Many times the Mahāmṛtuñjaya mantra is used for Havan.

त्र्यम्बकं यजामहे, सुगन्धिं पुष्टिवर्धनम् ।
उर्वारुकमिव बन्धनान्मृत्योर्मुक्षीय माऽमृतात् ॥
[RV 7.59.12]

One finds this mantra in Taittirīya Saṁhitā 1.8.6, in WYV Vājasenīya-Saṁhitā 3.60, in Kaṭhak Saṁhitā 9.32. One finds the reference of this mantra in Merutantra. In Samrājyalaxmīpīthikā Lord Śivā explains the importance of the same to Pārvatī in Bhairavtantra of Mahāśaivatāntra - Patal 30, 8-9. On the same the commentaries of Sāyaṇacārya, Venkaṭamādhava, Bhattbhāskaramiśrā, Uvatācārya and Mahīdhara are available.

This mantra says : I perform sacrifice for the master of all three worlds, ie. Earth, heaven and skies - the almighty father. Due to its effects of this Yajña the imbalance of these three - Bhuḥ, Bhuvaḥ and Swaḥ - is cleaned and destroyed. The atmosphere becomes pure. In the nature the harmony develops and increases. The faults in my behaviour - even from my earlier

births - tie me in the process of karma. These ties are cut off and it is possible to get salvation. This salvation is obtained before death.

It also says : We perform sacrifice for the Lord, who has got three eyes, who is the father of Brahmā, Viṣṇu and Śiva and whose mother is the Goddess Mahātripursuṅdari. Lord, the Vedas are full of your prayer. Your fame has crossed all the boundaries of the world and the saint of your body is nourishing. You are powerful and develop the spiritual strength of the human beings. Lord, you are benevolent to us and drive us away from the fear of death and from all the worldly sorrows. Lead our mind towards the endless happiness. Do not let us hinder from this path of self-realisation and a path aiming towards the oneness with you.

Nowadays in Germany and other countries sacrifices are done on full moon day and new moon day. On these days oblations of clarified butter with the 'Mahāmṛtyuñjaya mantra' are offered in the fire for twenty-four hours for seeking special results. The details are discussed in the further chapter.

These above discussed Yajñas are performed occasionally as mentioned earlier. They are called Kāmya-Yajñas, that are performed to fulfilling certain wishes. Agnihotra is the Nitya-Yajña, that is to be performed every day regularly. One can find the answer of various doubts regarding, why to perform Agnihotra -that is described by the scriptures as a regular and unavoidable rite.

... ..

5. Agnihotra

The Vedas, the most ancient wisdom revealed to man, have recommended Agnihotra, so that man can build up a fundamental attitude towards his life from body, mind and soul angle. Innumerable persons, by performing Agnihotra regularly, have experienced this basic change in their way of thinking, towards ever mounting problems of life. With the researches on Agnihotra a new horizon has been re-opened, for the IT generation of the world.

The Agnihotra is the 'Nitya' Yajña. Nitya denotes its regular nature. As per the Vedas, it is to be performed every evening and every morning, ie. exactly at local sunset time and exactly at local sunrise time. 'Agni' means fire and 'hotra' means offering oblation. Thus Agnihotra is the act of offering oblations to Agni - fire. It is not a mere ritual. But is a part and parcel of Vedic science. This Yajña is to be performed regularly throughout the life.

Yajña is the technical term from the Vedic science of bioenergy denoting the process of removing the toxic conditions of atmosphere through the agency of fire. This meaning purifying of the atmosphere with fire as the medium. When one heals the atmosphere, the healed atmosphere heals him.

*Agnihotra, which has scientific, psychological and para-psychological implications, needs to be performed only in a stipulated way and at stipulated times. The shape of the pot for the ritual is most important.*¹

¹ Parkhe, M.S. Agnihotra, The Vedic Solution For Present-day Problems, Vaidika Samśodhan Maṇḍala, Poona, 1982, p 50.

As any other Yajña, Agnihotra is performed in a special manner. Certain disciplines have to be followed while performing Agnihotra. With a little practice everyone can perform it. It does not take more than five to ten minutes to perform.

5.1 : Procedure

Agnihotra is performed twice a day. A semi pyramid shaped copper pot is prescribed for Agnihotra. The pot - copper pyramid should be placed on a fire-resistant place. When the fire is ignited in the pot, it gets quite hot. A small fire is prepared with the dry cow-dung cakes in the pot. The cow-dung pieces should be arranged so that there is good ventilation in the pot. First put a small piece below and then arrange the pieces- one above the other to let have some gap in between them. One can use gugul, camphor or cotton wick soaked in cow ghee to ignite the fire. Use of any petroleum products should be strictly avoided. For oblations raw rice is required. Thirty to thirty -five grains per oblation are sufficient. It is almost two pinches of raw, unbroken rice grains, smeared with clarified butter made of cow's milk. Two to three drops of ghee are sufficient. Then with the right hand give the offerings. The oblations are offered while chanting two Vedic mantras that are very simple.

The mantras for the sunrise are :

सूर्याय स्वाहा, सूर्याय इदं न मम ।

प्रजापतये स्वाहा, प्रजापतये इदं न मम ।

[GoG 1.1.9-10]

The mantras for the sunset are :

अग्नये स्वाहा, अग्नये इदं न मम ।

प्रजापतये स्वाहा, प्रजापतये इदं न मम ।

[GoG 1.1.9-10]

These mantras of morning and evening sacrifice occur at first place in YV. Then they are found in various Brāhmaṇas. They are in Aśwalāyana -, Pārāśara - and Gobhila Gṛhyasūtra. As Gobhil Gṛhyasūtra refers these mantras occur in Aśwalāyana Gṛhyasūtra as the part of the mantras of Aupāsanhoma - regular rituals. Then they are referred in the official scriptures regarding Bramhakarmasamućāya, nitya-karma and regular rituals.²

The deities of the sāyamprātarhoma also occur in œrauta agnihotra. The formulas run: agnaye swāhā (first libation in the evening), prajāpataye swāhā (according to some texts recited in thought or silently); sūryāya swāhā (in the morning), prajāpataye swāhā. ³

² vide, Kulkarni, S. K. Devayan, pp. 73 & 74.

³ Bodewitz. Daily Evening And Morning Offering(Agnihotra), p. 193.

Bodewitz further explains the procedure of the rite. He writes :

Turning again to the sāyaṃprātarhoma, which seems to be more sacred than the vaiśvadeva and which represents the gṛhya version of the agnihotra, one may draw attention to the following agreements with the śrauta rite. The dedications to the deities have been mentioned above. The second libation, which is the śrauta version belonged to prajāpati, here is accompanied by the formula prajāpataye swāhā , or is silently offered (as in agnihotra). The second libation is larger according to some texts. The ritual seems to be definitely simpler than in the agnihotra. Indeed a samidh is placed on the fire before the offering. According to some texts the preparatory actions are the same as agnihotra. The offering, however, is performed with the hand instead of a sacrificial ladle, if at least the usual oblations of rice, of barley are made. Some texts show a closer agreement with the śrauta rite. If the material of the agnihotra is used, the usual actions of this rite seem to take place as well. Parallel to the uddharaṇa of the fire from the gāṛhapatya to the āhavanīya taking the place before sunset and sunrise according to ŚB, the single fire should be kindled before sunrise and sunset. Just as in the agnihotra the evening performance is regarded as the first : i.e. the gṛhya agnihotra should start with an evening offering after the gṛhya version of the agnyādhāna.⁴

Bodewitz is making a difference between Agnihotra and sāyaṃprātarhoma, hence is trying to find out similarities and differences. While explaining the relation of Agnihotra with other sacrifices he states, it is a simple sacrifice and compulsory. ... It forms the daily confirmation of the relationship between the āhitāgni and his fire. Indeed the Agnihotra may have several cosmological implications in the Brāhmaṇas. However, it is essentially a personal ritual with at least partially personal aims.⁵

⁴ Op cit, p. 193.

⁵ vide, Bodewitz. Daily Evening And Morning Offering(Agnihotra), p.125.

The cumulative effect of all these steps of performance makes one believe that Agnihotra should be something more than a mere religious rite.

The beginning of Agnihotra is always with the evening offerings. According to YV, at the time of creation of the universe, Prajāpati created the Agni at first. Hence offerings in the Agni should be the first rite, decided Prajāpati. It says further, at the sunset the offerings are obliged to Agni and Prajāpati. At the sunrise the glory of Agni is transferred into Sun. Thus offerings of morning are for Sun and Prajāpati.

YV further says that after oblations certain mantras regarding Agni and Sun are to be chanted. But it is not the part of basic rite. Some people chanted these and certain other prayers, who were able to do it. It shows that offering two oblations in the morning and two in the evening was Agnihotra rite, that was followed originally. This rite is very easy and simple.

5.2 : Basic religion

Perform Agnihotra twice daily is the order of the Vedas. As it is the order of the Vedas it is benevolent for the human beings, for mental perfection and for the harmony of the universe, as it is created by the God.

The fire worship is the basic religion and at the same time the important medium, with which the basic foundation of life becomes strong, wide and ever lasting. In addition to that anyone can perform fire worship. There is no pre-requisite. The one, who has got a wish to perform, can offer the libations in the fire.

The references of morning and evening sacrifices are found in the ṚV in the first Maṇḍala. This is very significant. The very beginning of ṚV is with the Praṇava, ie. with 'Om'. The next word 'Agni', who is benevolent and blessed for the word and people in the world is connected and related to Lord Agni. It is the very factor

that is the medium and instrument of praising the healthy atmosphere around the people in the world, which leads to the light of knowledge. Praise of Agni helps the person to develop his mental condition to a higher stage.

The ṚV describes the effectiveness of the fire worship from its beginning.

ॐ अग्निमीळे पुरोहितं
यज्ञस्य देवमृत्विजम्।
होतारं रत्नधातमम्।

[ṚV 1.1.1]

The word 'Agnimīle' says, 'We praise the Agni'. Though it is the word to word meaning, this praising of Agni is naturally inclusive of praising with many different mantras and the rites, that are pleasing deities by giving oblations in the Yajña according to the proper ritualistic performances. Especially in the word 'īle' the larger meaning is included, i.e. to offer oblations for deities at proper time. In the remaining words of the mantra the description of Agni is found. The word 'Ratnadhātamaṃ' means laden with precious stones. Agni is said to be the mouth of God and Yajña is called the 'Kāmadhenu'- the cow that fulfils all the wishes of the person, with whom she lives. Hence the Yajña is the medium to please all the deities. This very first mantra of ṚV explains the preciousness of fire-worship is very mysterious and important. Furthermore the word Agni cannot be merely translated as fire. The Vedas do attach much deeper significance to it .

Agni, who is the priest invoking Gods and reciting Rig mantras and who is also the seer, intelligent, offerer of oblations, true, most rich(i.e. possessing wealths. Wealth here mean material one, it means lot of sublime

and positive aspects-) and also the God Himself, comes with other Gods. Veda mantras can be interpreted in three ways at least or there are at least three levels of meanings. One is called the Adhibhautik (...) belonging to elemental or material things. The second is Adhidaivik (...) belonging to Devatas or Gods. The third one is Adhyatmik (...) belonging to soul, spirit or ultimate reality. Further, these levels depend on the viewpoint of the interpreter or the spectrum of realization or experience of the person concerned. It has been, therefore, said 'Anata Vai Vedah'. Vedas are limitless. Both meaningwise and mantrawise they have no limits. ⁶

In the first sūkta of first Maṇḍala in the ṚV the references to the everyday sacrifice are visible. The first word of the ṚV is 'Agni' - which denotes the well-being, welfare of the mankind. The complete development of mankind is possible with the worship of Agni. Hence it is mentioned at the first place. Agni is capable to create a benevolent atmosphere around us. He is the reason and medium of creating a balanced atmosphere. The Vedas make it abundantly clear that the human beings are duty bound to offer oblations to fire.

Bhagavad Gītā says :

सहयज्ञाः प्रजा सृष्ट्वा पुरोवाच प्रजापतिः ।

[Gītā 3.10]

Humanity was created simultaneously with the fire ritual (the Yajña): so said the Almighty Father at the outset. In the beginning the Almighty Father created man

⁶ Kulkarni, S. K. Path Of Light, Satyabodh Prakashan, Pune, p 22.

along with the Yajña. He explained that man can gain prosperity by performing Yajña. No Yajña ritual can be performed unless fire is generated and oblations are offered into fire. Gītā, therefore states that fire technology was made known to mankind right at the outset.

The simultaneous creation of man and Yajña must have been for meeting man's inner and outer needs. Prajāpati, here, stands for the scheme and principle of both human and social growth.⁷

According to the Vedas Prajāpati created mankind with the eternal religion. When the Nitya-type of Yajña is to be performed by everyone, it should be small and easy. Then it can be a part of regular life.

उपत्वाग्ने दिवेदिवे
दोषावस्तर्धिया वयम्।
नमो भरन्त एमसि॥

[RV 1.1.7]

Every word in this mantra is important. It is said that the knowledge in the Vedas is symbolic. This mantra says, Oh Agni, we, your worshippers, come near you, bow in front of you, every day in the morning and in the evening.

The AV says :

⁷ Parkhe, M.S. Agnihotra, The Vedic Solution For Present-day Problems, p 56.

सायं सायं गृहपतिर्नो अग्निः
प्रातः प्रातः सौमनसस्य दाता ।
प्रातः प्रातः गृहपतिर्नो अग्निः
सायं सायं सौमनसस्य दाता ॥

[AV 19.55.3-4]

AV explains here the results of Yajña done every evening and morning. It says the Agnihotra that is performed in the morning keeps the mind fresh, enthusiastic and happy till the evening and the Agnihotra performed in the evening keeps the mind fresh till the morning. Saumansasya which is cheerfulness of mind will not be possible unless one is relieved of both physical and mental anxieties and the stress therefrom. The dynamic energy of mind is thus set into action.

It can be realised from the above quotation that such an effect remains for about twelve hours and when Agnihotra is performed both in the evening and morning, it remains for twenty-four hours. To put it in another way, one may say that the performer of Agnihotra and others remaining in the atmosphere, by inhaling gasses generated out of Agnihotra, experience a psycho-medical effect, the efficacy of which remains for twelve hours.⁸

⁸ Kulkarni, S.K. Path of Light, p. 30.

The rite performed in the transition period bends the mind in such a way, that it leaves the negative thoughts far behind and prepares the mind for the sacrifice. The wish of sacrificing and giving the needy whatever good one has, prepares the mind set to look towards his day's work as a third person . One is able to keep oneself aloof and maintain the equilibrium of his mind.

दर्शं च पौर्णमासं च अग्निहोत्रं च धीमतः ।

चातुर्मास्यानि चैवासन् तेषु धर्मः सनातनः ॥

[MB Śāntiparva 269.20]

In these words the religion is explained clearly. The basic, original religion is expressed in very simple language. The behaviour and life style according to this basic religion is also simple and easy, but at the same achieving the ultimate goal of the life on this earth. The Agnihotra rite is emphasised as the easy and simple ritual.

यज्ञेन यज्ञमयजन्त देवास्तानि धर्माणि प्रथमान्यासन् ।

[RV 1.64.50]

Gods worshipped the Yajñapuruṣa with the Yajña. It was the first and original religion or the way of worship.

The Devas (celestial bodies) performed Yajña (sacrifice) in honour of the deity of the Yajña, forming the first religion.

... fire has been referred to as instrument in transforming - the void not an apparent universe of matter, and the same fire formed the foundation for the material as well as the spiritual evolution of man. Yajña or the fire ritual is called here as the first religion of man and as seen before the definition of Dharma ...⁹

If Yajña is the original religion, then it is supposed to be followed by everyone. Then it should be very simple and easy. If the religion is said to be for certain people, for certain time and even for the people in the certain country, it cannot be the basic religion or original religion. The simplest form of worship - Yajña - is explained by all established religions, as the basic religion.

The Vedas that praise Yajña are like :

पितृदेवमनुष्याणां वेदश्चक्षुः सनातनः ।

The above mentioned line from Manu Smṛti 12.100 quotes Vamanshastri Kinjawadekar (in his book 'Agnihotracandrikā'). It says : Vedas are the eyes of people living on the earth. To earn the ultimate knowledge the Vedas are the medium. These Vedas tell to practice Yajña . One finds more information about Vedas in the same book in the following words that are from Brahad Yogi Yajñyavalkya Smṛti 12.1 :

⁹ Parkhe, M.S. Agnihotra, The Vedic Solution For Present- day Problems, p 46.

न वेदशास्त्रादन्यत्तु
किञ्चिच्छास्त्रं हि विद्यते ।

There is no science on earth that is equal to Vedas or like Vedas. In all Śastrās the Vedas are the main, where different references can be found.¹⁰

यावज्जीवमग्निहोत्रं जुहुयात् ।
नानाहिताग्निर्म्रियेत् ॥

In the same book Kinjavadekar quotes above mentioned line. He says : It is doubtless, that if Yajña is said to be the basic religion, the procedure should be very easy to follow for every single person.¹¹

सायं-प्रातः प्रयुञ्जानो अपापो भवति ।

[GA]

¹⁰ vide, Kulkarni, S.K., Devayan, pp. 45-74.

¹¹ vide, Kinjavadekar, Vamanshastri. Agnihotrachandrika, Apate, Vinayak Ganesh (Ed.), Anandashramsanskritgranthavali, Granthanka 8, Pune, 1921, p.3.

In Gaṇapati Atharvaśīrṣa one finds the reference of evening and morning ritual that frees from sins. One gets purified due to this religious practice and feels happy, calm, quiet and tensionless.

The equipments that are required for Agnihotra are affordable to every person in any society. Thus this regular practice can be performed by everyone. There is no bar between cast, creed, colour, religion and sex. Any one who can sing the mantras, who can follow the discipline of time can perform. As long as one breathe, or till the last breath perform Agnihotra.

Only when everyone in the world is able to follow the Yajña, it can be called the basic religion. This original form of praying god cannot be meant only for people dwelling in a specific country, or living in a specific time-period, or even for the people following specific religion. Otherwise such a rite cannot become basic religion. Yajña is prescribed for all the people living in this world, which is mentioned in all religions and their basic religious manuals.

Agnihotra is expressing gratitude towards the Almighty Father, as he has given to the world so many essential gifts - as water, air, light, etc.- without asking. Then it is the human beings to be grateful to God for those things. Agni is the mouth of all the deities. Hence men offer the oblations in fire and recognise and respond to what someone has done for everyone on the earth.

5.3 : Three folded form of Agni

In the ancient times the offerings were made in the morning for Sūrya and Prajāpati and in the evening for Agni and Prajāpati. The number of offerings was also limited - i.e. one for Sūrya and one for Prajāpati or one for Agni and one for

Prajāpati.

As Sūrya is called the glorious 'Brahma'. He is the energy source and light - light of knowledge also. He loves every one, including Bramha, Uṣas and various other gods. Agni is the 'Brāhmateja'. He is light and energy as Sūrya. Prajāpati, is the one who, has created everything in the world and whom everything in the world belongs to.¹²

The real meaning is that the creator of the world has to be worshipped. There are many names for Him. Every one has given Him a name according to his experience, his view and knowledge. But all of them address to the God.

Offering oblations in the fire twice daily - Agnihotra rite - was very easy and can be performed by anyone. Eventually this rite was developed larger. Then this larger rite was considered as Agnihotra rite. The original Agnihotra rite is explained by the Vedas and the larger rite of Agnihotra is explained by the writers of Śāstras. Those, who have three fires at home, ie - Gāṛhapatya, Āhavanīya and Dakṣiṇāgni - have to follow many rules. The important thing is that they have to perform Agnihotra every morning and evening. With the time the larger rite was understood as the original Agnihotra rite. But the rite according to the Vedas is very easy and very small. The longer rite of Agnihotra did not remain in the daily schedule of common man, due to its size, rules and regulations.

The grains grow because of Agni and Sūrya. That is grown for them. It belongs to the nature first. Hence it is to be offered first to the Sūrya, Agni and Prajāpati. This thought behind the Yajña or Agnihotra is most important. It is explained in 'Vāyupurāṇa' in a detailed manner.

In the 'Satya-yuga' the main rite was of fire-sacrifice. There are confusions regarding the word Agnihotra. The three folded form of Agnihotra increases it. As the picture of having three different Yajña places and all the time burning fire etc.

¹² Parkhe, M.S. Agnihotra, The Vedic Solution For Present-day Problems, p 46.

arouses in the minds of people. As this concept has its tradition of centuries. Basically Yajña and Agnihotra are the same words, denoting the fire worship. The Yajña that is performed regularly is known as Agnihotra.

The story of Tretāgnivistār occurs in Bhāgavat Mahā Purāṇa. The story of king Purūrava and Ūrvaśī can be found in the ninth skandha. The fourteenth adhyāya of it tells more about Agnihotra. Ūrvaśī narrates the king Purūrava a solution to live life happily without her. The mantra she gave to him was practised by Purūrava and got a Yajña-vessel from 'Gandharvas'. This story symbolically says : Purūrava got a Yajña-vessel from Gandharvas as a gift for a happy and benevolent life, which means Yajña is a medium of gaining material happiness. Further more Purūrava performed Yajña for getting a place in paradise. That means performance of Yajña can achieve the follower a happy life after death also.

The original rite, as the king got was only one fire. In the 'Tretāyuga' king Aila expanded it into three forms. This story of king Purūrava and king Aila occurs in the scriptures like Harivaṅśa Purāṇa, Vāyu Purāṇa etc.

एकोऽग्निः पूर्वमासीद्वै
ऐलस्त्रीस्तान् अकल्पयत्।

[VP 9.1.48]

The original form of Agni was one. King Aila has developed and enlarged it into

three forms of Agni - i.e. Gāṛhapatya, Āhavanīya and Dakṣiṇāgni.

एक एव पुरा वेदः प्रणवः सर्ववाङ्मयः ।
देवो नारायणो नान्य एकोऽग्रिर्वर्ण एक एव च ॥

[Bh Mp 9.14.48]

Earlier there was only one Veda. The institution of Yajña is also enlarged with the time, as it says that only one agni was there.

तदेतत्सत्यं मन्त्रेषु कर्माणि,
कवयो यान्यपश्यंस्तानि त्रेतायां बहुधा संततानि ।
तान्याचरथ नियतं सत्यकामा,
एष वः पन्था सुकृतस्य लोके ।

[Mu. 1.2.1]

Muṇḍakopaniṣad explains the same. It says, this is a fact that the wise sages have seen the original rites in the mantras. They got the illusion of rites (karmas) in mantras. This got elaborated in the Tretāyuga. One has to follow these rites. That is the path of wisdom and help for their development.

It becomes therefore clear, that originally only one fire - Agni- form was worshipped and that it the eternal and original religious practice.

5.4 : Significance of oblations

One finds references regarding the things that can be offered in Yajña in YV. After lighting the fire with the help of dried cow-dung cakes or dried Yajña-sticks, two offerings are made in the morning and two in the evening with cow-milk, says ŚB.

स यत्सायमस्तमिते द्वेऽआहुती जुहोति । तदेताभ्यां पूर्वाभ्यां
पद्भ्यामेतस्मित्मृत्यौ प्रतितिष्ठत्यथ यत्प्रातरनुदिते द्वेऽआहुती जुहोति
तदेताभ्यामपराभ्यां पद्भ्यामेतस्मित्मृत्यौ प्रतितिष्ठति सऽएनमेषऽउद्य-
न्नेवाऽऽदायेदेति तदेतं मृत्युमतिमुच्यते ।

[ŚB 2.3.3.9]

The person giving two libations in the evening at sunset and in the morning at sunrise - exactly when the sun is rising- offering two oblations is set free from the fear of death. As for all living beings the death is the major fear. But by offering

two libations one is free from this major fear. The time of offering the libation is mentioned is clearly. It should be offered exactly when the first rays of sun would rise on earth while accepting these offerings. Thus the exact time and exact number of libations- two libations - is explained here.

A detailed explanation about offering only two oblations is given in 'GoB'. It says:

प्रियमेधा ह वै भरव्दाजा यज्ञविदो मन्यमानास्तेहस्म न कञ्चन्ना वेदविदमुपयन्ति, ते सर्वमविदुस्ते सहैवाविदुस्तेऽग्निहोत्रमेव न समावदयन्त, तेषामेकः सकृदग्निहोत्रमजुहोत्तमितरावपृच्छतां कस्मै त्वं जुहोषीति एकधा वा इदं सर्वं प्रजापतिः प्रजापतय एवाहं सायं जुहोमीति प्रजापतये प्रातरिति। तेषां यो द्विरजुहोत् तमितरावपृच्छतां काभ्यां त्वं जुहोषीति, अग्नये प्रजापतय इति सायं, सूर्याय प्रजापतय इति प्रातः। तेषां यस्त्रिरजुहोत्तमितरावपृच्छतां केभ्यस्त्वं जुहोषीत्यग्नये प्रजापतयेऽनुमतय इति सायं, सूर्याय, प्रजापतये अग्नये स्विष्टकृत इति प्रातः। तेषां यो द्विरजुहोत्स आर्ध्नोत्स भूयिष्ठोऽभवत्प्रजया चेतरो श्रिया चेतरावत्याक्रामत्तस्य ह प्रजामितरयोः प्रजासु या तत्त्वमुपेयातां तस्माद् द्विर्होतव्यं, यजुषा चैव मनसा च यामेव स ऋद्धिमानोति तामार्ध्नोति य एवं वेद, यश्चैवं विद्वानग्निहोत्रं जुहोतीति ब्राह्मणम्।

[GoB 3.15]

Priyamedha Bharadvaja and some persons with him were considering themselves as knowledgeable pundits in Yajña-Sāstras and were not ready to go to some other Vedic pundit for a dialogue or for understanding any thing. One of them offered only one oblation during Agnihotra at evening and morning. Second person was offering oblation in the name of two deities and the third offered three oblations.

The person, who offered only one oblation during Agnihotra was asked by others, whom do you offer the oblation? His answer was, this complete world is an image of 'Prajāpati'. Hence I give oblation in his name at the time of sunrise and sunset.

The person, who gave two oblations answered, I offer at the sunset to Agni and Prajāpati and at sunrise to Sun and Prajāpati.

The third, who offered three oblations said, I offer at sunset Agni, Prajāpati and Anumati and at sunrise Sun, Prajāpati and Agniswastikrut.

Amongst these three, who offered two oblations became prosperous in all walks of life than others.¹³

Thus one should offer two oblations at sunrise and sunset.

Though the main offering medium is said to be cow-milk, to fulfil certain wish rice-grains, clarified butter made out of cow-milk, and yavāgu are offered according to TaiB.

If one desires to gain glory, one should offer clarified butter; if animal wealth is the desire, then offer milk in Yajña; if good health is desired, offer curds in Yajña and for well-being of the town use yavagu as offerings.

¹³ vide. Kulkarni, S. K. Panchasadhan, 17 Dec.1977, p. 9.

तद् ह जनको वैदेहो याज्ञवल्क्यं पप्रच्छ वेत्थाग्निहोत्रं याज्ञवल्क्या
 इति। वेदेति होवाच। किमिति। पय इति। तत् पयो न स्यात् केन
 जुहुया इति। व्रीहियवाभ्याम् इति।
 यद् व्रीहियवौ न स्यातां केन जुहुया इति।
 यद् अन्यद् धान्यं तेनेति।
 यद् अन्यद् धान्यं न स्यात् केन जुहुया इति।
 आरण्यभिर् औषधीभिर् इति।
 यद् आरण्या औषधयो न स्युः केन जुहुया इति।
 अभिर् इति।
 यद् आपो न स्युः केन जुहुया इति।
 स होवाच न वा इह तार्हि किं चनासीद् अर्थतद् उ हूयत इ व सत्यं
 श्रद्धायाम् इति। तं होवाच वेत्थाग्निहोत्रं याज्ञवल्क्य नमस्तेऽ स्तुसहस्रं
 भगवो दद्म इति।

[JaiB 1.19]

(Once King Janaka asked Yajñavalkya, if he knew about Agnihotra properly.
His answer was, 'Yes'.

'What is to be used as offering in it ?'

'Milk or milk-products'

'If it is not available, then what is to be offered ?'

'Rice grains or yava.'

'If it is not available, then what is to be offered ?'

'Use another food grain.'

'If that is not available, then what is to be offered ?'

'Use medicinal plants form the jungle.'

'If they are not available, then what is to be offered ?'

'Water.'

'If water is not available, then what is to be offered ?'

'Offer truth in the faith, that is offered earlier. In other words remember with full faith.'

'Oh! Yajñavalkya, you have recognised the proper meaning of Agnihotra. I bow in front you.'¹⁴

While explaining the importance of Agnihotra, the reference of offering truth- that is to be offered in faith- has mentioned. It says, not to miss or forget Agnihotra any time and to have complete faith or total surrender for it. In case of possibility of not performing Agnihotra the last choice is mentioned as to perform it in the mind or just by remembering the performance whole heartedly.

यदा लेलायते ह्यर्चिः हव्यवाहने ।

तदाऽऽज्यभागावन्तरेणाऽऽहुतीः प्रतिपादयेत् । ।

[Mu 1.2.2]

One should offer oblations, when the flames are seen. To offer oblation in the smoke shows neither love nor sincerity towards the performance.

The oblations that are offered in the Yajña are transformed into minute particles and intense effective material. This is proved by the modern scientists. Russian scientists have proved that the clarified butter of cow milk offered in Yajña creates smoke. This smoke reduces the radiation effects in the atmosphere on a large scale. Yajña is helpful for the individual and social development.

¹⁴ vide. Kulkarni, S. K. Panchasadhan, 17 Dec.1977, p. 10.

When the oblation burns, due to the chemical reaction smoke and steam are released. With the help of fire as a medium the oblations offered in the Yajña effect on the surroundings. The purifying gases fill the atmosphere in a large area. As smoke and steam rise up in the atmosphere, they purify the air and at the same they form clouds. These clouds bring rain. This rain water is also pure and helps plants to grow. The plants produce a good harvest. Ultimately the people are benefited.

5.5 : Significance of time

Darśapūrṇamāseṣṭi, Cāturmāsya and Agnihotra - all these three types of Yajñas have an important similarity. Agnihotra is performed in the transition period of evening and morning. Darśapūrṇamāseṣṭi is performed in transition of New-moon and Full-moon day. Similarly Cāturmāsya is performed in changing period of seasons. Amongst all these Yajñas Agnihotra is the Nitya- regular performance.

समुद्रो वा एष अहोरात्रः ।
तस्यैते गाधे तीर्थे यत्सन्धिः
तस्मात्सन्धौ होतव्यम् ॥

[ŚaB]

The continuous cycle of day and night is difficult to cross. It is like a deep ocean.

In this ocean the transition periods - time of sunset and sunrise - are such timings, that help to cross the ocean, says Kulkarni.¹⁵ These are called the most pious places. Thus at these times only the 'Havan' has to be performed, says Kulkarni in his book *Devayān* while using this quote.

One gets the reference of the Agnihotra times in AV, which is originally in RV. There are several definitions of sunrise and sunset given in the ancient Vedic knowledge. The sunset and sunrise are called the transition periods. During this period the breathing pattern changes, says Āyurveda. Hence this change effects directly on breathing pattern, blood pressure, digestive system.

5.6 : Significant Effects of Agnihotra on human mind

Certain homogenous changes in the mental stage occur with the performance of Agnihotra. They have a definite beneficial effect, as will be seen, both from individual and collective angles. A few exemplary instances of this effect on life are given below.

5.6.1: Changes in the mental status

The *Isāvāsyaopaniśad* begins with the thought of sacrificing things for the needy.

¹⁵ vide, Kulkarni, S.K. *Devayān*, p. 59.

It lays importance on performing right action. It tells people not to forget their duties. After completing the duties only one is allowed to enjoy. God is everywhere in the world and watching. Hence, do not follow selfishness and greediness. Always think of the fact that whom does all the wealth in the world belong to.

तेन त्यक्तेन भुञ्जीथाः
मा गृधः, कस्यास्विध्नम् ॥

[Īśāvāsya.1]

It says, enjoy and experience everything with sacrifice. Do not have a wish of acquiring other's wealth. It will not give you any satisfaction. This line also referees to the same idea of 'Idam na mama'. When the selfishness is kept away, one can enjoy the life with a special happiness. This idea of 'this is not mine, this is yours - of God', keeps the person in a positive thought. It gives a new dimension to look towards problems of life. One gets a special happiness. This happiness is to be experienced by oneself. It can not be explained in mere words. The beginning of a new mental procedure starts with the mantra 'Idam na mama'.

The last part of the mantra - Idam na mama- has a special significance in moulding the mind. The utterance of these words at sensitive moments changes the attitude towards wealth and worldly aspirations. The repetition of these mantras twice a day helps in developing such a detachment. Moreover this leads to seeking refuge in Almighty Father and to a spiritual upliftment. ¹⁶

The mind slowly withdraws out from worldly matters, as it is all engrossed with the

¹⁶ vide. Kulkarni, S.K. Path of Light, pp. 29-30.

thought of God. The offering of oblation to fire at sunset and sunrise cultivates the inclination of human mind day after day ultimately towards surrender to God. This is described even as 'total surrender' to God.

Not mine but thy will be done.

This quote of Bible expresses the exact feelings. Not according to my wish but according to your wish will be my behaviour. The selfishness, egoism should be destroyed, is the main aim of this mantra. It is directly related to the business of human mind. The thoughts in the mind, the vibrations - taking place while articulating a sound- affect the mind and surroundings. Hence the thoughts, vibrations and the aim (that arises in the mind) should be proper and right. As while fulfilling these thoughts one is going on a path, that has to be right, what one would seed, would ripe. Thus this aim should be proper and benevolent. The effect of our thoughts is strengthened by Agnihotra. One tries to do meritorious deeds without attachment, without expectation of reward. One tries to do it because it is our duty. Because of changes in oneself which one experiences if one does Agnihotra regularly, one finds oneself better able to help others in need. The manner in which one offers this help goes a long way towards determining its ultimate value to others and to oneself. This is where the conception of and behaviour in consonance with surrender are important. Here Agnihotra is discussed with the ritualistic views. As many Indian people love to know where exactly one finds the references of this sacrifice in the ancient scriptures. Today many scientists are working out to find the effects of Agnihotra - Yajña, with the yardsticks of natural sciences and modern technologies, with all the possible dimensions in various parts of the world. Here some of the important researches are discussed in the further chapter, that are undertaken in Germany,

as the concept of working in this field with a scientific approach was started and is lead by Germans.

All these researches show the usefulness and importance of sacrifices in various ways and angles in the daily life of common man all over the world. It is a proven powerful solution to pollution according to scientists and scholars. Hence many people have started adopting this as their lifestyle.

... ..

6 . Yajña : A Scientific Perspective

In this study the main importance is given to the scientific aspects of the Yajña. Around the globe, in many countries people are performing daily morning and evening sacrifices. In India people have altogether different view of looking towards the whole process of Yajña, which is mainly ritualistic and religious. But in Western countries, the scholars are viewing the process of Yajña as a chemical experiment, performed with certain disciplines. The German scholars and scientists are the first to observe it in this manner.

All the following researches have a strong potential to explain the relevance of daily Yajña - Agnihotra in the life of modern man.

6.1 : Purification of atmosphere

Modern science has proved that the area and atmosphere around Agnihotra is purified. Due to Agni or burning of oblations in the fire microbes are formed and mixed in the air, e.g. it is difficult to sit in the air where chillies are put in the fire. Same way when oblation is burnt harmonious air is created. The microbes are carried further in the air around. They purify the air in that area.

The performance of Agnihotra purifies the air and removes the toxins in the atmosphere. It also purifies the contaminated water. It improves the nutritional content of interim space in between the planets. It seeds the clouds to precipitate nutritional rain. Yajñas help in patching up the ozone filter damaged by pollution. Plankton is now radioactive in some parts. Fish are dying. Fish can not breathe. Gills become clogged with debris and chemicals floating in the bodies of water. They begin to suffocate in the California coast. But the scientists do not find any

trace of any poison in their bodies. Greater amount of normal elements such as nitrogen, potassium, chlorine and iodine. It appears that the metabolic rate increased to such a point that things just exploded from pressure. The water resources get purified, leading to a better absorption of sun's rays, if Agnihotra is practised on a larger scale. This brings nature back to harmony.¹

When elements begin to change, unknown catalytic elements begin moving into the intersphere setting off a chain reaction of disasters. These elements become beneficial in Agnihotra atmosphere. Somehow due to a magnetic like pull set up where Yajña is performed.

A person seeking mental peace and purification, if sits in this type of air he can achieve his goal. Due to Agnihotra and its purifying effects negative thoughts, feelings, anger, anxiety, tension decrease and positive thoughts overcome them. After performing Yajña or when the offerings are made with the chanting of mantras certain changes occur, they are like follows :

1. A white smoke comes out, which can occupy 20'x20'x16' size hall.
2. The atmosphere in the hall is filled with humid gases and steam.
3. When the offerings are burning, the rice grain burn with a noise and some gases are released. They are - 1. Ethylene oxide 2. Propylene oxide 3. Formal Dehyde 4. Vita Propyo Lactones. All these gases are purifying and useful in killing microbes. They are helpful for human beings. The effects of all gases are depending on humidity and temperature. This can bring concessions like follows:
 1. The person returning home after tiring day's work is benefited due to Agnihotra atmosphere.
 2. The gases arising from the offerings are chemically reacted with the polluted gases and the clean air is formed.
 3. The gases arising from the offerings kill the infections microbes in the

¹ vide. Paranjpe, Vasant, V. Homa Therapy. Our Last Chance, Five Fold Path Inc., Madison, 1989, p. 57.

atmosphere.

4. The atmosphere of the home of the Agnihotra follower becomes purified and he and his family can sleep properly.5. The percentages of infectious microbes is high in the morning and in the evening. Hence by practising Agnihotra twice a day the danger of these microbes can be avoided.

6. Due to sufficient sleep the blood pressure is decreased by 10 to 15 degrees and in the morning the Agnihotra follower feels healthy and fresh. If one cannot sleep properly and if one is restless, the blood pressure increases.

7. The purified gases rising from the offerings fill the house and it becomes free from any pollution and infectious bacteria.

8. When the purified gases come in contact with other polluted gases, due to chemical reaction the purified air remains.

9. The purified atmosphere effects not only on human beings but also on fruits, vegetables etc. Hence they remain purified for a long time.

10. Due to morning Agnihotra the mind becomes stable and practitioners can work and solve difficult situations easily. Even the positive effects on the mind keep the negative thoughts away.²

Hence Agnihotra can offer happy, homogeneous and healthy life for everyone.

The purifying effects of Agnihotra can be described as following :

Tremendous amount of energy are gathered around the Agnihotra copper pyramid just at Agnihotra time. A magnetic field is created, one which neutralises negative energies and reinforces positive energies. When Agnihotra fire is burnt there is not just energy from the fire. The rhythms and the Mantras generate subtle energies which are thrust into the atmosphere by fire. Also consider the quality of materials burnt wherein lies the full effect of this healing HOMA. Much healing energy emanates from the Agnihotra pyramid. An aura energy field is created around the

² vide, Sohoini, Y.B. Air-Pollution, Agnihotra and Human-beings, Manav-Dharma-Sammelan, Bhopal, 1973, Panchasadhan, 17 August 1977, Pune, pp. 14-17.

plants during Agnihotra. Thus plants become stronger and disease resistant. When the flame dies the energy is locked in the resultant ash. This ash is used for preparing various folk medicines.³

6.2 : Importance of the material used for Agnihotra

An analytical approach is set into motion to find out the scientific basis and the principle behind all the specifications and the sequence thereof, as it is the need of the time and rational people.

6.2.1 : Dried cow-dung cakes

In Ayurveda cow-dung, cow-milk, clarified butter made out of cow-milk is referred as to be used in almost all medicines. Wherever there is not reference regarding the animal, whose milk, dung or ghee is to be used to prepare medicine, it is understood as to be of cow, is the advice of Āyurveda.

In German medical dictionary while explaining the meaning of cow-dung many medicinal effects of cow-dung are given, eg. If a person is suffering from diphtheria, put thick layer of fresh cow-dung around the neck. The diphtheria can be cured. The inflammation inside the chest can be cured by hot layer of cow-dung.

³ Johnson, Bruce & Heschl, Karin. Homa Organic Farming, Berk, Ulrich and Johnson, Bruce (Ed.), Brainstorming Conference in Co-operation with Planning Commission, Government of India, Bringing Homa Organic Farming into the Mainstream of Indian Agriculture System, Fivefold Path Publishers, Parola, 2009, p. 90.

In olden days, the hospitals were sterilized by burning cow-dung in the evening in some European countries. Even a patient of TB was kept in a cow shed, as a treatment, as the atmosphere in the shed is pollution free, due to cow-dung. Cow-dung is used as a medicine as well as in preparing medicines. The cow-dung has a special capacity of reaching the highest temperature at a comparatively short time while burnt. This capacity of cow-dung is used in ayurvedic medicines - like the different 'Bhasmas' or 'Pūtas'- gajapūta, varahapūta etc. ⁴

According to the article of 'New York Times' written by Dr. Mac Farson, he had undertaken research on cow-dung. His observations proved that the cow-dung of a healthy cow is a uncomparable pesticide. The smell of fresh cow-dung kills the bacterias of cholera and TB. His observations were made with Dr. King in Madras.

The researchers say that the stomach of a cow is a factory of Vitamins. No other animal of the earth has four sections in the stomach as cow. The research has found out that in the cow-dung one finds : Menthol, Ammonia, Phenol, Indol and Formalin, and Nitrogen 0.32%, Phosphoric Acid 0.21%and Ptash 0.16%. ⁵

According to Āyurveda, while taking bath one should put cow-dung on the body for cleaning. In Naturopathy also the cow-dung is used as a medicine. It has many medicinal applications according to Āyurveda, eg. In case of small pocks the wounds are filled with the fine powder of cow-dung, that is sieved through a fine cloth. For curing normal wounds the fine ash was mixed with the cow ghee and was put on them. To preserve food-grains and to increase their shelf life the ash was mixed with them. ⁶

⁴ vide. Gandhe, Shyamsunder. Gomay, Panchsadhan, Pune, 17 November 1979, pp. 8-9.

⁵ Op cit, pp. 8-9.

⁶ Op cit, pp. 8-9.

German scientist Rudolf Tayner has found out that some special elements are present in the cow-dung, those provide nutrients and nourishment to the soil. These elements are full of cosmic energy and power. The cow eats organic material like plants, grass or medicinal plants etc. Some part of it is digested and remaining is - though it has special nutrient factors- thrown out as waste. But this part is processed though the stomach of cow. It has certain cosmic and biological effects during the digestion process. Hence though cow-dung is a waste, it has miraculous medicinal and purifying effects. These beneficial effects are noted in the Āyurveda.

In Pokharan, in Rajsthan, where the Atomic Test was held by Indian Government, the houses had clay walls. It was found in some houses the wall were plastered with cow-dung. The observations of the scientists have proved that in the houses, that were plastered with cow-dung, they have not found any nuclear rays or radiations.⁷

6.2.2 : Clarified butter made out of cow-milk

In the clarified cow-butter 11% oxides, 12% minerals, 2% lactose and 3% gases are present. Iodine, much quantity of Vitamins A and D are present in it.

Certain bacterias in the cow-milk and curds are helpful for human body. They clear some poisonous elements from the stomach.⁸

According to Āyurveda, this clarified-butter is a best ointment. It has important

⁷ vide. Damale, Suvinay. *Gaiechya Shenache Aushadhatil Upayog*, Kulkarni, Aravind, Agrawal, Ramesh and Ambike, Subhash, 'Govnsha'- Ek Shashvat Vardan', Purushartha and Govidnyan Sanshodhan Sanstha Sanyukta Visheshanka, Pune, 2009, pp.77-78.

⁸ Loc cit, pp.77-78.

properties, as it is cold in nature, increases intelligence, thinking and memorising capacities. It cures the digestive problems. It helps in increasing the physical power and life-line. It is helpful for the skin, aroma and power of the eyes. Using this clarified-butter as an oblation helps in cleaning pollution in the atmosphere and the air nearby area. The minute poisonous bacterias in the air or atmosphere are killed. The old ghee is more useful and can be used as an ointment for healing wounds and scars. The wounds are cured in less time and were unaffected by infections, due to its special qualities. It was also used as a special pesticide. It is used in many eye deceases, women's health problems and in the decease of faint. It is a cure for certain psychological problems.⁹

6.2.3 : Rice grains

Unbroken rice grains, preferably less polished or whole bown rice should be used for Agnihotra. If the rice is broken, the chemical analysis of both pieces may be the same but the subtle energy structure is broken. Hence the ancient bioenergy states that only unbroken and whole rice grains should be used for Agnihotra. There is 12% water and remaining carbohydrates in rice grains. Rice is a staple food all over the world and is easily available. If the rite is the basic rite and is to be performed by everyone, then the material should be easily available.

6.2.4 : Copper pyramid

⁹ vide. Gandhe, Shyamsunder. *Gomay, Panchsadhan*, Pune, 17 November 1979, pp. 8-9.

Agnihotra fire is performed in a copper pyramid (pyramid shaped pot). There are two important things, that are to be mentioned. Firstly the pot is of copper, which is one of the heavy metals according to the metallurgy. Secondly the shape of the pot is of a pyramid. This shape has importance in itself.

The typical pot prescribed for process of Agnihotra is made of pure copper. It has a semi-pyramid shape. The dimensions of the Agnihotra pot are 14.5 x 14.5 cms at the top, 5.25 x 5.25 cms at the bottom and 6 cms in height.

The electron arrangement of copper resembles with silver and to a degree with gold.

The oligodynamic effect (Greek oligos = few, dynamis = force) was discovered in 1893 by the Swiss Karl Wilhelm von Nägeli as a toxic effect of metal ions on living cells, algae, molds, spores, fungus, virus, prokaryotic and eukaryotic microorganisms, even in relatively low concentrations. This antimicrobial effect is shown by ions of: mercury, silver, copper, iron, lead, zinc, bismuth, gold, aluminium and other metals.

... ..

Certain metals, such as silver, copper and copper alloys, are known to be far more poisonous to bacteria than others, such as stainless steel and aluminium, which is why they are used in mineral sanitisers for swimming pools and spas. ¹⁰

Copper is acknowledged for its oligodynamic action and has been widely used in Āyurveda due to its medical characteristic. It is universally acknowledged for its excellent conduction of electricity and heat. It is widely used for storing drinking water and is known to enhance the purity and energy levels of water. The metal copper plays an important role in the process of Agnihotra, as Agnihotra has close connection with fire, heat, electro-magnetic force and cosmic energy fields.

¹⁰ http://en.wikipedia.org/wiki/Oligodynamic_effect

The shape of the Agnihotra pot matches the pyramid. Only difference is, it is inverted. Pyramid means a container having fire in the middle. The word 'Pyr' means fire and 'mid'- middle. But the word is associate with the ancient stone buildings in Egypt. The ancient word for pyramid in Egyptian language was 'khuti' or 'khufu', which means 'glorious light'. The word pyramid is closely connected with the inexplicable energies emanating from its centre and shape. The pyramid shape creates bacteria static atmosphere. In food like - milk, fruits, etc., that is preserved in this shape develops its quality and remains fresh for a long time. From the mummification of a small stray animal, which had died in the huge pyramid at a particular spot, scientists from France, Czechoslovakia and America started studying about Pyramids. Later on a special branch of science is developed, which is called Pyramidology. People are aware in this century about the effects of specially designed shapes, combined with colour and with sound on body and mind.

The pyramid shape itself is being seen as a supernatural source of power or energy. The idea that a simple geometric shape or drawing could generate an energy field has been proved beyond doubt.

Experiments with pyramids have shown the theta and alpha brain waves are increased. Hypertensive individuals become tranquillized. Lethargic people become energetic again. Frequency was in the microwave range. Items placed under the pyramid stay "charged" for various lengths of time after being taken from under the pyramid. After being under the pyramid for a few minutes, the patients' pain started to go away and burn areas healed much faster.

The vector angle of energy formed by the carrier wave frequency is 52.606° . All pyramids produce the same kind of energy. When treating something with a pyramid, the volume of the object should not exceed 5% of the total volume of the pyramid

Sharpen razor blades, Restore the luster to tarnished jewellery and coins, Mummify and dehydrate meat, eggs and other food stuffs. Help keep milk fresh and prevent souring without refrigeration. Increase the growth rate of plants. Help attain increased relaxation. ¹¹

¹¹ vide, www.wikipedia.org

Sheela Ostrandar wrote a book - 'Psychic Discoveries Behind The Iron Curtain'- based on the observations of the studies regarding Pyramids. Till then it was just said that a special energy flows through the specific shape of the pyramid. According to the observations of Ostrandar in Czechoslovakia the scientists and common people have experienced the energy power of pyramids. The first theory regarding this energy was set by Bovis in 1930. He visited the pyramids mid of Chepok many times. He found a big drum in the central hall of the pyramid , in which there were many dead bodies of dogs and cats. The watchman told, animals enter the pyramid, sometimes they do not find a way out and they die. The bodies are collected then in a drum and when it is full, they are thrown out. But surprisingly no body in the drum was decayed. All the bodies were mummified. The mummification was due to the dehydration of the liquid material in the bodies. Bovis made a replica of pyramid in his own country and experienced the same.¹²

Druval, another Czechoslovakian scientist made different experiments. He found out that the blunt blades were sharp again, when kept in a pyramid shape. Afterwards in 1959 this invention got a patent of Chekoslovakian government. Others kept food material in the pyramid shape and found out the taste was changed. Some used cigarettes or coffee and experienced the same. Some scientists slept in the pyramid. When they got up, they found the wounds in their teeth were cured, their energy level was increased.¹³

Plagnan described the secret behind the Pyramid : The key to the power of the pyramid lies in microwaves. Microwaves are a form of electromagnetic radiation of very short wavelength. Electromagnetic radiation consists of waves of

¹² vide, Rajimwale, Shrikant. Agnihotra and Pyramid, Panchasadhan, 17 July 1977, Pune, pp. 6-8.

¹³ Loc cit, pp 6-8.

magnetic and electric energy charges. The pyramid shape is an efficient resonator of microwave signals. In his application to 'NASA' Plagnan wrote the microwaves can be changed into light waves with the help of pyramid shape. If energy generation of this type is possible it will be a revolutionary effect than the solar energy. Scientists have found out that the objects that create alfa waves, if kept , in pyramid shape, they create twice or thrice quantity more alfa waves.¹⁴ Mr. Ustrzycki, a polish scientist wrote about the resonance from the pyramid and pyramid fire (Agnihotra) :

The specific frequencies of the different steps of the Pyramid are 3000, 3009 and 3015 Hertz. The most intensive sound waves have their origins at the four sides of the pyramid, forming a rather small angle. From inside the pyramid standing wave with a frequency of 1.2 Hertz is sent out. When being sung resonance takes place in the pyramid. The most powerful effect is with the word 'swaha'. One characteristic frequency of the pyramid is corresponding to the human heart beat. Another one corresponds to the frequency which can be found in the human brain.¹⁵

This pyramid shape of Agnihotra pot or Yajña-vedi are same. In a pyramid the energy is concentrated at the middle portion, whereas in a Yajña-vedi the energy, that is created at the middle is thrown out in the atmosphere. The energies spiral in a counter-clock-wise fashion when coming from the Agnihotra pyramid because a tremendous amount of impact and acceleration of those energies is generated that way. As the energies move in on upward direction, they are simultaneously moving outward from the copper pyramid in all directions thereby spreading the effects of Agnihotra to a wider area. There is a

¹⁴ Loc cit, pp 6-8.

¹⁵ Op cit, pp 6-8.

concentration of those energies thrust to the north.

Die Prozesse von Agni-Hora erwecken genau wie der Bioenergotherapie, die Radiästesie und unkonventionellen Techniken, die die Energie vermitteln ... Zum Agni-Hora-Ritual braucht man: die Treppenpyramide aus Kupfer, die auf der abgescherten Scheitel gestellt und über Himmelsrichtungen orientiert werden soll, ausgetrockener Kuhdünger, Ghee, etwas Holz (aus den Bäumen, die keine Stacheln haben; am besten das Holz mit den heilenden Eigenschaften) und unabschälter Reis. Die Zeremonie soll richtig um den genau bestimmten Zeitpunkt der Sonnenaufgangs und -untergangs stattfinden. Die Entzündung selbst soll einige Minuten früher erfolgen, weil sich die Pyramide bis zur Temperatur ca 480 c erwärmen muß. Im bestimmten Moment wird von der das Agni-Hora-Ritual praktizierten Person Reis ins Feuer geworfen. Die genaue Beschreibung des Rituals ist in den Publikationen des "Homa Therapie Zentrum" zu finden. Hier bespreche ich die Konstruktion der Pyramide. ...Jede elastische Konstruktion hat ihre eigene mechanische Resonanz. Diese Resonanz wird von den Schwingungen mit der bestimmten Frequenz hervorgerufen. Die Schwingungen, die die Eigenresonanz hervorrufen, brauchen zu ihr Gewinnung wenig Energie. Sie haben auch gleichzeitig die längste Zeit des Dauers. Zu den einfachsten Beispielen, die das Phänomen bildlich vorstellen, gehört das Ausschwingen des Schwingungen der angeschlagenen Saite oder die Glocke. ...

Die Agni-Hotra.Pyramide ist ein altes Opfergefäß, dessen Konstruktion aus das elastischen Stoff so gemacht wird, dass seine Gestalt die Resonanzkammer für die akustischen Wellen bildet. ... Um die Agni-Hora-Pyramide zu untersuchen, habe ich die elektrische Apparatur gebaut, deren Konstruktion die Abb. darstellt. Die Apparatur registriert die Schwingungen der Seitenwand der Pyramide. Die empfangenen Schwingungen wirken nach der Verstärkung durch einen Verstärker auf die gegenüberliegende Wand der Pyramide. So wird ein Generator konstruiert, dessen Herz wie Agni-Hotra-Pyramide ist. Diese Apparatur hilft auch bei den weiteren Untersuchungen, zB. bei der Untersuchungen der Schwingungsfrequenzen der ganzen Pyramide, der Schwingungenrichtungen und -verteilung. ... Die Grundriß stellt die Schwingungenrichtungen der ganzen Konstruktion dar. Das Experiment beweist, dass die Pyramide den zentralen und zentrifugalen Entwicklungen ausgesetzt ist. Anders, die ganze Konstruktion ist beim Brennen mit der Eigenfrequenz zusammengedrückt und gestreckt. Die Pyramide ist so konstruiert, dass die Seitenkanten der Schwingungen nicht ausgesetzt sind. Die Tatsache ist bemerkenswert. Die Pyramide ist eine Selbsttragkonstruktion, d.h. sie hat keine zusätzliche Elemente, die sie versteifen. Die Schwingungen werden aber sowohl durch die Lagerung der Seitenkanten, als auch durch die Lagerung der Spitzen der oberen Schwelle

nicht eliminiert. Die einzelnen Abschnitte der Seitenwände schwingen mit verschiedenen Frequenzen. Meine Untersuchungen beweisen, dass sie 3000, 3009 und 3015 Hz betragen. Bei den solchen, kleinen Unterschieden der Frequenzwerte hat man der Frequenzumsetzung der Wellen zu tun. Die mathematische Analyse beweist, dass man infolge dieses Prozesses die Infranschälle bekommt.

Nach dem weiteren Untersuchung und der Analyse der Abmaßproportionen der Pyramide erweist sich, dass die Maxima der mechanischen Schwingung der horizontalen Abschnitte der Pyramidewände von sich um 0,25 der Wellenlänge entfernt werden. Anders, hier befindet sich ein System der gekuppelten Oszillatoren, die von sich um 0,25 der Wellenlänge entfernt werden. Diese Aufstellung verursacht eine schmale Richtcharakteristik des schwingenden Systems ... Die Welle pflanzt sich von außen der Pyramide in 4 Richtungen fort. Im Pyramideninnere ist die Welle der Resonanzverstärkung ausgesetzt und die Form der Kammer richtet das Maximum der Intensivität nach oben. Auf der Zentralachse der Pyramide erscheint sich die stehende Welle. Das ist die Infranschallwelle mit der Frequenz ca. 1,2 Hz.

Dieses Experiment prüft, ob das Hervorrufen der Schwingungen der Pyramide mit Hilfe der menschlichen Stimme möglich ist. Die oben beschreibende elektronische Apparatur wird auf der Schwelle der Empfindlichkeit eingestellt. Beim Mantra-Singen tritt statistisch die Mehrheit der Resonanzen bei dem Wort "swaha" hervor. Das Singen verschiedener Lieder erweckt die Schwingungen, vor allem aber im Moment, wenn der Konsonant "s" realisiert wird. Das Wort "swaha" gibt die Mehrheit der Resonanzen auch in den Fällen, wenn es sich im polnischen Text befindet, obwohl die Reibelaute für sie polnische Sprache charakteristisch sind.¹⁶

Vibrations providing peace, harmony and energy come out of this shape all that time. Especially at the time of sunrise and sunset these energy vibrations mix with the cosmic rays and create purifying energies.

Agnihotra pot because of its shape helps to diffuse the generated energy in all directions, while in Egyptian pyramid by its inverted shape conserve the cosmic energy at one point in the conical building. The pyramid shaped of Agnihotra pot

¹⁶ Berk, Ulrich, Die physikalischen Erscheinungen der Agni-Hotra-Pyramide Wirkung, Deutsche Gesellschaft für Homa Therapie, Mühligen, 1986, Seminar.

receives, generates and decentralizes special healing and purifying energy emissions in the ecosphere. It acts as an effective bacteriostatic and antimicrobial agent. It acts as a generator of unusual energy fields. It interacts with the cosmic ray mechanism. Its effectiveness reaches its peak levels, at the two circadian rhythms ie. sunrise and sunset, with which the performing of Agnihotra coincides.

6.3 : Chanting of Mantras

During the process of Agnihotra two short Sankrit mantras are chanted. The Vedas contain the essence of revealed knowledge and are respected as the treasure of the pure knowledge. These chants have a special capacity to set out peaceful, healing and harmonious wave pattern when pronounced. These chants have a specific harmonising effect on the atmosphere and the mind.

The healing and curative effects of sound and music is the subject of many psychiatrists and scientists studying botany and biology. It is an established fact that sound has a definite effect on the growth of plants. Researchers in this century have shown that definite notes of music have a pronounced effect on the growth of plants.

They have noted the immense power of sound, when they noted that due to the resonance created the footsteps of marching armies, often crashed the bridges. Growth of plants as well as in animal cells is induced due to certain hormones, auxins and other growth promoting substances. Production of these substances can be introduced artificially. One of the methods of such artificial induction is vibration, for getting faster growth of moulds or bacteria and for production of antibiotics or other chemicals, shaking is done.

American workers have discovered an electronic Band-Aid. In this band, two metallic strips are used which act as electrodes. When an electric current

of certain voltage is passed through these strips, an electromagnetic field is created, which helps in setting up of vibrations of definite frequency. When vibrations of specific frequency are given to the wounded portion of the animal body, the cells in the affected area are induced to produce a larger quantity of growth hormone viz. collagen. This results in a faster rate of cell growth in the wounded zone and thereby causes quicker healing of the wound.

Dr. J. C. Bose, in his experiments, in the early twenties of twentieth century, had shown that plants do show a marked effect of music on their growth. He also claimed that plants too have a system parallel to nerves of animals and they have also feelings. His experiments might require further confirmation. But the conclusion that sound waves have an effect on plant growth has to be accepted. In this context, one can say that the recitation of specific mantras during Agnihotra or Yajña is responsible for setting up vibrations, their cells are induced to produce more growth substances. It may be due to this reason that plants growing in Agnihotra and Yajña atmosphere exhibit a more rapid rate of growth. Accepting that the researches of Dr. Bose are likely to be further confirmed, then the love and feelings of plants expressed while reciting of mantras are bound to be quite conducive for their growth.¹⁷

Vibrations exist everywhere. Every thing has its vibrations. Even what looks still, like a solid, has movement(vibration) within its atomic structure. Vibrations can range from near zero to infinite (0->∞) Audible sounds are vibrations with frequencies between 20 to 20,000 cps 1 cps = 1 cycle per second = 1 hertz (1 Hz). Vibrations can travel through different media (earth, air, water, wood, glass, etc.) at different speeds. Many vibrations can interact to produce new forms of waves. There is a principle called “Resonance” whereby an object can vibrate and induce vibrations in another distant object. An example is the hitting of a tuning fork (X) against a piece of wood. This will produce a specific sound. If another, similar tuning fork (Y) is nearby, this (Y) will also vibrate without being hit. Agnihotra is a bio-energetic process which helps to bring balance (healing) into nature by Resonance. The different kinds of vibrations emanating from the

¹⁷ Kulkarni, S. K. Path of Light, Satyabodh Prakashan, Pune, 2000, p. 55.

sun are captured and sent in many directions to resonate (activate, awaken, vitalize, etc.) by the Agnihotra process. ¹⁸

Mantras the sound that are uttered activate these special vibrations that create certain atmosphere or effects. Then the desired results are realised. Anything can be activated, controlled, changed by mantras. When mantras are done in conjunction with Yajña the vibration from the mantras become locked up in the ash and therefore the ash become more powerful.

Sound. If you test Agnihotra with an oscilloscope, you will hear a special sound coming from the fire. It is the sound that heals. All the other physical things are there, nutrients, vitamins, minerals, but the key is the sound. If you are subtle enough, you can detect it. Fire produces sound, but it also reacts to sound. If you sing special vibrations while the fire burns in the pyramid there is a resonance effect. Ancient science states that it invigorates the cells of plants and helps the reproductive cycle. Resonance plays a vital part in nature. We have to consider a healing molecular spectrum far beyond the infrared, indeed beyond the whole electromagnetic spectrum. ¹⁹

The power of ultrasonic beams is observed to explode the microbes and are being employed in intricate surgeries. Classical music fed to plants accelerated their growth and the cows in the musical atmosphere yielded more milk. Thus the power of sound vibrations is long since acknowledged in the field of science.

¹⁸ vide, www.homatherapy.org

¹⁹ Tompkins, Peter and Bird, Christopher. *Secrets of Soil. A fascinating account of recent breakthroughs- scientific and spiritual- that can save your garden or farm,* Harper & Row Publishers, New York, 1989, Pp. 250-251.

6.4 : Significance of time

At sunrise the many fires, electricities, ethers and more subtle energies emanating from the sun extend all the way to the Earth and produce a flood effect at those coordinates where the sun is said to rise. It is awesome. The flood enlivens and purifies everything in its path, destroying what is impure in its wake. This torrent of life-sustaining energies causes all life to rejoice. At sunrise that music can be heard. The morning Agnihotra Mantra is the essence of that music. It is the quintessential sound of that flood. At sunset that flood recedes.²⁰

When the sun is rising or setting the changes in the upper layer of atmosphere and the layer of atmosphere near to the earth are observed. These changes affect on the human respiratory system, its speed, the pulse-rate and its speed, speed of digestion and blood pressure. These changes are proved by many observations and experiments undertaken by scientists.

The human body temperature increases from mid-day till 4 pm and then it starts decreasing till early morning to a certain limit. This happens every day. According to human metabolism the density of intellectual strength of each person is at its highest level in the morning. His acceptance power is also high this time. His mind is stable. At mid-day all these capacities are decreased. In the evening the results of day's work affect his strength mentally and physically. The blood sugar level is also decreased. He is tired. At this time the dust and microbes that come near the earth's surface due to gravitational force, attack on him. The tired human being becomes victim of them.²¹

²⁰ Paranjape, Vasant, V. Homa Therapy Our Last Chance, pp. 13-14.

²¹ vide. Kulkarni, S.K. (Ed.). Panchsadhan, pp. 49-50.

Agnihotra is to be performed during the transitional moments of night and day, when rapid change or turbulence takes place in the environment. This in turn makes an impact on the natural metabolic balance. The reaction on human metabolism has been the basis of study of yogic science, which states that the pattern and rate of breathing in an ordinary person is not all the time regular. It increases during excitement and falls down during relaxation and becomes irregular while speaking. These variations disturb metabolic conditions. The suddenly changing transitional moments make a similar impact and it is still more, when the environment is polluted. Agnihotra is to be performed for resetting disturbed metabolic conditions. It acts as a catalyst for self adjustment or self correction for bringing back the biological equilibrium.

6.5 : Significant Effects of Agnihotra on human mind

The ever deteriorating environment has drawn attention of Government authorities, which in turn laid emphasis on certain legal remedies to avoid further deterioration. While such a step is quite necessary, a positive approach for enhancing the health of the environment does not appear to have received the necessary attention, excepting some emphasis on afforestation.

6.5.1 : Homogeneous effect on the mind

During the performance of Agnihotra, products like fumes, heat, energy, moisture, gases, ash and sound waves with vibrations of certain frequency are

created. These products have a definite beneficial effect, as will be seen, both from individual and collective angles. A few exemplary instances of this effect on life are given below.

The performance of Agnihotra, which has an impact both on intellect and emotion of the performer, can be termed as insight oriented psychotherapy. It brings a permanent intra psychic change, whereby an ability to understand the inner nature of things is developed, in the present day life a lot of adjustment has become obligatory. Rather than a demanding attitude to get what is desired, an attitude to receive life as it comes, without much questioning, is the transformation, that one experiences by a faithful and a regular performance of Agnihotra. This is how it acts as a bonding medium to hold family relationship, because it helps to establish a common level, at the time of the Agnihotra for all, from the eldest to the youngest.²²

While leaving the oblation in the fire the performer leaves his right over it. With recitation of this mantra or becoming one with the purpose of the mantra the performer withers out his possessiveness. This withering out, of the sense of possession is the crux of the effect of Yajña on human mind.

Agnihotra is an antidote to several forms of pollution, especially including thought pollution. Though thoughts are subtle and mind is subtle and past of the theory of how Agnihotra works, involves discussion of subtle energy. One should not allow such 'lack of concreteness' to dissuade one from trying or valuing Agnihotra. With Agnihotra thousands on every continent report cures of physical and mental diseases and relief from stress.

6.5.2 : Brain-waves

²² vide, Kulkarni, S. K., Path Of Light. pp. 29-30.

The smoke from the Agnihotra fire travels directly east in a clockwise spiral. That is particular to this Yajña only. Other Yajña may be different. Still the effect shoots straight up a distance of approximately eight miles. Smoke goes in other directions from the fire also but it most frequently spirals to east. This is where most of the concentration is. It is from the direction of east that the flood of energies, electricities and ethers come. This is why we are told, it is better if one faces east when one medicates. ²³

The brain-waves of a person sitting near Agnihotra have an impact on the flame. If you measure frequencies of the flame by some optical methods, we could get something like an EEG (Electro Excelo Graph) without even touching that person.²⁴

The daily practice of Agnihotra helps in removing the stress and tensions on mind. It clears the area of negative thought patterns that impinge on the mind and establishes a positive approach characterized by love. It reduces the anger, self-destructive habit patterns and brings motivation to get rid of drug addiction, alcoholism etc.

According to the statistics of alcohol abuse in Western countries it is a major problem. Some of the psychologists have found a solution of this problem in Agnihotra practice. They state :

The 1987 report of the National Institute on Alcohol and Alcoholism concluded that alcohol abuse costs the country \$89.5 billion annually, of which \$54.7 billion or 61% is lost due to alcoholism in the workplace. Most of the estimated loss is attributed do reduced productivity and to lost

²³ vide. Paranjape, Vasant, V. Satsang, Vol. V, No. 6, Madison, 1979, Editorial.

²⁴ Paranjape, Vasant, V.(Ed.), Agnihotra Radioactivity - Brainwaves - Resonance from the Pyramid, Satsang, Vol. 21 No. 14 & 15, Fivefold Path, Inc.,2-16 December 1993, Madison, Pp 23-28.

employment. Workplace loss from abuse of drugs other than alcohol is set at \$26 billion annually.

... ..

Homa Therapy is a practical and useful modality for treatment of drug abuse in a drug-free environment. Many treatment models deal directly with the issue of addictions, address pathologies (attempting to correct the condition by altering what is viewed as pathophysiological process at a very advanced stage) or trying to get at root cause of the addiction. Homa Therapy heals the atmosphere which, in turn, heals the mind which, in turn, enhances a change in behaviour pattern.²⁵

Another experiment that was undertaken in India regarding alcohol de-addiction.

The results of this research are as follows :

The Vedic psychology state that the human mind alone is responsible for bondage as well as liberation, depending upon its attitude. Mind alone can cause attachment and bind the person to material objects and vices. It is said that as long as person feels that he is attached to certain objects, he virtually remains in the bondage. The moment the mind develops strong will power and feels that it is free the individual is able to liberate himself. It is stated that Agnihotra atmosphere enhances the strength of mind. Regular practice of Agnihotra sets in motion a pure and healing cycle in the household which imparts peace and tranquillity of mind. "Agni" is said to be purifier and cleanser of minde off its negative and evil tendencies. It initiates pure and creative thoughts. According to veda, the practice of Agnihotra gives a strong push to the mind in a positive direction and promotes pure thoughts. This atmosphere endows mental peace and tranquillity to the whole family. It is said to impart power of intellect wisdom, devotion to attain higher goals and physical strength etc. ... Invariably in all the households the practice of Agnihotra has bestowed

²⁵ Paranjape, Abjay, V.(Ed), Homa Therapy as Treatment for Drug Abuse, Bharatiya Satsang, Vol. VIII, No. 10,11 &12, March, April, May, 1988, Pp. 8-15.

peace, prosperity and happiness. ²⁶

The experiment was carried on with the alcohol addict person's families and the addicts. The family members started practising Agnihotra regularly. The addicted persons started practising it slowly and developed positive changes in mind. Their life style was turned to normal.

While sharing the results of the psychological experiments with the Agnihotra therapy, Dr. Barry Rathner says :

Double-blind studies I conducted at University of Pune demonstrated that if the three sunrise/sunset Agnihotra inputs are modified in any manner, the effects are not only diluted; they are non-existent.

Timing must be exact. Mantras must be recited properly. The three materials to be burnt are non-negotiable. Size and shape of the copper pyramid similarly must be exact.

Finally the quantum physics tells us that effects of some seemingly physical process can and do have power much grater than pure physical science indicates. This is a hint into the Vedic prescriptions that state that Agnihotra effects travel upward 12 km and 1 km in diameter. ...

If experiences have been noted and even anecdotal evidence is compiled that remain indisputable thus far, emergency conditions facing us all demand we perhaps compromise our precEDURE to the extent that we jump in, try Homa Therapy and let the proof be in the pudding ! ²⁷

6.6 : Agnihotra and organic farming

²⁶ Institute For Studies In Vedic Sciences. Significant Role Of Agnihotra In Alcohol De- Addiction, Shivapuri, Akkalkot, conclusions.

²⁷ Rather, Barry. Homa Psychotherapy, Brainstorming conference, p. 97.

The ever deteriorating environment has drawn attention of Government authorities, which in turn laid emphasis on certain legal remedies to avoid further deterioration. While such a step is quite necessary, a positive approach for enhancing the health of the environment does not appear to have received the necessary attention, excepting some emphasis on afforestation.

Growing vegetables, fruits, grains, etc without chemical fertilizers, insecticides, pesticides and herbicides, by strengthening the subtle energy structure of plants and affecting hormones in the reproductive organs of pests, etc. Large quantities of food can be grown in a small area by introduction of mini-climate techniques that become self-operating based on the phases of sun and moon and HOMA fire.²⁸

Homa Organic Farming means the application of Yajña (Homa) Therapy in agriculture, which means healing the environment, the atmosphere and the all of life using the Vedic science of Yajña. By practising Homa Therapy for farming one can grow maximum yield in minimum agricultural area and keep the soil fertile, the water pure and the atmosphere nutritious. No chemical fertilizers or chemical pesticides are used in the complete process. Only the Yajña (Agnihotra) atmosphere and ash is used as a manure and for pest control or curing the diseases of plants.

The main important stress of Homa Organic Farming lies upon the daily practice of Agnihotra. Jerak Bizberg, who conducted experiments in this regard has written:

The basic process used in HOMA farming in Agnihotra. A copper pyramid of prescribed shape and size is used for this process. In the ancient sciences

²⁸ Paranjape, Vasant, V. Homa Therapy Our Last Chance, p. 11.

of bioenergy, biogenetics, medicine, agriculture, weather engineering and psychotherapy given through VEDAS to bring harmony into the ecosystem, the process of Agnihotra YAJNYA in the basic tool. In the ancient body of knowledge many things are described about pollution. The English word pollution comes from the Sanskrit word PRADUSHAN. Under the extremely polluted conditions of today, it will help us a great deal to have access to this knowledge, which will save us from total destruction it will be interesting to see how the ancient Masters describe the effects of of pollution.²⁹

The Agnihotra- Homa is performed at the centre of the field everyday at sunset and sunrise. Vyāhṛti Homa can be performed any time except sunset and sunrise. It can be performed before Tryambakam Havana. This Havan can be performed for having better results for few hours daily. Especially it can be practised on new moon day and full moon day. The other way of performing Tryambakam Havana is perform it for 4 hours daily and 24 hours on full moon and new moon days.

Whenever possible on a farm, if Homa Therapy Farming practices are being followed. One should attempt to do Agnihotra at a central location on the farm or in a garden throughout the year.

It is probably best to plant in mounds like the Rudolf Steiner method. It allows more food to be grown in less area and it is much easier to care for. It is good to put Agnihotra ash in the compost pile as this helps energize the material as it decomposes giving the earth it is treated with subtle energies to aid in the growth of crops. Farmers, if you would like to grow crops in Agnihotra atmosphere, please be sure that the maximum yield is realized when you perform Agnihotra in the centre of the farm and then on the four extreme corners of the farm, North, South, East and West. If farm exceeds 200 acres and if the personnel are there you can perform

²⁹ Bizberg, Jerak. Homa Farming for the New Age. A practical guide to Homa Farming based on the ancient science of Agnihotra, Fundacja Agnihotra, Jordanow, 1999, p.11.

Yajnya in the interior. It will spread up the nutritional process. When finished do not put the ash in one place. Spread the ash.³⁰

He gives more tips to the farmers for having a good and nutritious yield.

Take a seed and place in cow's urine for at least two hours. Remove the seed and cover with cowdung and let it dry in the sun. then plant the seed with Agnihotra ash. Have a good mind when you plant. Be full of love. Plant on new moon day or full moon day, depending on seed planted. Observe the growth of plants, disease, resistance, reproductive capacity, quality etc. Perform Agnihotra regularly and give the ash to the soil.³¹

He explains methods of curing the sick plants with Agnihotra ash medicines and how the care of plants can be taken to keep them healthy.

The other method of Homa Organic Farming is of using the resonance technique, which heals large areas in a short time. One resonance point can heal up to 200 acres or 80 hectares of land. For this 10 new pyramids are charged with mantras and placed on the farm in a special configuration. Two simple huts may be of bamboo, stone, wood, bricks, cane, etc. are built on the farm simply to protect the fire pyramid from sun and rain. In some of these pyramids only Agnihotra is performed and in some Tryambakam Havan is performed on new moon and full moon days.

If Yajña is going on for 24hrs in proximity to a garden, that itself is an effective aid to insect control. The atmosphere becomes saturated with ghee and the plants

³⁰ Op cit, pp.19-20.

³¹ Op cit, p. 20.

are able to manufacture a protective coating due to a special combination in their chemical makeup interacting with the ghee absorbed by the plants by breathing. The Yajña atmosphere also creates something intangible that permits this situation to occur which is based on the vibrational content of the atmosphere due to the mantras going all the time.³²

During the performance of Agnihotra, products like fumes, heat, energy, moisture, gases, ash and sound waves with vibrations of certain frequency are created. These products have a definite beneficial effect, as will be seen, both from individual and collective angles. A few exemplary instances of this effect on life are given below.

The problem of pollution on our planet becomes more and more serious. The clearest sign is that forests die. First it started in Germany, now you can see this already in all parts of Europe. This shows that the ecological balance has gone totally out of order and that whole life on this planet is threatened - the plant kingdom, the animal kingdom, and in the end, all humanity. The speed of destruction is increasing.

*By 1982 West Germany's (of that time) interior ministry was estimating that some 1.2 million acres of its trees already were dying in forests from the Harz Mountains in the northeast to the Black Forest in the southwest. In Bavaria, some 150,000 acres of forest are now composed largely of dead trees, and another eight million acres are showing early signs of damage. Just across the border in Czechoslovakia's Ore Mountains some 247,00 acres of forest are dead and reforestation efforts are failing.*³³

³² vide, Paranjape, V. V., Satsang, Vol. V, No. 7, Madison, 1979, Editorial.

³³ Paranjape, Vasant V. (Ed.), Satsang, Vol 12 No.8, Fivefold Path, Inc., Madison, 6 Sept 1984, p.9.

After the visit to forests in Germany in a damaging state, the experiment of 'Homa-Farming' was carried out.

After a tour of West German forest recently we started Operation Survival, a forest project in Germany - involving the Bodensee and Lake Constance region - where we have been asked by the Forest Department to take care of a 90 acre area of the local forest. Homa Therapy fires are now burning in that forest at sunrise and sunset in addition to four hours daily and 24 hours round-the-clock on new moon and full moon days. The aim is to heal atmosphere ... and thus the forest itself.³⁴

According to the analysis of the Cooperation Extension at Cornell University (Ithaca, NY), (the Extension consists of the New York State Colleges of Agriculture, Life Sciences and Human Ecology working with the U. S. Department of Agriculture.) : Disease in plants develops only when a susceptible plant, a virulent pathogen and a favourable environment occur together for a critical period. The volume of the pyramid represents the amount of disease that develops.

A 1980 study showed that 60 percent of the fir trees in Baden-Wuerttemberg were healthy; two years later only 2 percent of the trees were healthy. In West Germany at least 8 percent of its trees were damaged or dead. ... last year legislators dismissed warning of foresters, biologists and Green (the environmentalist-peace party) as 'panic-mongering'. Now, however, politicians engage in a 'Flucht nach vorn' (rush to the front) on the issue. The Greens who made the 'Waldsterben' (death of the woods) a major campaign issue, forced many politicians to recognize the need for action. Industry, however, is not keen on fitting power plants and factories with scrubbers. The German coal industry argues that 90 to 95 percent of the problem in the woods is due to the natural process of soil acidification. The

³⁴ Paranjpe, Vasant. Agnihotra in the forests of Germany, Satsang, Vol. 12, No. 8, p. 6.

chemical industry proposes that fertilizers containing lime and magnesium be used to restore the forests to good health.³⁵

As Agnihotra has demonstrated in preliminary studies the ability to neutralize virulent pathogens as well as to create an unfavourable environment for disease by reducing air pollution and acid rain. By working directly on plant metabolism and strengthening plants through cellular structural changes and changes in root system configuration, Agnihotra reduces plant disease by reducing the susceptibility of the host plant.³⁶

Though conventional farming had some success in the beginning, after some decades deterioration of soil, imbalance in the nature, problems like input costs rise and production falls are developing. Hence organic farming is the need of the time.

Homa organic farming give higher yield per hectare than any known method of farming, organic or chemical. Hence it could not impact the target of quantity. Also quality viz. taste, texture, colour, disease, resistance, harvesting losses and shelf life.

At few places in Peru Amazon area of Ucayali and Huanuco region, out of curiosity trails were taken on small pieces of land which were spread with strong herbicides by helicopter under the US sponsored scheme to eradicate Coco plantation. The chemicals were so strong that if a drop falls on top of a car it would pick up the paint. In such destroyed soils with Homa

³⁵ Paranjape, Vasant.(Ed.), Not Man Apart, November 1983, Satsang, Vol. 12, No. 8, Fivefold Path, Inc., Madison, 6 Sept. 1984, P. 11.

³⁶ vide. Rathner, Barry. Fight the Disease Pyramid with Copper Pyramid Fire, Satsang, VOI 12 No.11, Fivefold Path, Inc., Madison, 18 Oct 1984, p. 6.

Organic farming even in the first year plants were able to grow.³⁷

Modern agriculture science pays attention to soil and water quality but not much to atmosphere, which surrounds the plant. According to Homa Therapy biggest factor in farming is as following :

1. If Agnihotra is practised under a tree it helps production of chlorophyll.
2. Agnihotra generates a coating around plants which acts like a shield to prevent pests, insects, fungi etc.
3. Plant has a system something like a Nadi-System in humans. In Homa atmosphere the veins of plants remain more cylindrical and the nutrients breathed by the plant through soil and air are harmoniously distributed in all areas of the plant.
4. In Homa atmosphere some material is added to the soil and roots stay strong.

Homa Farming - ein vedisches Feuer für die Landwirtschaft: Einfluß von Agnihotra-Asche auf die wasserlöslichkeit von Phosphor im Boden
Anhand von drei verschiedenen Extraktionsmethoden wurde der Einfluß von Agnihotra-Asche auf die Löslichkeit von P im Boden untersucht:durchgeführt wurden eine 48-stündige Wasserextraktion nach Lai (ohne Jahr), eine -stündige Wasserextraktion nach van der Paauwet al.(97) und eine CAL-Extraktion nach Schüller (969). Die Ergebnisse der 48-stündigen Wasserextraktion zeigten, dass durch Agnihotra-Asche die Menge des löslichen P im Boden erhöht werden kann. Allerdings wurde eine ähnliche Wirkung auch bei der Kontrollasche beobachtet, die ohne das Singen eines Mantras und nicht zu Sonnenauf- oder -untergang erzeugt worden war. Besonders deutlich war der Effekt der Kontrollasche dann, wenn diese in einer Kupferpyramide hergestellt worden war. Weder die einstündige Wasserextraktion nach van der Paauwet al. noch die CAL-Extraktion

³⁷ Powers, Lisa (Ed.). Tsunami and Agriculture, Homa Farming, Satsang, Vol. 32, No. 5, Fivefold Path Mission, Madison, January & February 2005, p 13.

waren geeignet, die bei der 48-stündigen Extraktion beobachteten Effekte zu replizieren, d.h. die Ergebnisse dieser beiden Methoden zeigten keinen Anstieg des löslichen P im Boden durch die Aschebehandlungen. Ein Erklärungsansatz könnte in der Dauer des Boden/Asche-Kontaktes liegen, die bei diesen beiden Methoden möglicherweise zu kurz war, um eine volle Entfaltung der feinstofflichen Kräfte der Agnihotra-Asche zu erlauben.³⁸

A research that was undertaken by German agriculture experts in FAL regarding Homa Farming. They observed the effect of Agnihotra ash on the solubility of phosphor in the soil. They used three different extraction methods for their experiment. After applying the 48-hour water extraction, they found out that Agnihotra-ash may increase the amount of extractable phosphor in soil.

On 25th and 26th February 2009 a brainstorming conference was held by Fivefold Path Mission in Parola, Maharashtra, in cooperation with Planning Commission, Government of India. The issue that was discussed here was 'Bringing Homa Organic Farming Into The Mainstream Of Indian Agriculture System'. Many experts from India and abroad have expressed their views, some of them are quoted here.

Ulrich Berk, President, Deutsche Gesellschaft für Homa Therapie, Germany, is of the opinion :

Many different success stories from various countries show that Homa Therapy has helped to solve severe problems in Agriculture where other methods (both conventional and organic) failed. See the reports in this booklet on Mango in Uttar Pradesh, Sericulture and Floriculture in Karnataks, Cashew Nut in Maharashtra, Sugarcane in Karnataka, Soya Bean

⁵⁴ Kratz, Sylvia and Schnug, Edward. Homa Farming - a Vedic Fire for Agriculture : Influence of Agnihotra ash on water solubility of soil P. Federal Agricultural Research Center(FAL), Institute of Plant Nutrition and Soil Science, Braunschweig, Germany, Zusammenfassung. sylvia.kratz@fal.de

in Madhya Pradesh, Cotton in Maharashtra, Mamgo and Potato in Uttar Pradesh, Banana and great variety of fruit and vegetable in South America wheat and beans in Turkey and the Middle East.

But of course these are only a few reports given by the people present in this conference. There is a lot more available on the internet showing that all different kinds of diseases and pests have been controlled by Homa Therapy, that yields have increased and cost of production decreased, that germination period as well as production cycle was reduced, and that harvesting losses were reduced and diseased plants rejuvenated. ...

These "controlled experiments" are comparative studies, measuring the quality and quantity of production with and without Homa and keeping all other possible factors (climate, soil, seeds, farming operations, etc.) the same.

Preliminary controlled experiments have been done in Palampur University and in the Ooty Institute of Tamil Nadu Agricultural University.

The research in Palampur concentrated on the effect of Agnihotra ash (Agnihora bhasm) as compared with other organic substances on beneficial bacteria in the soil, on the yield and the quality of production (in particular the oil content of medicinal plants). Also it was tested how well Agnihotra ash can control diseases and pests, again in comparison with other organic preparations.

In the Institute of Commercial Horticulture, Tamil Nadu Agricultural University, Ooty, comparative studies were done on flowers mainly, but also on some kinds of vegetables, and the results are that organic farming with Agnihotra gave better results in terms of yield, quality and shelf life as well as disease resistance.

In short, the general scheme of such comparative study on farm level is as follows :

We select one farm for Homa Farming, on other farm at least three kilometres away (as the crow flies) without Homa. (In case one wants to compare Homa organic with conventional farming also, a third farm could be added for that purpose.)

On both farms the soil quality should be the same, and then the same crops will be planted, using the same seeds, same farming practices, etc.- the only difference will be that we have Homa atmosphere on the first farm but not on the second one. The use of Agnihotra ash in comparison with other organic preparations can be tested on both farms.

A comparative study of Homa Organic Farming /non-Homa Organic Farming will clearly show which impact Homa has on quality and quantity of yield , on plant health, etc. As all other factors (like soil, weather, seeds, farming practices) are kept same, the effect of Homa will be identified.

...

In order to identify such underlying mechanisms, we suggest setting up

experiments in disciplines like microbiology, plant physiology, plant pathology, soil science (especially soil physics).

... ..

Agnihotra ash increases the water-soluble phosphorus extracted from the soil.

Such an experiment has been done in U.S. and has been repeated in Germany recently.³⁹

In the same conference Dr. R.K. Pathak, Chief Consultant, National Agriculture and Cooperation, Krishi Bhavan, shared his experiences of using Agnihotra and Agnihotra ash for organic farming.

I made visits to Manas Krishi Organic Farm at Shahapur in Thane district of Maharashtra owned by Shri Vyankatesh Kulkarni, Tapovan in Jalgaon district of Maharashtra managed by Fivefold Path Mission's representative, Shri Bruce Johnson and Shri Abhay Mutalik Desai's Farm at Sutagatti in Belgaum district of Karnataka. These visits provided me lot of confidence. Under the technical support of Mrs Karin, some activities on Homa Organic farms were initiated at Central Institute for Subtropical Horticulture at Lucknow and a few farms in Uttar Pradesh on our instigation.

The basic strength of the Homa Therapy system is regular practice of Agnihotra at the organic farm. It is a gift to humanity from ancient science of bio-energy, medicine, agriculture and climate engineering. When Agnihotra is performed tremendous amounts of energy is gathered around the copper pyramid at Agnihotra time. Which results in creation of magnetic field. This is capable of neutralizing the negative energies and reinforces positive energies. It is further claimed that smoke emerging from Agnihotra gathers particles of harmful radiation from the atmosphere and on a very subtle level even neutralizes the radioactive effects.

There are number of examples that if plants are kept in Homa atmosphere, they receive nutrients from the Agnihotra atmosphere. A special configuration of Agnihotra pyramids is installed to activate a Resonance

³⁹ Berk, Ulrich. Agnihotra and Homa Therapy - Scientific Perspective, Brainstorming Conference, pp. 46-49.

Point on a Homa Farm. Agnihotra fire along with several hours of 'Tryambakam Homa' is performed daily, with more hours of om Tryambakam Homa on full moon and new moon days. Agnihotra ash is used to prepare a special Bio-formulation 'Biosol' and also it is used for seed treatment, pest and disease management.⁴⁰

He added his on field experiences. He says, Homa Organic Farming is 'a totally revealed science'.

Homa production of Mango in Peru has shown very encouraging results... In order to repeat the same, we tried to see the performance with Dashehari a leading mango variety of north India. On an average productivity of Dashehari is around 10 tonnes/ha. For this yield, one has to spray a minimum of 5-6 sprays of pesticides at a regular intervals. I anticipated that if we increase the production even up to 20 tonnes/ha and eliminate use of any chemicals in its production it would be a real contribution in mango cultivation. On my advice Ramesh Tiwari from Hasanganj, Dist. Unnao, Uttar Pradesh initiated Homa Organic Farming in his orchard and as per his statement he has able accomplish my dream. It is interesting to record that his mango orchard is free from any pest and disease infection and production is superior as compared with those managed with agro chemicals.⁴¹

Abay Mutalik Desai has carried out experiments of Homa Organic Farming were

⁴⁰ Pathak, R.K. Expectations With Homa Organic Farming, Brainstorming Conference, pp. 64-66.

⁴¹ Pathak, R.K. Integration Of Organic Farming Systems For Sustainable Mango and Potato Production, Brainstorming Conference, p 20.

carried out from 1999. He has compared these experiments with his previous experiments of Organic Farming.

Table 1: Sugar Cane (20-25 acres)

Year	Variety	Irrigation	Water GPM Gals/min	Electric Power HP/Hrs	Chemical NPK Kg/acre	Yield MT/acre	Farm Machine
1989	CO-740	Flood	900	30/24	1000	14	50 HP Tractor
1990- 1995	CO-740	Sprinkler	240	20/16	400-200	25-50	50 HP Tractor
1995- 1999	CO-8014 /8011	Sprinkler	240	20/12	200-75	40-45	50 HP Tractor
1999- 2009	Homa Organic Farming	Co89014 Co94012 Sprinkler	240	20/6	No chemicals	40-45	1 pair of Bullocks and 10 HP Power Tiller

In 1999 I first met Shree Vasant Paranjape. Heal the atmosphere with Agnihotra Homa and the healed atmosphere will take care of your farm along with minimum organic farming practices. Grow nutritional food without any chemicals by strengthening the subtle energy structure of plants to enhance plant health and yield. Agnihotra Homa and Tryambakam Homa can be done daily by any person irrespective of caste, creed, religion, age and sex. HOMA Therapy can be used with any system of organic farming, if alone organic farming practices are not giving the desired results. These were the words from Shree Vasant Paranjape which changed my vision. I wanted to practice simple and successful organic farming with lower cost of production, lower energy inputs, lesser water and labour. I immediately incorporated HOMA with my organic farming on all 50 acres.
Farmers adopted organic farming themselves last decade and were successful and would continue to use Homa Therapy now to become

successful and to protect themselves from environment challenges. They will not wait for the scientific community's approval.⁴²

Abhay Mutalik-Desai, who has experienced the success with Homa Organic Farming in his fields, does not want to wait for scientists to approve the results. He - as has stated in the same seminar - has taught more than 5000 farmers Homa Therapy and is ready to work with NGOs in Karnataka and also the 'Organic Krushi Mission' of India in order to teach more and more farmers Homa Farming.⁴³

While Dr. Tej Pratap, Vice-Chancellor, CSK Himachal Pradesh Agriculture University, Palampur, confirming the success with Homa Organic Farming adds more details :

The use of this knowledge of Homa pyramid fire in farming, revived in late 20th century in Latin America as well as in India,... Homa pyramid fire has a strong potential for increasing the yield and quality crops, food grains, vegetables and fruits, alike. It also seems to be regulating insect infestation and fungal disease in crops in an ecologically sound manner. Soil characters with significant effect on yield such as plant availability of nutrients appear to be improved. There are now definite examples of Homa Farming experiences and success stories among the farmers in India.⁴⁴

⁴² Op cit, Mutalik-Desai, Abhay. Experiences With Homa Organic Farming In Karnataka, pp 11-13.

⁴³ Op cit, Mutalik-Desai, Abhay. Experiences With Homa Organic Farming In Karnataka, pp 74-75.

⁴⁴ Op cit, Pratap, Tej. Foreward, pp 1-2.

These are some chosen expert's opinions on Homa Organic Farming. In the same conference many more agriculture experts and scientists and farmers as well, have expressed their views and shared their experiences. They are not only Indians, but also from various parts of the world - like Germany, Poland, Austrelia, America, Chile, Peru etc.

Under the guidance of Dr. K. N. Dhumal, Dr. M. G. Shitole and Dr. B. G. Bhujbal the Department of Botany, University of Pune has undertaken a studies ' Impact of Agnihotra farming on growth, yield and quality of some crop plants' in the kharif season. The crops that were selected for the project were of different types like - vegetables - Methi, Bhendi, Brinjal and Chilies; cereals - Jawar, Wheat (rabi season); pulses - Mung (kharif season), Gram (rabi season); oil seeds - Groundnut, Soyabean (kharif season). The seeds for the project were produced authentic from college of Agriculture, Pune and Mahatma Phule Krishi Vidyapeeth, Rahuri. For all the experiments Randomized Block Design was followed and the experiments were performed in controlled laboratory conditions and in field conditions. Soil analysis was done before and after the experiments. The broad conclusions of the project are : Agnihotra ash solution treatment is best for inducing the increase in morphological characters like hight of the plant and number of leaves. This treatment stimulates percentage of shoot length. The biochemical investigation of chlorophyll, reducing sugars and proteins revealed that, photosynthetic pigments (chorophylls) reducing sugars and proteins are stimulated due the agnihotra ash treatment. Agnihotra prayer chanting is giving equally good results for all the crops screened in the present study. During germination there was significant increase in root length, shoot length and root to shoot ratio. Better establishment of seeding in agricultural crop results into higher yield quality and quantity. The number of photosynthetic organs (leaves) per plant have also shown significant increase in all the plants studied. Increase in number of leaves in methi is directly responsible to increase the yield in methi. In other plants like mung, soyabean and bhindi increase in the photosynthetic area has positive correlation with increase in the yield. The biochemical studies

regarding chlorophyll content, reducing sugars and proteins demonstrated that chanting of agnihotra prayer in the vicinity of the growing crops has great impact on metabolic and biochemical process in treated plants. There was favourable increase in total chlorophyll pigments (master molecules in photosynthesis which are responsible for carbohydrates-sugars synthesis) in all the plants. Regarding protein and sugar content it is clearly seen that both are positively influenced by chanting agnihotra prayer. It will result into accumulation of dry matter. Sugar and proteins are basic biomolecules in plant's life. Enhancement in them indicate better growth, better functioning and better yield. The results on groundnut, sshravan ghewada, chilies, bhindi were very promising. All the crops were very healthy, disease free, luxuriantly growing, the number of floweres and fruits/ pods were significantly higher. Agnihotra farming is best technique in 21st century for improving quantity and quality in various crop types. The agnihotra prayer chanting improves the crop yield along with protecting the crop from fungal or bacterial diseases. It reduced the cost of cultivation, as there was no addition of fertilizers. Thus agnihotra farming has many fold favourable impact in present agricultural system. This should be recommended on large scale in future for the benefit of mankind to have healthy environment, healthy food and healthy mind which will generate peace and prosperity in the whole world.

The Department of Botany is very keen in keeping the experiments on agnihotra farming in progress even during rabbi season.

6.7 : Agnihotra ash medicines

Today's world is dynamic, diverse and full of multiple impressions that have a great impact on people's lives. Continuously one has to deal with this diversity and face new situation. Toxic contamination of food and water, radioactivity, noise and many other pollutions are the outside pressure that create stress and strain

on all systems.

Homa Therapy comes from the Vedas, totally a revealed science. Today many people wish to make use of ancient science of medicine - Āyurveda, to maintain good health and well being with Homa Therapy, a part of Āyurveda technique, one can strengthen health. With this therapy medicines are prepared for men, animals and plants. Homa atmosphere and ash is used to cure and preventions of diseases as it is mentioned in Āyurveda. These medicines are helpful in neutralizing the effects on the body caused by ingesting radioactive food materials. A special effect is on biogenetics, like imbreeding of specific qualities in a child or grandchild etc. Yajñas help in correcting infertility in a person.

Since 1974 Monika Koch is working with Homa Therapy - Agnihotra and Agnihotra ash. Monika Koch, a German Pharmacist, pioneered the use of Agnihotra ash as a medicine. She developed the guide lines for the preparation of various medicines based on Agnihotra ash, such as ointments, powder and creams. By using these instructions, people make and use these remedies as folk medicines. People from many parts of the world have used these medicines successfully for a wide range of ailments.

Dr. Ulrich Berk has witnessed and talked many people who have experienced the healing effect of Agnihotra ash, eg. One woman who did not want to live anymore joined the 'Traymbakam Yajña' and immediately felt much better.

A worker in the bread factory did an experiment with bacteria and Agnihotra. They took a piece of mouldy bread and put one part in Agnihotra atmosphere and the other kept out of Agnihotra atmosphere. The piece of bread that was not in Agnihotra atmosphere continued to mould normally. The piece of bread in the Agnihotra atmosphere not only stopped moulding, but the amount of fungus decreased also.

A physicist shared his experiments about radioactivity. This incident happened shortly after Chernobyl, when people were terribly worried. He examined the Agnihotra ash with a sophisticated apparatus. He found that the radioactivity

during Agnihotra is only natural radioactivity. He measured no higher radioactivity in the ash and strongly recommended eating powdered Agnihotra ash three times a day because that time, especially in Europe, everything that one normally eats was radioactive and contaminated, including medicines. Specially horrifying was the radioactivity in the minerals that our body stores.

6.8 : Agnihotra and Radioactivity

Normally scientists will not understand easily how radioactivity can be neutralised by doing Agnihotra. They always think of burning something as a chemical process only. But if it is only a chemical process then the nuclei of atoms are not changed and hence radioactivity is not affected at all.

It is possible to fuse these atoms under quite normal conditions. In laboratories most scientists do not believe that this might be possible. The Agnihotra process is also something similar to 'cold fusion'. This explains how radioactivity can be eliminated.

Because of the catastrophe in the nuclear reactor in the Ukraine at Chernobyl, at the end of April, 1986, increased radioactivity was observed in large areas of Europe. In Poland, especially, the northeastern parts of the land which are about 700 km (438 miles) away from the damaged nuclear reactor, were affected.

It is interesting to note how the PSI skills and the age-old therapeutic methods could be made serviceable and helpful in the case of nuclear threats. Along with the typical methods to fight dangers of radioactivity (corresponding protection against radiation with iodine tablets, vitamins, etc.) various Radiesthetic and parapsychological methods have proved useful.

Every couple of hours the radioactivity in the atmosphere and in the drinking water was measured by the Radiesthetes in Bialystock, the largest northeastern city of Poland, which also made possible an independent check on the existing quantity of radiation. Two weeks later these measurements

were compared with the official data of the International Atomic Energy Agency. They concurred with each other to a great extent.

It has been found during this work that the different PSI methods are suitable for measurement as well as for protection from harmful radioactive emission. PARTICULARLY EFFECTIVE RESULTS WITH RESPECT TO ELIMINATION OR REDUCTION IN THE RADIOACTIVITY WERE ACHIEVED THROUGH AGNIHOTRA FIRE AND ASH. Today the process of Agnihotra is widely spread in Poland. Agnihotra is, at present, being practised in over thirty cities. ... ⁴⁵

These were the experiences of people living in the nearby area Chernobyl, which were published in 'Zeitschrift für Radiesthesie, München.'

According to Karin Heschl, if Agnihotra would be examined from the point of view of Quantum Physics, scientists would find a gold mine of knowledge in the ancient Vedic science of healing the atmosphere. She adds further, the Veda the ancient most knowledge known to human beings, consists of many sciences, like Vedic science of bio-energy, climate engineering, agriculture, biorhythms, pyramidology, medicine (Āyurveda), etc. When Agnihotra is tested with an oscilloscope, it is noticed that a special sound comes out from fire. It is the sound that heals. Fire creates sound but it also reacts to sound. The act of singing special vibrations while the Agnihotra copper pyramid fire burns, creates a resonance effect which invigorates the cells of plants, leading to better reproductive cycles. Resonance plays a vital part in natural phenomena.

Chernobyl was very dangerous, but today it is even more dangerous. Before, the radioactive elements were in the air- now they are in the soil. Europe is suffering! Children don't have enough non-radioactive elements. Offcourse the TVs, newspapers and radios don't speak about the real situation, but the scientists and experts know that it is very dangerous. ...

When the Chernobyl nuclear accident happened, I was a Hooma volunteer and had a farm near Graz in Austria. Immediately after the accident the

⁴⁵ Matela, Leszek. Radioactivity and Agnihotra, Bharatiya Satsang, Vol.VIII, No. 10.11 &12, March, April, May 1988, p. 1.

Austrian Government issued instructions that every farmer had to carry milk and fodder for testing for radioactivity. When I did this, the inspectors were shocked, because they found only normal radioactivity levels in my milk and fodder samples. The inspectors said it was not possible to have normal radioactivity after Chernobyl. They asked, "Is there anything special that you are doing on your farm?"

I told them that my farm was using ancient Ayurveda technology to grow food which is now presented as Homa Organic Farming technology.

"We do a small fire in a small copper pyramid exactly at the moments of sunrise/sunset. Materials burnt are dried cow dung cake pieces, a little clarified butter from cow milk and a few grains of raw rice. This is called Agnihotra Homa. Also we do another Homa, repeating one mantra and adding a drop of clarified butter to the fire after the mantra for four hours daily. On full moon and new moon days we take turn to maintain the second Homa for twenty-four hours. According to Ayurveda by this method we inject nutrition into the atmosphere. This affects the plants, soil and subsoil water.⁴⁶

While narrating the reports on the effects of Agnihotra on the radioactivity the authors of 'Secret Life of Plants' Peter Tompkins and Christopher Bird wrote in their next best-seller :

From Europe we received reports of a group of scientists in Rovinj, Yugoslavia, experimenting to establish just what Agnihotra does, and how. Their interest had been aroused by the discovery that after they had burned the required ingredients in the copper pyramid their instruments failed to pick up radioactivity in the immediate area, an anomaly since the Chernobyl disaster, which irradiated, along with large parts of Europe, even their small Adriatic seaport on the Istrian peninsula in the province of Croatia. The Yugoslavs also learned that group of subcontinent Indians living within the borderlands of the Soviet Union who used dried cow dung to seal their hunt were unaffected by the radioactive contamination. Intrigued by

⁴⁶ Op cit, p. 44.

these mysterious developments, the Soviets have invited one of the Yugoslav scientists, Mato Modrić, a biologist, to visit the Soviet Union to demonstrate the method of Agnihotra in the hope that it may be of value to its citizens.⁴⁷

People in Europe have suffered much diestrous effects due to the accident of Chernobyl. Hence their feelings regarding the problem of radioactivity and the solution to it are very sharp. In Agnihotra they have found a perfect solution and the European scientist are still researching on the issue.

6.9.1 : Measuring the effects with Kirlian Photography

The 'Kirlian Photography' is a special method to measure the finest effects of energy pressure of living beings. This method helps in capturing on a photographic plate an image of what is thought by some to be an aura of energy that emanates from animals and plants and that undergoes changes in accordance with physiological or emotional changes.

Kirlian photography refers to a form of photogram made with a high voltage. It is named after Semyon Kirlian, who in 1939 accidentally discovered that if an object on a photographic plate is connected to a source of high voltage, small corona discharges (created by the strong electric field at the edges of the object) create an image on the photographic plate. The Kirlian technique is contact photography, in which the subject is in direct contact with a film placed upon a metal plate charged with high voltage, high frequency electricity. Kirlian made

⁴⁷ Tompkins, Peter and Bird, Christopher. *Secrets of Soil, A fascinating account of recent breakthrough - scientific and spiritual- that can save your garden or farm*, Harper & Raw Publishers, New York, 1999, pp. 250-251.

controversial claims that the image he was studying might be compared with the human aura. An experiment advanced as evidence of energy fields generated by living entities involves taking Kirlian contact photographs of a picked leaf at set periods, its gradual withering being said to correspond with a decline in the strength of the aura. However it may simply be that the leaf loses moisture and becomes less electrically conductive, causing a gradual weakening of the electric field at the drier edges of the leaf. In some experiments, if a section of a leaf was torn away after the first photograph, a faint image of the missing section would remain when a second photograph was taken.⁴⁸

Mit Hilfe der modernen Kirlianfotographie sind wir nun in der Lage, alle diese (positiven) Wirkungen auf einem direkten Wege zu messen. Durch die relativ kurze Zeitspanne vom Versuch bis zum Meßergebnis fallen somit viele Faktoren der Unabwägbarkeit weg.

Die Kirlianfotographie ist eine Methode, wie man feinstoffliche Energieflüsse bei Lebewesen sichtbar machen kann. Obwohl man inzwischen durch diese Methode schon einige Effekte sichtbar machen kann, sind sich die Wissenschaftler noch nicht ganz einig, um welche Art von feinstofflicher Energie es sich hier handelt (Bioplasma, Aura, seeliche Energie usw.).

... ..

Da der gedankliche Gemütszustand der Versuchsperson das Bild wesentlich schnell verändern kann, wurden die Versuche jeweils an drei verschiedenen Tagen durchgeführt. Die Veränderungen werden jedoch bei allen Bildern gleichermaßen deutlich sichtbar. Mit Agnihotraasche in der Hand wirkt das Bild energiereicher, was durch die Verstärkung der äußeren Korona erkennbar wird. Die sich schließende innere Korona weist auf einen Heilungseffekt hin. Bei Patienten, die genau ihr notwendiges Medikament erhalten, kann man vergleichsweise auch feststellen, daß sich Energielücken in der Aura schließen.

Die Wirkung ist nicht nur bei Agnihotraasche sichtbar, sondern natürlich auch beim Praktizieren von Agnihotra.

... ..

Alle Versuchspersonen hatten vorher das Agnihotra nicht gekannt. Man kann also davon ausgehen, daß Agnihotra unabhängig von der gedanklichen

⁴⁸ www.wikipedia.com

Überzeugung der Person positive Wirkungen hervorruft. Wenn ein Mensch zum erstenmal mit einer neuen, unter Umständen exotisch wirkenden, Technik konfrontiert wird, dann sind die gedanklichen Reaktionen erfahrungsgemäß eher zurückhaltend, skeptisch oder sogar negativ.

... ..

Bei den Versuchen mit Agnihotra wurden die Pflanzen in der Regel in der Entfernung von einem bis eineinhalb Meter vom Feuer plantiert. ... die Pflanze hat sich vom aggressiven, nervösen Zustand zum entspannten, vergeistigten Zustand verändert.

... ..

Zusammenfassend kann man sagen, daß sowohl beim Menschen, als auch bei Pflanzen bestimmte Wirkungen mit positiven eigenschaften festgestellt wurden. Wir wissen jedoch nicht, wie alles im einzelnen zusammenhängt und weshalb diese Gesetzmäßigkeit in die Natur abläuft. Da Agnihotra stets von mindestens einer Person durchgeführt werden muß, ist zum Beispiel nicht auszuschließen, daß die Pflanzen eher von dieser Person und nicht unbedingt direkt vom Feuer beeinflußt werden. Der Faktor Mensch wird wohl kaum auszuschalten sein. Viele von Agnihotra unabhängige Versuche haben ergeben, daß Pflanzen ihre "Gefühle" fast von einer Sekunde auf die andere verändern können und von menschlichen Gedanken ebenfalls leicht beeinflussbar sind.

Es ist eigentlich gar nicht so wichtig zu wissen, wie das Ganze funktioniert, sondern daß es funktioniert. Jeder ernste Wissenschaftler wird heute zustimmen müssen, daß man bei Untersuchungen, die inrenewie mit dem Menschen zusammenhängen, grundsätzlich die Ganzheit der Natur einbeziehen muß. Unterschiedliche Phänomene lassen sich nur schwer ganz isoliert voneinander betrachten - und bei feinstofflichen Energien ist dies ohnehin noch um einiges schwieriger.⁴⁹

The experiments were undertaken to examine the results of Agnihotra on human body and plants. The people, who were examined, did not know Agnihotra earlier. The readings were taken before and after the Agnihotra. The changes were marked in the magnetic field of human hands and leaves of plants. Before Agnihotra the condition of plants was nervous and aggressive, that was changed to enthusiastic conditions. As the people did not know Agnihotra earlier, the results show that the positive changes in the condition is not due to prejudices.

⁴⁹ Fehringer, Mathhias. Agnihotra und Kirliionfotografie, Nov. 1987, Radolfzell, pp. 1-8.

6.9.2 : Measuring the effects with PIP Imaging

PIP (Polycontrast Interference Photography) Imaging is an effective visual, safe and non-invasive scanning system that reveals the energy field. The energy field is made from the 'interference and transference of light frequencies, at and beyond, the visible spectrum.' PIP records these harmless, predominately infrared frequencies, through a video camera and recodes them using a standard computer with the PIP computer program. It shows energy transference and dynamics at work, and used to provide an accurate recording of the body's energy and monitoring the effectiveness and results of treatment systems.

Primarily medical and complementary therapists use PIP Imaging. It determines 'energetic stresses' which are clearly indicated by 'focal points and congestions of low energy' that relate to physical symptoms, disease and pain. It is also used to monitor the effects and results of healing modalities, medicines and treatment systems by taking scans 'before and after' therapy.

PIP Energy Field Imaging was used to record the effects and determine any changes with 'before, during and after readings' of the Agnihotra practice, an ancient Indian fire ceremony, which is used to purify areas and improve people's health. This research was prepared by Ms D Takawale of CHEFR and edited by Prof J Rogerson, CHEFR co-founder, from the Energy Centre at The World Peace Centre MIT College, Pune India.

For this study two types of analysis were made 1. Investigation of Agnihotra on the 'Performer 2. Investigation of Agnihotra on the 'Audience'

The Agnihotra performer was PIP scanned 'before, during and after' conducting the ceremony. The performer and camera were in the same position to keep parameters constant and scans consistent.

In the first scan above 'Before Agnihotra', the performer of the ceremony has a relatively dark body and surrounding energy field reading, compared to those in Scans 2 and 3. Scan 1 therefore indicates the most 'low energy', shown as darker congested colours in focal points and thick bands, mainly in the throat, lung and abdominal areas. Scan 1 also indicates the lowest energy absorption and transference rate, which is the body's ability to draw in higher, brighter colours and frequencies and its efficiency to ground the lower, darker ones.

Scan 2 shows the most significant increase of both body and surrounding energy fields, and the highest rates of energy absorption and transference. Notice the grounding and dispersing of the darker congested 'focal points' of low energy and the increased size and vibrancy of the energy field. Scan 3 'After Agnihotra', shows slightly less vibrancy and rate of transference compared to Scan 2 and higher rates compared to Scan 1. PIP indicates that the Agnihotra performer's body following the ceremony increases in vibrancy, absorption and transference rates, which correspond to an improvement in his feeling and well-being.

Ten subjects were chosen for investigation of Agnihotra on the Audience. Each subject was scanned with PIP prior to Agnihotra in the standard PIP environment. The group then participated in the Agnihotra ceremony, but did not perform in the Agnihotra 'service' itself, but as the audience and spectators in its vicinity. Following the Agnihotra each subject had a second PIP scan to monitor and assess any changes.

In Scan 1 'Before Agnihotra,' the first audience subject has a darker body field and surrounding energy field compared to Scan 2 'After Agnihotra.' Scan 1 therefore indicates 'lower energy', shown as darker congested focal points and thick red bands, mainly around head, throat and elbow areas. Scan 1 also indicates the lowest energy absorption and transference rate. After Agnihotra the congested pools and bands increase in brightness, vibrancy and improved absorption and transference rates. Notice how the overall energy field has expanded and brightened up in Scan 2, lowering and dispersing the congested focal points of low energy around head, throat and elbows. This indicates that

following the Agnihotra ceremony, the subject's body increases in vibrancy and transference rates and corresponds with an improvement in his feeling.

On the second audience subject above, 2 sets of scans were taken by PIP Imaging; 'Before and after' scans of body profile and before and after of the head reading. Before Agnihotra, Scans 1 & 3, show darker fields, especially in the surrounding energy compared to Scan 2 & 4. Before Agnihotra, Scans 1 & 3 indicates the lowest energy transference rates. After Agnihotra the congested pools and bands increase in brightness, vibrancy and improved transference rates. Notice how the overall energy field has expanded and brightened up. This indicates that following the Agnihotra ceremony, this subject's body and head field readings increase in vibrancy and transference rates and corresponds with an improvement in his feeling.

CHEFR concludes that the results of Agnihotra ceremony on the research subjects and performers, as revealed by PIP Energy Field Imaging, clearly show an increase in vibrancy, brightness, absorption and transference of energy after the ceremony and months practice. This correlated with health improvements and testimonials from the individuals to feeling better, fresher with increasing amounts of stamina.

6.10 : Research regarding the effects of Soma-Sacrifice

Wojciech Puchalski - a scientist from 'The Nature Laboratory', has undertaken certain research in India to understand practical applications of Vedic spirituality and knowledge with scientific instruments. His report describes some preliminary results of studies on energetic and environmental effects of Vedic rituals and ceremonies. The field study was done from December 2007 to January 2008 near Maheshwar on the banks of Narmada river (South Madhya Pradesh). The

Narmada river is the only world's large river with great majority of its course from East to West is described in terms of geostrophic effect which may be responsible for some unusual qualities of this river. Volcanic soils of this area are extremely paramagnetic. He undertook the same experiment in January 2009 at the same place. But the observations of this experiment are not yet published.

6.10.1 : Instruments for the observations

Life Energy Meter- the instrument used for the research - designed according to Wilhelm Reich's concept of orgonometer, has found to be a valuable and useful tool for detecting neo-energetic charges in air around ceremonial places, where Vedic rituals were performed; states the scientist. This device can also measure differences in human personal energetic fields, including energies of particular 'chakras' and energid fields of vegetation, including cultivated crops. This instrument was used to measure the effects of Soma-sacrifice in Maheshwar. The ceremony of Somayāga was described in terms of intensive and dynamic changes and transformation of life energy. Some distinct phases of this ceremony were described, with their processes of production, uptake, release and transformation of life energy. Materials used for the ceremony (soma - *Ephedra* stalks, a trunk of *Ficus racemosa*, leaves of *Poa cynosuroides*, milk and many others) have extraordinary energetic properties, and these preliminary findings demand further studies, which effects might have a special importance for material technology.

For this purpose the Experimental Life Energy Meter model LM3 with Vacuum Tube Probe LM-01AC, manufactured by Heliognosis, Canada, was applied in investigations. This device is an electronically enhanced version based on

Wilhelm Reich's (1981) concept of Orgone Meter. Living organisms can emit or absorb from their environment a kind of energy which can easily be detected with this device, both by direct contact with a probe, or from some distance in air. Also, the energy measurable with it is constantly present in air, with spatial and temporal variability of its amount.

The phenomena it detects, according to manufacturers, has been known by several names including orgone, zero point energy, chi or prana. However, as Vedic science distinguishes four types of prana, it is not clear which spectrum of it is detectable with this device. Therefore one should take in consideration that even with this device not all energies involved would be measured.

The life energy meter was fixed on a tripod and powered by 12V rechargeable battery, which was placed at some distance (at least 1 m) to avoid any interferences (or keep them at a constant level). Also it is important for people not to approach the device or its probe, as their personal energy fields affect the measurements to a great extent if closer than 1-1.5 m. It is also necessary to switch the device on at least half an hour before starting the measurements to power it up for obtaining stable results.

It is necessary to keep in mind also that this device can measure the energy in the point of fixing its probe. It means that measurements indicated the energy present at a side of ceremonial places, at the height of about 1.2 m above ground level, with some distance kept for not disturbing the ceremony itself and to not interfere with energy distribution at the ceremonial field. The bulk of energy produced, claimed by performers of ceremonies as moving vertically even up to 12 km, could not be measured. According to the manufacturer's instruction, this device may also be used for measurements of personal 'aura' energies, by scanning a human body along its axis, or with changing distance from the body surface. When scanning, distinct maxima appear at levels where, according to Eastern traditional science, main chakras of the body are located. Taking such measurements one should be sure that no metal object is present along the whole scanning line on the body of assessed person.

6.10.2 : Procedure

During the Somayāga, *Ephedra* is particularly venerated. The stalks woven in a cloth have been conditioned in a special way by exposing them to energies of the ceremony for some days. Then they were ground in stone mortars with water to pour such a juice into wooden holders of various shapes and to use it for offerings to fire and also to drink during the culminate phase of the ceremony, apparently exhaustive for performers. The main goal of such a large ceremony is said to be clearing and healing of atmosphere, water and soils with use of this special fire. The whole ceremony was performed by a group of more than 20 pundits – priests trained in mantras, ritual fires, offerings and other elements of the whole ceremony, perfectly knowing their jobs and cooperating within their group without any sign – even for a while – of lost coordination. Also they are conscious to a great degree of energetic effects which arise from their work. People should be healed, although some effects of pain or temporary intensification of symptoms of illnesses which one already suffer, may occur (and did occur for some of people present there). It was also said that the spatial effects of Somayāga may extend into a distance of more than 100 km, and sustain even for 80 years. These effects should be larger than 1000 Agnihotras performed simultaneously. Only short, half an hour ceremony was done on the first day afternoon at a side of the main ceremonial place. With mantras, the LE rapidly had grown during first minutes. Then pundits started to light fire by friction using a special wooden tool. This time resulted in pronounced decrease of LE readings, which then started to grow with fire already lighted and mantras chanted. Within some minutes LE returned to previous maximum to drop until the end of this ceremony.

In early morning (at sunrise) a small belt of clouds (*Alto cumulus* and *Cirrostratus*)

was visible in the sky, normally cloudless in this time of dry season. These clouds had disappeared till about 10 a.m.

It was the day of offerings: fruits, flowers and water. Pundits started from previous side place then moved to the main ceremonial area. Morning offerings and mantras were connected to high growth of LE readings, with the highest rate during the offering of water. Change of sites, short breaks between rituals might result in small drops of LE level, rapidly returning to previous values and continuing in increase. Completely different pattern was in afternoon ceremony. This, held in the main ceremonial area, was connected to a rapid decrease of LE values. In that time the sky became covered by clouds *Cirrocumulus*, which belong to the group of high clouds, forming by convection at heights between 6,000 and 13,000 m. These clouds had remained in sky till night. The evening Agnihotra performed by many people at the Somayag site only very slightly slowed down the LE decrease, which was continuing through the whole afternoon.

Before the Somayāga it was informed that clouds may form as a result of this ceremony. Considering cloudless sky during the whole period of my stay there, the LE loss in this as well as in previous afternoon and cloud formation as energy consuming process, it is possible that these clouds might be the product of the ritual. Moreover, there was no wind (at least at the ground level), which might suggest that clouds were formed as a result of local air convection. However, there is no direct proof for this hypothesis. This phenomenon should be discussed with Indian meteorologists, who should have more data on air mass movements in this period and more knowledge on climate peculiarities of this region. This day production of 'big fires' started. There were small fires of wood and ghee, with mantras chanted. A small amount of mixture of cow and goat milk with ghee was added to the fire, with appropriate mantras chanted. This suddenly produced a large outburst of flame. In this moment measured LE in air started to decrease, which continued in few minutes. LE dynamics became regular, with undetectable effects of particular events. Only one big fire, bigger than previous

day, had produced measurable LE decrease in air at the border of ceremonial place. Weak wind gusts, which appeared around noon, produced significant oscillations of measured results. This day last 'big fire' was created and ceremonies previously with fires in pits in the center of fenced ceremonial place, around noon moved to another center in the same area – the big hearth, which was built of bricks and clay the previous day. Wooden shelves, where *Ephedra* was exposed were burnt as first. The LE measurements reflect some small irregularities in the overall trend of energy growth in the area, which occurred at the same time as changes in rituals performed. Generally, breaks between rituals. But in early afternoon there was the only event, which at this phase of the ceremony had produced significant decrease of LE in air.

This was erecting a pole in the ceremonial place, a new element within it. Firstly, a fresh trunk of 'audumbara' tree (*Ficus racemosa*; syn. *F. glomerata*) was placed vertically in soil inside the ceremonial area. It was then sprayed with ghee, covered with dry 'darbha' grass and wrapped round with blue fabric. Then some sticks were added and when the whole construction was ready in few minutes, a huge LE drop occurred. It seems that the whole construction worked as a powerful energy receiver and condenser. a tree trunk works as an electronic condenser, a device constructed to store energy loads. A condenser is built of thin layers of electric conductor and isolator, and the most common cylindrical condensers look like rings in timber of a tree. Tree rings really are formed in this manner: during warm (or wet) season there is time for growth of broad timber vessels, filled with sap (an electrolyte, good electric conductor). Dark part of a ring, created during cold (or dry) season, is hard. There is no flow of sap in compacted lignin tissues, which cannot conduct electricity. The timber of *Ficus racemosa* used for this purpose had very distinct annual rings, qualifying the trunk as a good condenser. Freshness of the trunk is also of importance, as a fresh trunk still contains sap, acting here as electric conductor. Another element of the construction is 'darbha' grass, *Poa cynosuroides* (although some sources determine it as *Desmostachya bipinnata*). This grass, growing in tussocks at

swampy sites, have long, very sharp leaves, sharply pointed at their ends. It is considered a holy plant in India, used in numerous rituals as purifying or protecting agent. Iyengar writes that these leaves can absorb even 60% of X-ray radiation; therefore it may serve as an effective absorber of various high-frequency energies from air. And probably here this is the main function of this grass. Specific shape and sharp edges of leaves may be responsible for these exceptional qualities, but according to this source, a special mantra is needed to chant when the grass is cut. Moreover, Iyengar suggests that the Earth's magnetic field may be a factor responsible for occurrence of this plant, as it was found also for some plant species in Europe in my ongoing studies. The functions of other elements of this construction need more studies. This was the most intensive day of the whole ceremony. Stems of *Ephedra*, which have been energetically conditioned during previous days, are now ground in a stone mortar with some water to make juice, which is then filtered and poured into wooden and ceramic containers of various shapes. This grinding of soma appears to be highly energy consuming (from air) process. The level of LE measured in air lowers during this procedure, or later in the day the rate of LE increase is retarded when soma was ground. Contrary to this, pouring small portions of the soma juice to fire had produced increase of energy in surrounding air. The soma juice was poured many times during the day, individually or as a group ritual, always with appropriate (and loud) mantra chanted. There were also sticks of a woody plant (its name wasn't noted) with large spines, used earlier in the ceremony, which were also burnt this day. The intense LE growth was diminished just in the moment of throwing them into fire. Wind gusts, bringing air masses from outside, significantly changed LE readings in air surrounding the ceremonial site. Also, when the measuring device is moved closer to the point of ongoing ritual, the meter needs some minutes to fix to a new energy level. This also indicates strong energy gradients in the whole ceremonial area. Although LE measurements were ended at 18:30, the ceremony continued after a break till late night. Apparently energy saturation within the area was so high at that time, that it was even

possible to feel a strong 'charge' or 'current' in the ground with one's feet, and for some time it was even painful to stay at the ceremonial place without covering of head. And during this time a significant change of magnetic induction had occurred: the magnetometer readings decreased by 24 miligausses. This may be considered as a big change of the magnetic field. The last day of the ceremony. The *F. racemosa* trunk, set as energy receiver and condenser two days ago, was unwrapped, drawn out from the ground and with only the 'darbha' grass remaining on it, brought from the ceremonial place at the Narmada river bank. Wooden containers and tools previously used for handling soma juice were also brought to the riverside. After some time of chanting mantras when LE growth was noted, the trunk was taken into water. At that time, sudden and the most intensive LE decrease in surrounding air was noted, which lasted 10 minutes. After this, a short ceremony was held at the ceremonial place, with last fires, offerings and mantras. The LE values had increased during this time, except a moment when a large piece of wood (a thick trunk) was thrown into fire on the big hearth.

6.10.3 : Observations

The whole one-week ceremony seems to be extremely complex and complicated. It is possible that many more different energies, 'electricities', were in action, not possible to detect and quantify with instruments working there (or even with any other instrument of contemporary science). As for performing team, and many participating people, such a ceremony has mostly spiritual meaning and importance. There may be involved processes and actions far beyond the realms which contemporary academic science is interested in. But, while conscious of these, may try to approach them. The measured LE patterns follow typical diurnal cycles, with growth from morning to around noon, and then decrease in

afternoon, until sunset. Rituals performed during Somayag create – as related to the natural cycle – smaller irregularities, which however prove that these rituals have their effects. To describe the energy evolution, five phases of the whole ceremony may be distinguished: There was not enough time to make detailed geomantic observations simultaneously; but roughly it could be noted that the Bovis/BSM values of the place had grown intensively. Starting from 30,500 BSM (causal range) on the second day (or even less before), there was increase through 47,500 on the third day (spiritual range) and 95,000 on the sixth day morning and 240,000 BSM at the end (both within the range of pure spiritual being). The geomantic colours of the site were also changed: from blue to white, with indigo and green as supplementary colours at the end. Infrared appeared for a while as a transitional supplementary colour. Interpreting these colours according to L. Hilsberg, we start from order and regularity of structures (blue), to achieve proximity to the very spirit of the area, a space for creating unity, peace and also life (white). Indigo means appealing to the history, old times, even very ancient, of the site. It is also a colour of mind, of a place good for thoughts, for thinkers and scientists. Green means harmony, beauty and joy; is a colour of old people happy with their life and places good for them; it also combats pain. Infrared, detected only once in between, then disappearing, means dying, decomposition of something old and ill. When already dead, this colour also disappears.

When a biologist observes the whole ceremony and tries to understand as much as possible of it, his attention undoubtedly would be driven to special qualities of natural materials used in the ceremony. These are plants, as *Ephedra*, known as a metabolic drug, but it appears that its action is not only based on biochemical reactions of an alkaloid it contains, but it is able to absorb, to breathe in various energies from its environment. This involves a question, which is more general, not directly related to this ceremony: if we isolate from plants and purify substances which we think are the only active agent, do not we lose something even more important, but acting at another level? There might arise another

question: what is the real purpose of milk? What babies of the cow and the goat really receive with it, if it may produce such huge fire outbursts? What roles and functions various plants may perform, used in the ceremony, both in practical use by humans, and in their natural environment? Whether interactions between plants in their natural communities really are based on chemical competition, or some other, more subtle energetic processes are involved, based on specific qualities of particular species, which we are not conscious of.

6.10.4 : Remarks and Limitations

There are many more such questions, making a scientist's mind anxious, agitated and finally helpless. Even if this scientist had learnt so many times in his life that nothing is to be wondered at. From this point of view it would be recommended for biologists to participate in such an event, or better not, to have a quiet and sure mind is so pleasant.

It is necessary to say that the priests of the Somayāga team do have at least an important part of the knowledge which is lacking for an academically trained mind. They are conscious of energies present around and emerging here and there, of results produced by their work with 'raw materials'. Their kindness and help allowed me to see and understand much more and avoid mistakes. However, the problem sometimes is with translation and full understanding of thoughts, and it is not only because of different national languages we speak, but with translation between mystical, intuitive and logical ways of thinking. But, with learning of languages or with help of a good interpreter, this problem may be solved. One important part of their knowledge is how people with their bodies and minds may

react to huge energy loads and gradients produced during the ceremony. Defining spaces where 'plain' people are not allowed to enter and somewhat in consequently observing these rules, was due to changing energy fields and more or less danger they may produce to people. Then, if it is so dangerous, how do they survive in the very heart of these fields? At least part of their mantras, their robes, breathing and mental work have their protective functions. Chanted mantras were an inherent element in each ritual performed. It is another issue of paramount importance and only weakly known to contemporary science, how voice (i.e. mechanical wave) frequencies and energies affect processes at various levels, from sub-molecular to biological and psychical. These mechanical waves of interest are not only within ranges of audible sound, but also beyond these ranges, both in low and high frequencies. This should be an important part of further studies. One more note on wheat grains (used in some rituals), which soaked in water at the ceremonial place, after the ceremony had germinated almost immediately. However it is not clear here how long these grains were wet before, but such studies on rates and intensities of biological processes, including seed germination, with control samples and strict experimental procedures, should be among the priorities for further studies.

Not only German scientists and scholars are experimenting on the results and effects of Agnihotra, but Indians are also analyzing them, some of Indian scientists and agricultural experts are working in collaboration with German scientists or even alone.

The study of MIT, Pune shows that the minute changes in the human aura can be measured with the new PIP technology. The Agnihotra - Yajña has many benevolent effects on the human body, which is clearly measured by this new technique.

Here it has been tried to take up a survey of important experiments, investigations, their observations and their conclusions regarding Agnihotra. Many more experiments are done and are still continuing. For example as Mr Abhay Shende, the bio-technologist, told he would continue with his experiments

of PIP Imaging on some more detailed aspects. As the observations of auro after performing Agnihotra once are monitored, the observations of people practicing agnihotra for a certain period would be monitored and will be compared. Same time PIP Images of the person, who does not know agnihotra will also be compared. Same is the case of Homa-Farming. Indian agriculture experts and University professors want this subject to be added in the syllabus of the university courses. The Botany department of Pune University want to continue with their experiments on the farm in Nasarapur village on crops in Rabbi season, as they have observed the changes in the Kharip season. They want that some students of their department should take up these experiments on M. Phil. or Ph. D. degree level. Some experts in the field of agriculture feel that Homa Organic Farming is a novel technology, it should be added in to the prescribed syllabus of the agricultural courses of universities all over India. Hence much more is be done with the help of various knowledge branches working together on the Agnihotra - science of Yajña. The need of interdisciplinary studies is increasing hereafter in this multi-dimentional knowledge field.

... ..

7 . Interviews :

For acquiring the first hand information and experiences of the persons working in the field of Nitya sacrifices, their interviews are included in this study. Mr B. Shrinivas Sattri is versatile Vedic scholar and performer of various sacrifices and Dr. Ulrich Berk is the coordinator of all the scientific experiments that are undertaken all over the world.

Another effort is taken by giving a questioner to the German visitors of the Somayāga that was organized in Pune from 6 March to 11 March 2009. Secondly, the same was sent to Homa Hof Heiligenberg, Germany. It is a Homa Organic Farm in Germany, where many visitors come to see the organic farm. After a tour of the farm, the Agnihotra and its effects are introduced to the visitors. Many regular performers of Agnihotra visit this place and work on the farm. Hence the data regarding the experiences of these people is collected (on the same questioner in their own handwriting) with the help of the people working in this farm.

1 . Shri B. Shrinivas Sattri

The name of Mr. A. V. Vishwanath Shrouti, the versatile Vedic scholar of 'Black YV branch, is referred with respect. The resident of Nellor visited Pune in 1955 for the first time with his brother Vyankatesh Shrouti on the last day of Vājapeya Yajña, that was performed in S.P. College. Here he had discussion with N. S. Sontakke , who later on introduced him to the Vedic pundits circle of Maharashtra. In these words introduced 'Shrinivas Sattri' his grandfather and explained his tradition. He added further that Vishwanath Shrouti worked with C.G. Kashikar in Vedic Samshodhan Mandal, Pune in 1964. Both worked together on the 'Caturtha Kāṇḍa of Taittirīya Saṁhitā' for three months. Shrouti

helped him in reading the Samhita in Telugu script.

The father of Vishwanath Shrouti was against the animal killing in the Yajña. So was the mind set of his son. Hence he had a long discussion with Sontakke in Akkalkot. The result of which he performed Agniṣṭoma in Akkalkot in 1969, without any animal sacrifice after many centuries. That followed a number of Agniṣṭomas which he performed being the Adhvaryu.

Here, when asked, Shrinivasji explained, though he had normal schooling till his B.Sc. degree from S.V. University, he took proper education of Vedic Samhitā by his grandfather (father of his mother). He is born in a family in which Vedas and Śrauta are learnt and practice for generations. He is a 'Samhitā-pāthi' of Black YV branch and also a 'Padapāthi'. He said though he is a science graduate he never used this material education for earning daily bread, but he has worked with his grandfather and his maternal uncle since 1978-79 as a Ṛtvija of Somayāga.

He has performed many major and rare Yajñas and has a long list to tell regarding, which Yajña he has performed, in which year and where, - like in 1979-80 Atrićaturātra Arikāgniṣṭoma and Agniṣṭoma for Selukar, Viśwajita Agniṣṭoma in Nanded in 1982, Vājapeya in Latur and Solapur, in 1983 Nakśatreya for 60 days in Nellore, Agniṣṭoma in Chipalun, Bhopal and Una - Gujarat, in 1987 Jāmdagni-Ćaturātra in Jalana, in 1989 Agniṣṭoma in Solapur and Pañćarātra in Pune (Chaturshrinigi), in 1990 Agniṣṭoma in Sadoli - Rajasthan. Then he performed three years Yajōas - ie every year one in Haridwar- in 1991, -92, -93. They are Āhitadnya-Ṣadrātra, Saptarātra and Aṣṭarātra, in 1994 Agniṣṭoma in Delhi (where he met Houben and had a discussion on Pravargya) and Jodhapur, and Virāta-Agniṣṭoma in Akkalkot, in 1995 Dāśrātrakapārli in Parali. In 1996 in May and in December he performed Poundrika-Ekādaśarātra in Bombay. In 1997 he could not perform any Yajña.

This year he went to Nepal for Āturmāsyā, but not as Ṛtvija. The year 1999 added a special feature to his life, as he performed the special 'Gavāmayan-Satra' in Gangakhed - Maharashtra for Selukar. Gavāmayan-Satra means all together 361 days 'Sutyas'. A Sutyā means offerings with soma. For 361 days he performed soma offerings and prior to this Sutyā Pravargya. The duration of this special Pravargya is 30 days. In 2000 he performed Prūṣaṣomanīya Agniṣṭoma in Hrishikesh, in 2002 Agniṣṭoma in Hyderabad and Somayaga in Gangakhed. He worked as Adhvaryu for Ekahitā Mahāvrat in Ghatkopar and for Agniṣṭoma in Thane, which was performed specially for Balasaheb Thakare's health by Anand Dighe. In 2005 Vājapeya in Parali and Bṛahaspatiṣṭoma in Basavkalyan and Viśwajit-Atirātra, in 2006 Ṣodaśi at Latur. In 2007, 2008 and 2009 he performed Agniṣṭomas in Akkalkot, Aurangabad and Pune. He took part in the 'World Vedic Conference' that was held in Ujjain in 2007 and has presented his paper. He will be performing Agniṣṭoma again in April 2010 in Podechery.

As he explained the long list of Yajñas, he used different names, but said the offerings were with soma. While making it more clear, he told though it is known that there are main 7 Soma Institutions, but with a little difference in performance nearly 400 to 500 different Somayagas can be performed. Somayaga is a Kāmya-Yajña - ie, to fulfil certain wish soma is offered in the Yajña. Hence for a special wish, certain pattern of ritual performance and certain sūktas are chanted. He added further, that the duration of Viśweśwar Yajña is of one thousand years, as the Gavāmayan lasts for 361 days.

Whether to perform Pravargya is a much discussed and beloved issue of German scholars. Sattri while showing the reference from the Āpastamba Sūtra, told it is the discrimination of the Adhvaryu. He has got all the rights to decide. For the same issue he showed reference from the Taittirīya Āraṇyaka. Another important issue is of vessels. If the Yajña vessels can be used or are used again and again. For that he said, before starting the work of making a small rite of

Garmasambharaṇ is performed. This is done at least six months before any soma-sacrifice. According to Āpastamba Sūtra (15 ādhyāya first and second anatra) one should either do this rite or after doing Agnihotra one should start the work or at least one should chant the mantras. All the vessels of Pravargya and Mahavira can not be used again. It is burnt in Uttara-Vedi. The remaining material of Pravargya must be handed over to Agni. The material remaining after main soma-offering in the Uttara-Vedi is to be immersed in the river, lake or stream nearby - ie. in water, eg. the vessels used for gathering soma juice, offering and rest other jobs.

While the Yajña procedure is going on much care is taken of all the material and specially of Mahavira and soma. The main reason is that they should not get contaminated. The purity of the material is most important. This gives the expected results.

He shared his experiences of performing soma sacrifice as Adhvaryu. He said all 16 Ṛtvij get the benefit of the Yajña results and not only the Adhvaryu. Though he has performed many Yajñas, every time he has a feeling of doing the job next time better than that of earlier one. He added, the atmosphere around him give certain signs, by which he can take care, while performing. If the flame of fire shoots immediately towards sky, after giving offerings of Pravargya, he feels the deity of Yajña is satisfied and rest other rites would be performed properly and nothing would go wrong. If after completion of Yajña- śālā a crow would enter it, then he feels it is a sign that something would go wrong, may be the Ṛtvij could have some controversy amongst them or something like that. Then he can take care and act very carefully.

He has always a special wish to strive hard towards the perfection for the next Yajña. He gets a special satisfaction and peace after every Yajña that can not be explained in mere words.

2 . Dr. Ulrich Berk

Dr. Ulrich Berk was a professor of Philosophy in Konstanz University, Germany. Since 1979 he is a regular practitioner of Agnihotra. Today he has kept himself busy in undertaking various research projects and experiments regarding Agnihotra. He is the co-ordinator of all the researches undertaken throughout the world.

According to him though many researches and experiments are done on Agnihotra, many more should be undertaken to achieve a full understanding of how Agnihotra works in terms of modern science. Interdisciplinary research is necessary forth at, especially in fields like Biology, Biochemistry, Plasma Physics, Quantum Physics, and also Study of subtle energies.

Dr. Berk while talking about his experiences told that in 1988, he and Kurt Rennig had visited the well-source of the river Rhine. Stthey made their way through Swiss Alps and reached the Gotthard Mountains. After 2 and half hours of climbing from there they reached the Lake Tuma, the well-lake of the Rhine. From 2.30 to 3.00 pm they performed 'Havan' with 'Tryamakam' mantra. Then Kurt went to the other end of the lake and one two ends they performed 'Vyavhruti Homa' at exactly 3.00pm. It was a special experience for them as they were sitting on the mountain at 2700 meters high. Ulrich was surprised, when suddenly besides him a fish jumped out of the water, as if he wanted to look at what was going on there. Afterwards they placed the Homa-ash into the lake. He added further, when the quality of the water was tested it turned out to be improved.

Berk recalls a strange incident in the year 1993, when he met in Lithuania three young girls, who were clairvoyant. Medical doctors seek their help. They would go to a hospital and treat the hardest cases. They can see easily all the organs and the problems with the body. He invited them to participate in the Agnihotra. He did not give any explanation about healing fire, firstly he could not speak their language and secondly they were very simple with no scientific training at all.

After the Agnihotra the three girls said that within a radius of three hundred meters all the plants were bowing towards Agnihotra and that plants love the fire. The girls later commented, 'earthquakes, famines, volcanos and great times of turbulence are ahead. But we must now begin to focus on the new land to be prepared for His Return.

In Germany FAL Institute (Forshungs-Anstalt für Landwirtschaft, Braunschweig) has done observations and experiments and has prepared a larger research project to compare Homa farming with other types of organic farming. The projects regarding Agnihotra - or Homa farming are undertaken in many countries. Peru is the most prominent country amongst them.

In India the projects are undertaken with collaboration of Indian scholars and scientists. In Delhi, The Tata Institute - ie. The Energy and Research Institute - works on the effects of Agnihotra. The Palampur University, Kanpur University, Ooty institute of Tamil Nadu University, and the Dharward University have undertaken projects of Agnihotra farming. In Pune scholars are working on the 'aura' readings and 'aura' changes due to Agnihotra-effect in MIT, World Peace Centre. At the same time some scholars are working with the results of Agnihotra on the cultivation from Modern College, Abasaheb Garware College, and Department of Botany, University of Pune.

8. Concluding Remarks

In ancient times Cretans, Babylonians, Sumerians, Akkadians, Semites, Polynesians, Greeks, Jews used to perform Yajñas - the sacrificial worship. Mexican Incas had a developed form of such worship. Fudo Myavs of Japan perform Goma - i.e. holy fire invocation. Even today one can witness the Goma ritual at the 'Naritasan'- Shintoji temple in Japan, where fire offerings are given five times daily. Specific varieties of wood and other materials are offered to fire. Baku in Russia had fire temples. Indians are known as Yajña performers. Avesta, the scriptures of the Zoroastrians name this worship as Yasht - sacred act for attainment of the divine. The place of worship is known as fire temple and the supreme deity is Ahur Mazada. In Sanskrit known as Great God. The Supreme God of Hawaiian islands is called 'Aah' and its symbol is the flames of fire.

There are many views and differentiations of opinion regarding the theory of wandering of tribes in ancient times through out the world. According to one such theory a race may be from parts of Europe came and settled down in India, that was called 'Āryans', whose scriptures are known as Vedas. How far these theories are true, is not the subject here, but Yogi Aurobindo expresses his views regarding the Āryan-tribes and their invasion in his book 'The Secret Of The Veda'. They are significant and should be noted. He writes :

But the indications in the Veda on which this theory of a recent Aryan invasion is built, are very scanty in quantity and uncertain in their significance. There is no actual mention of any such invasion. The distinction between Aryan and un-Aryan on which so much has been built, seems on the mass of the evidence to indicate a cultural rather than a racial difference. The language of the hymns clearly points to a particular worship or spiritual culture as the distinguishing sign of the Aryan, - worship of Light and of the powers of Light and a self-discipline based on the culture of the "Truth" and the aspiration to Immortality, - Ritam and Amritam. There is no reliable indication of any

racial difference. It is always possible that the bulk of the peoples now inhabiting India may have been the descendants of a new race from more northern latitudes, even perhaps, as argued by Mr. Tilak, from the Arctic region; but there is nothing in the Veda, as there is nothing in the present ethnological features of country to prove that this descent took place near to the time of the Vedic hymns or was the slow penetration of a small body of fair-skinned barbarians into a civilised Dravidian peninsula. ¹

Even the explanation in his footnote is important.

In India we are chiefly familiar with the old philological division of the Indian races and with the speculations of Mr. Risley which are founded upon these earlier generalisations. But a more advanced ethnology rejects all linguistic tests and leans to the idea of a single homogeneous race inhabiting the Indian Peninsula. ²

If the meaning of the Sanskrit word 'Ārya' is taken into consideration, it means a noble man, a civilized and cultured man. That means people of any race can be 'Ārya', for that matter they should not have to come from east or west. Another significant point is that the Vedic gods are recognised with many different names, like Indra- as Varuṇa, Parjanya or Agni -Mātariśvan, Viśvedevā, Prajāpati, Hiraṇyagarbha, Pūṣan, etc. It seems that this concept is not understood by some western scholars. One finds that they go with the etymology of the word and cannot understand that one god is known with various names.

As from the study of Homer the Greek grammar rose, so from the study of the Vedas grew the Indian, but investigations of the Indians, favoured by the constitution of their language, were incomparably deeper and more lasting than those of the Greek grammarians.

¹ Sri Aurobindo. The Secret of the Veda, p. 24.

² Op cit, p. 24.

Prominent among the grammatical writings are the Nirukta, a collection of a strange or obscure words of the Veda, together with the interpretation of the Vedic investigator Yaska (about 500 B. C.) And the Prâtiçâkhyas, each of which contains, for various reasons of a single Veda, the most precise statements of phonetic changes, pronunciations, accentuation, metre etc.

In them is presented the scientific treatment of a single tongue in a perfection which arouses the wonder and admiration of those who are more thoroughly acquainted with it; which even now stands, not only unsurpassed, but not even attained, and which in many respects may be looked upon as the model for similar work. ³

It is not only Kaegi, who has narrated the speciality and importance of Vedic linguistics and grammar, but same views are expressed by Max Müller and Benfey.

Max Müller writes :

I believe, I shall not be contradicted by Holmholz or Ellis or other representatives of phonetic science, if I may say that, to the present day, the phoneticians of India of the fifth century B.C. unsurpassed in their analysis of the elements of language. ⁴

Benfey is of the opinion that :

... by this method and its wonderful results the linguistic labours of Indians have pre-eminently - indeed, almost alone,- made it possible for modern philology to take up its problem and work it out its end with the

³ Kaegi, Adolf. The Rigveda : The oldest Literature of the Indians, Arrowsmith, R. (Tr.), Authorised Translation with Additions to the Notes, Amarko Book Agency, New Delhi, First Edition, 1972, p. 7.

⁴ Op cit, p. 7.

success which is universally conceded to it.⁵

Hence the study of Indian grammar, linguistics, languages and literature became much popular amongst Western scholars. Some of the Western authors were so much impressed with the Indian ideas and views that they imported them in their own works, which affected in increasing the popularity of the original Indian immortal works.

In this study the first chapter deals with the ancient Indo-German relationship ties. The survey has been taken since when these relations existed, the reasons behind these ties and the fascination of Germans towards India. Here it has been tried to take a glance at the scholarly work of German Indologists and the present situation of Indology studies in Germany.

As the next chapter deals with the ṚV and deities in the ṚV, the survey of the work of German scholars is taken here.

The third chapter is regarding the Fire-worship - Yajñas. Here the types of Yajñas are explained with some examples of important Yajñas, that are performed today. Germans have tried to investigate the results of Somayaga especially with the help of Life Enrgy Meter. They are performing 'Havan' and 'Vyāhṛatihoma' in the farms for better quality of cultivation.

The fourth chapter is regarding Agnihotra - daily morning and evening sacrifice. Important references from the Vedas and other Vedic literature are discussed here, as it is the basic religious rite.

The important experiments that are performed on this Yajña with the help of modern natural sciences are discussed in the fifth chapter. The important of all is being done in Pune itself, i.e. PIP Imaging, with which the minute details and changes in the human auro are monitored.

In the sixth chapter the interviews are given for the interest of experts. The German scholars, Indian Yajña-expert were interviewed. Some common

⁵ Op cit, p 8.

practitioners of Agnihotra in Germany are given a questioner and their remarks regarding it are gathered.

7.1 : Vedic Tradition :

The Vedic tradition of India is not simply a spiritual path, but a way of life. It includes many avenues of learning that an increasing number of people from the West are investigating and using.

This study will show the advantages of the Vedic paths of development that the reader can use in his life to attain more personal awareness, happiness and fulfilment.

The nature is a huge machine. In order to work this machine properly and regularly a working manual is given. As one gets the tips of any new device with it in a manual. The Vedas are given as a working manual of the nature - world. They are not created by any human being. The Ṛṣis or the Seers got illusions of the Vedas, deep in their meditations. This knowledge is acquired through wisdom. Hence it is eternal truth.

In Lindau in Germany at a get-together of Nobel-Prize winners in August 1976, Brayan Josephan, a scholar, who studied Vedas on the basis of modern natural sciences says :

The Vedas are the inspirations of the Absolute. There is a connection between the pattern of sound oscillations of words and their meanings. This fact corresponds to the correlation between the actual stage of the universe and its description by means of languages (in the Vedas as well as in physical formulas).⁶

The Vedas are the oldest documented spiritual teachings of humanity. They

⁶ vide. Rajimvale, Shrikant, Parmapityachi Denagi : Ved, Panchasadhan, 17 June 1977, p. 15.

are the best preserved record of our spiritual ancestors - the famous sages and seers of many traditions. Most importantly they share a pluralistic view of truth - that though the truth is one and undivided, there are many paths and approaches to it, ultimately as many as there are individuals - this pluralism is the hallmark of Vedic thought.

Vedic texts proclaim that 'the Vedas are infinite'. Vedic texts are just the starting point for the development of Vedic knowledge which is a living tradition of spiritual realization and communion with the infinite that is relevant to everyone and that exists more as an inner than as an outer reality.

The Vedic tradition is not mere a collection of various books, or preachings or teachings, but a way of natural and conscious living, a certain way of life. Vedic texts provide a living example and practical guidance to live a better life. The Vedic tradition has managed to sustain and transform itself over many millennia, enduring wars, cataclysms and cultural changes. It is because of the firm foundation in universal truth and its capacity to renew itself in every generation.

The four Vedas signify the philosophy of the eternity and absolute complementary role of Yajñas in the divine creation. The YV contains the knowledge of principles and methods of performing Yajñas as spiritual and scientific experiments for global welfare. The SV focuses on the musical chanting pattern of mantrās and the subtle form of Yajña by defining the latter as the process of mental oblation on the surface of internal emotions through the cosmic radiation of omnipresent subtle energy sound. AV deals with sound therapy aspects of mantras for the treatment of ailing human system at the physical, psychological and spiritual levels.

It is important to note that Vedic tradition has gone global in modern times with Vedic teachings in various forms now occurring in all lands and countries. It is bound to grow further as humanity searches for meaning in life beyond the limitations of both scientific materialism and religious dogma.

The Vedic view of universe is of Oneness, consciousness and Bliss, that works on many levels.

In the West we are used to thinking in rather restrictive categories of religion, philosophy, art and science. Vedic culture contains aspects of all these and yet cannot be reduced to any one of them. And everything can and should be a form of worship or honouring the wonderful sacred universe in which we live.⁷

Vedas have a holistic approach. Yajña has scientific, psychological and parapsychological implications and as one goes on performing it regularly, one comes to know many more aspects. That is why, the western countries or more accurately those who perform Yajña - Agnihotra, in various parts of the world do talk about 'Homa Therapy', 'Homa Farming', etc. Homa is Yajña and the daily morning and evening Yajña is Agnihotra.

While expressing the same thought David Frewley writes :

Vedic teachings have come to the West in many forms, not as an overt effort to convert people to a belief or to spread a particular ideology, but as a sharing of spiritual and healing practices in many forms. Millions of people in the West today follow teachings and perform practice that have their origins in the Vedic tradition and its views of dharma.⁸

All the ancient religions of the world have praised Yajña as the basic religion. The Vedic tradition of India is not simply a spiritual path, but a way of life. It includes many avenues of learning that an increasing number of people from the West are investigating and using it.

Vedic thought has had its impact on Western religions as well, with

⁷ Frawley, David. *Vedic Culture, The Difference It Can Make In Your Life*, Black and White , an imprint of Sandeep Prakashan, Delhi First Ed. 2006, Forward, xiv.

⁸ Op cit, Forward, xv.

Vedic ideas and insights occurring in Christian mystics, Sufies and Jewish Kabbalists.⁹

Vedic culture implies a broad field of knowledge for self-discovery and well-being for everyone. It is meant for greater good society. It is rooted in Sanatan-Dharma - the eternal and universal truth. It promises the ultimate way for self-growth, self-healing, self-empowerment and self-realisation.

7.2 : Yajña - the original ritual of every religion

Yajñas are described as the pillars of Indian philosophy and culture. The eternal source of universal knowledge, comprised in the Vedic mantras is deciphered and cosmic energy of sound contain in mantrās is activated and expanded with the help of Yajña.

One finds the followers of Yajña in every culture of today's world. Today after centuries, when the atmosphere around the earth is getting polluted, the rite of Agnihotra - consisting of just two oblations offered in fire at sunset and sunrise - is suggested as a solution. With the help of fire worship the benevolent positive energies are released in the atmosphere.

For fulfilment of various types of materialistic desires, different types of Yajñas are prescribed. They can be performed individually or in the community. Like Agnihotra is the individual Yajña, whereas the Somayāga, Parjanyaayāga are to be performed by a group. Darśapūrṇamāseṣṭi, Cāturmāsya, Vājapeya, Rājsūya and Somayāga are performed to fulfil specific desires.

⁹ Loc cit, Forward, xv.

Yajña has a potential to bring about certain achievement. With the advancement of physical sciences and consequent enlargement of human knowledge it has become easy to find out reasoning for such actions and reactions caused due to Yajña. In the present situation, when pure sciences are reeding and scientists are on verge to declare a new approach to problems of life, Yajña is a potent weapon and intrinsically an antidote to pollution. Besides being capable of generating homogeneous atmosphere can seed contentment in human mind and prosperity. As the atmosphere is already surcharged with greed and violence, the purifying effect of Yajña on the mind is a blessing to mankind, that can lead man towards spiritually higher goals. Satya-Dharma was revealed through Vedas at the time of creation of the world. Whenever imbalances are created in the society and evil predominates the Almighty has sent his messenger with specific allotted task to undo evil and protect the Satya-Dharma. The prophets and the messengers, who re-established the Satya-Dharma have stated again and again, not to make their idols of gold and silver, to increase the glory of the prayer-room, but to follow the path, they have laid before the society. They have shown the way which would lead to develop oneself step by step towards ultimate goal of enlightenment.

The history tells us that whenever the atmosphere is polluted by all means, when every where the non-religious and unscientific practices are followed, then the Lord has to take an incarnation on earth in any form, may be as a prophet, a messenger as a saint and so on and had to stop wrong practices and clean the minds of people.

In the Bhagavad Gītā Lord says : the dharma that I am telling you was preached to Vivaswan by me, which he explained to Manu. Manu taught then to Ikṣvāku. And the dharma was known to kings. These kings were seers. This dharma existed then as the tradition. (Gītā 4.1- 4.3)

The message given by Jesus in the 'Holy Bible' is significant.

Think not that I am come to destroy the laws or the prophets. I am not

come to destroy. But to fulfill.

St. Mathews 5.17

Jesus said, he never came to destroy the laws laid by the 'Lord', but he would fulfill then by conveying the message of Almighty.

While explaining the right path to Arjun - Lord Krishna has said : ' I am telling you the original religion, that consists of Yajña, Dāna, Tapa, Karma and Swādhāya'. The scholars say that this tradition is of five-thousand years. That day it was not labelled as 'Hindu'- tradition. But one can say, to stop wrong things and practices a disciplined lifestyle was established, which is called in the due process as Hindu religion.

In the 'Holy Bible' the illusion of Daniel throws light upon the Evening and Morning sacrifice. But he was told this rite will be followed eventually. It will take a long time to come this illusion true, till then keep it a secret.

The vision about the evening and morning sacrifices which have been explained to you will come true. But keep it a secret now, because it will be a long time before it does come true.

Daniel 8.26

When Daniel got the illusion of morning and evening fire sacrifice, he was told to keep it a secret, at the time of practising this ritual had not come or at that time this rite could not have become a medium of praying god. But the illusion showed him that the fire sacrifice is the original basic religion. It will come into power but the time is not proper, hence though it is shown to you, keep it a secret. As every where all unscientific and non-religious and non-ritualistic performances are followed. The earth has become a desert, in that sense. After a certain period a proper time will come, when every one will practice fire worship.

In the first 'Surah' of 'Quran Sharif' the Lord is described as humble and

gentle. At the same time while paying thanks for his gratefulness, he is explained as the master and ruler of the world - 'Rab'. Actually the Arabic word 'Rab' means the person, who leads towards mental perfection step by step unto the last goal of enlightenment.¹⁰ This word makes the philosophers think in details, as it resembles the meaning of the first ṚV sūkta. The prayer of ṚV saying; ' we come near you at dawn and dusk', can be compared with the 'Namaz' timings of both ends of the day. Continuous practice of Namaz at these times takes the person near 'Allah', expresses the exact meaning of ṚV prayer.

The first Surah says further : ' I have seen a fire. Perhaps I will get some fire from that or I will find way on this fire and when I reached there I heard : Hay Musa, I am your 'Rab'. Remove your shoes for me. You are in the pious valley of Tura. No doubt, I am your Allah. There is no one else who can be worshipped like me. Hence do respect me and in my remembrance start praying - practising Namaz.

Moses gets the illusion of light and that light says; 'I am your Rab'. The light is the symbol of Agni. In the ṚV the etymology of the word agni is the one, who develops you step-wise and leads you towards perfection. Hence the philosophers of comparative studies of ṚV and Quran do remember the fifth Ṛk of ṚV :

अग्ने नय सुपथा राये अस्मान्विश्वानि देव वयुनानि विद्वान् ।
युयोध्यऽस्मज्जुहुराणमेनो भूयिष्ठां ते नम उक्तिं विधेम ॥

[ṚV 1.189.1]

¹⁰ vide. Parkhe, M. S., Lailutul Kadar, Divya Prakashachi Ratra, Panchasadhan, 17 August 1979, Pune, Pp. 4-7.

Oh Agni, please lead us towards the path of making ourselves better.¹¹ The importance of agni is explained in Quran in 20th Surah 10 -14 Ayats. The same is repeated in Surah 27 Ayats 7-10 and Surah 28 Ayats 29 - 31.

Mohamad Paigamber has explained the importance of cow. He says; drink milk of cow, clarified butter made of cow-milk is a medicine. Do not eat meat of the cow. It can cause many diseases. In Koran Sharif the second Sura is called Al-Bakara. The arabic word Al means holy and Bakara means cow.¹² The Indian emperors like Babar, Humayun Jahangeer, Akabar have prohibited the killing of cows in their kingdom, if anyone would kill a cow, he got death sentence. Hence should take into consideration that Darashukoha - the elder brother of Aurangazeb was Sanskrit-pundit. Aurangazeb was also well versed in Sanskrit. Muhamamad of Gazani had kept Sanskrit Śloka inscripted on his coins.

At the holy place of 'Kaba' one oil lamp is kept burning for 24 hours. Even in the holy places like mosque or dargah a lamp is kept burning for ever. On the auspicious days the lamps are kept burning. This is very significant in connection with references of agni and its rituals.

Bhagawan Mahaveer criticised the violence strongly. 'Gautam Buddha' had severally criticised the animal sacrifice in the Yajña and celebrated only the right non-violent practice. He stopped the violent practice in the Yajña of the King Prasenjit and made him to perform Yajña according to the right way.

Buddha brought the message of reason, right conduct, absence of lust, freedom from passion and inward peace. His mission was to give a blow to flesh offerings in Yajñas, to resuscitate Yajñas performed in the prescribed manner eschewing violence or offerings of flesh and blood, to arouse people to their innate capacity to reason and sublimate intellect to right action, to pierce the shield of hypocrisy of the priestly class, to throw doubts in the armour of faith because it was on the wrong shoulder.

¹¹ Op cit, pp. 4-7.

¹² Op cit, pp. 4-7.

अस्समेधं पुरिसमेधं सम्मापासं वाजपेयं ।
निरग्गळं महारम्भा न ते होन्ति महप्फलाः ।।
अजेळका च गावो च विविधा यत्थ हज्जरे ।
न तं सम्मगता यज्जं उपयन्ति महेसिनो ।
ये च यन्वा निरारम्भा यजन्ति अनुकुलं सदा ।
अजेळका च गावो च विविधा नेत्थ हज्जरे ।।
एतं सम्मगता यज्जं उपयन्ति महेसिनो ।
एतं यज्जते मेधावी एसो यज्जो महप्फलो ।।
एतं हि यजमानस्य सेय्यो होति न पापियो ।
यज्जो च विपुलो होति पसीदन्ति च देवता ।।

[San 3.9.21-25]

He declared that in the Yajñas like - Aśwamedha and Purūṣamedha - if animal flesh and blood is used, they would not lead to the desired results. He stated many times that sacrificial offerings to the fire which do not involve killing of a goat or a sheep are of great reward. Such non-violent Yajñas should be performed again and again.

Yajña, the fulfiller of the desire, the greatest boon given to the mankind, had become a liability due to violence involved or blood and flesh offerings. It caused vitiation of atmosphere. A strong condemnation from the supreme authority was necessary to drive people away from wrong practice. Buddha strongly urged people to perform Yajña in a right and prescribed manner. This type of Yajña does not involve any type of violence. He stressed the importance of performing Yajña, which would yield prosperity for all.

After attaining the ultimate knowledge Buddha paid a visit to a nearby

kingdom, where Somayāga was about to commence. Somayāga in those days meant slaughtering of hundreds of sheep and goat before the sacrificial altar. The king was delighted to welcome his guest and stated that due to performance of this Yajña he would secure his place in paradise. Buddha exclaimed that if slaughter of quadrupeds would achieve that object, it should be much more elevating, if a sanyasi like himself offered to die on the altar. The king was aghast and seeing things in proper perspective, surrendered before Buddha.

Buddha has explained Agnihotra in a particularly special manner. In the 'Selasutta' from 'Suttanipata' the references are found.

अग्निहुत्तमुखो यज्जा, सवितो छन्दसो मुखं ।
राजा मुखं मनुस्सानं, नदीनं सागरो मुखं ।
नक्खातानं मुखं चन्दो, आदिच्चो तपतं मुखं ।
पुञ्जं आकंखमानानं, संघो वो यजतं मुखं ।

[Sutt 568-69]

In all the Yajñas, Agnihotra is the main, as it is the mount of the Yajñas. As the Sāvitrī or Gāyatrī Chanda is the main in all the Chandas. The important person amongst all men is the king and rivers it is the ocean, as all rivers flow into an ocean. In all the nakśatras, moon is important. In all the stars and planets the sun is important. Same way any person, who has a wish to do good and with this wish tries to sacrifice something for the 'truth' or for the 'satyadharma' - 'sangha' - is the important and special amongst all the deeds. Hence, though many different types of Yajñas are performed the importance of Agnihotra does not reduce. This is a daily rite, that is to be followed for the life-time. All the other Yajñas begin with the performance of Agnihotra. At first

place only one fire, then three different forms of fire and then all other Yajñas. Goma, (Homa in Sanskrit) the holy fire invocation was in great vogue during Tang dynasty and was first introduced in Japan by founders of Tendai sect and Shigon sect about twelve hundred years ago. The Sūtras prescribing the ritual state that if body, speech and mind of Fudo, the object of worship, those of the principal master and those of worshipper are fused into one, mental purity is achieved. In such a pure state prayer works like a miracle. The fire symbolises the highest wisdom (Bodhi) and fire would the worldly passion and one has to strive for the highest Buddhahood. Jesus Christ while describing his crucifixion said, “ the last lamb is killed” and hence forth no violent practice will be followed.

It is finished.

John 19.29

The description of ‘Lord’ in the Bhagavad Gītā, the importance of ‘Almighty Father’ explained in the Bible and the thoughts regarding ‘Allah’ in the Quran are one and same. It says : the Lord is watching everything. Allah is listening every word.

Seest thou not that
God doth know (all) that is
In the heavens and
On earth? There not
A secret consultation
Between three, but He
Makes the fourth among them,
Nor between five but
He makes the sixth,
Nor between fewer nor more
But He is in their midst,
Wheresoever they be
In the end will He
tell them the truth
Of their conduct, on the Day

Of Judgement. For God has
Full knowledge
Of all things.

(Glorious Quran) 58.7

According to Quran Surah 58 Ayat 7, whatever is happening on the earth is known to Allah. To that extent that when you feel there are three persons present at a place the fourth one is Allah- always there. When five persons are there the sixth is Allah. Nothing is unknown to Him. One can not hide anything from Him and nothing is away from Him.

Manusmṛti expresses the same : Keep your feet at the place that has become pious by sight. Tell the truth only. As the God is watching everything.

As the Bible says :

And your Father who sees what you do in private will reward you.

St. Mathew Psalms 94.9

In the Bhagavad Gītā while introducing Himself properly, the Lord says : the last hope of everyone, the benevolent power for all, master of all and the witness of every happening, surrender of all is only Myself.

गतिर्भर्ता प्रभुः साक्षी निवासः शरणं सुहृत् ।

प्रभवः प्रलयः स्थानं निधानं बीजमव्ययम् ॥

[Gītā 9.18]

The language of explanation might be different. The way of explaining might be differing. But the core of the knowledge, its philosophy is just the One. 'The

Lord is watching', tells further more that whatever is to be done, is to be done keeping Him in mind. If this principle is followed the world will be full of love, justice and religious views. Actual religion is not followed properly, but only fights are undertaken on its name-sake. But the time has come to understand the core of religion and to follow these rules, that becomes benevolent for the mankind. 'The Lord is watching', this view will make human beings humble and gentle and will bring them on the right track of behaviour with the fellow-men. Another important message that Bhagavad Gītā conveys, is to be active without taking the effects of the action into consideration or without keeping them in mind. One should be away from the good or positive and selfish effects of one's actions. One should be grateful towards the Lord for whatever He has given. In the Holy Bible same thoughts are expressed. It says :

*Therefore, I say unto you, ' take no thought for your life, what ye shall eat, or what ye shall drink; not yet for your body, what ye shall put on'.
- St. Mathew 6.25*

(Hence I tell you, do not think what you will get to eat or drink. Do not have that type of narrow views about life.) The life is much beyond this eating, drinking or wearing good costumes. The Bible gives further more explanation:

*If God so clothe the grass of the field, which to day is tomorrow is cast into the oven. Shall he not much more clothe you, O ye of little faith ?
- St. Mathew 7.30*

(If the God has given a nice dress of green grass to the earth today, which will go in the hearth tomorrow, will he not give something nice to you to wear.) Have faith in Him. He will take care of you also. One has to travel on the path He has shown and He is there to take care for everything. Forget all

selfishness and the worries of tomorrow, do good whatever you can do and leave the fruit of this being good at the wishes of the Lord.

As Agnihotra is the fundamental rite, why this rite got forgotten or stopped in the due course of time, is the doubt cropping in mind. It increases further more that why it is necessary to re-establish this Yajña-rite again. One may think further, when the God is one, the original knowledge is one and the path of reaching the ultimate goal of enlightenment is one, why do so many different religions and beliefs are practised. Bhagavad Gītā tells the need of re-establishing the dharma again and again.

Lord Krishna says :

यदा यदा हि धर्मस्य ग्लानिर्भवति भारत ।
अभ्युत्थानमधर्मस्य तदात्मानं सृजाम्यहम् ॥
परित्राणाय साधूनां विनाशाय च दुष्कृताम् ।
धर्मसंस्थापनार्थाय सम्भवामि युगे युगे ॥

[Gītā 4.7-8]

He told : When in the due course of time, due to selfishness, misguiding, knowingly interpreting the meanings and words in wrong way the dharma got 'polluted'. Whenever the dharma is 'polluted' I have to take a rebirth and re-establish dharma in its original form for the welfare of the mankind.

The evil practice of flesh and blood offerings pervaded the atmosphere and several messengers of Almighty had to appear on earth to cry halt to such misdeeds. Kurukshetra, Sarnath, Jerusalem and Mecca are some of the important places hallowed by the divine presence of these messengers.

The two main reasons of performing Yajña are - purifying atmosphere and making the atmosphere healthy, nourishing and benevolent. By using wrong things as the oblations the atmosphere does not purify, but has adverse

effects of it. Those, who used the practice of wrong things, have done the same. Finally in the different parts of the world, to show the right path of the religion or to lead different communities on the right path of the true religion, different prophets have started their work. These prophets knew that the Yajña is the main, basic and original religion. But when the practice of Yajña became violent and the animals were used as the oblations. One can observe a single common principle amongst all these happenings, the places, languages and people may be different, i.e. to stop violent practices in the Yajña, to stop unscientific rites and to establish the practice of prayer as a temporary ritualistic performance. Temporary, as every messenger has got illusions according to their ways and means of fire sacrifice. It is mentioned in the fundamental religious books.

When Yajña, the original religion, was attacked by wrong violent practices, many types of prayers took its place. When the atmosphere in the world is polluted, Yajña that can kill this pollution, is also stopped being practised.

The violent process of Yajña was not according to religion, or the Śāstras and had its bad effects. At this moment (all these prophets) lay emphasis on another aspect of the religious rite - ie. Prayers and idol worship. Prayers for different deities and Almighty God. This part of ritualistic performance is visible even today in all religions on the earth. When Yajña became rare people needed something external which might prove as an aid to purification. Thus idol worship was introduced, which itself became another liability at a later period, when man's greed spread its tentacles on this type of worship as it did previously in case of Yajña. When overall in the world the bad deeds and wrong practices were performed, at that time the right practice, though kept apart, at least wrong should not be performed any more. Hence the prayer was emphasised. This was the important motto of all the religions that can be experienced. But the original fundamental religion was kept intact and unpolluted and every messenger laid emphasis on the fact that one day will come, when everybody will have to follow the fire worship. That is the exact way of living benevolent life.

7.3 : Agnihotra

Yajña means selfness sacrifice for noble purpose - Sacrificing of the ego, selfishness and material attachment and adopting rational thinking, human compassion and dedicated creativity for welfare of all. The philosophy of Yajña teaches a way of living in the society in harmony, a living style to promote and protect higher human values in the society. A variety of Yajña is described in the Śāstras. Agnihotra - the daily morning and evening Yajña - is given in the ancient Vedic sciences of bio-energy, psychotherapy, medicine, agriculture, bio-genetics, climate engineering and interplanetary communication.

YAJNYA replenishes the nutrients that pollution robs from the our environment. The molecular change in the fission and fusion of atoms causes properties of elements to change in atomic structure and weight. The rotation of electrons and neutrons varies speeds.
HOMA Therapy is totally a revealed science. It is as old as creation. In the course of time this knowledge was lost but it is now being resuscitated to give people guidance about how to correct the polluted conditions of the planet ... ¹³

Yajña in physical terms is a process aimed at the refinement of the subtle energy existing in matter with the help of thermal energy of the mantras . The knowledge of philosophy and science of Yajña is as essential understanding and experimenting the science of spirituality as the knowledge of elementary physics is for material based sciences. The experiments of Yajña when performed at a small scale in daily life are known as Agnihotra. Veda describe Agnihotra as a process of fumigation.

¹³ Paranjpe. Vasant V. Homa Therapy Our Last Chance, p. 10

A time is approaching when science and religion will reunite and harmonise. Science is nothing but the investigation of physical laws, while religion is realization of God and His laws in the metaphysical realm. A new consciousness for need of spiritual values is rising in the world. In order to achieve this goal the necessity of harmony is a must. Harmony is an atomic energy that keeps off evils of all kinds. The Vedic seers were acting as generating Divine power to attain perpetual bliss for the mankind. In that type of harmonised atmosphere they practised sacrifices.

Heat and sound are the two main energy systems that are examined in physics. While performing Yajña these energies - the heat in form of fire and the sound in form of mantras are combined to achieve the desired physical, psychological and spiritual benefits. Fire is a scientific method of subtleisation of matter into energy and expanding its potential and positive effects in surrounding atmosphere. The electromagnetic waves generated thereby help in transmitting at cosmic level, the desired sonic signal stored in the mantras, that are chanted during the process of sacrificing the special material in the fire.

Thus, Agnihotra has three disciplines:

a. Burning of specific organic substances into fire

b. Mantra, i.e. Vibrations

c. Specific timings corresponding to one circadium rhythm of nature, i.e. sunrise, sunset.

If you miss timing then it is not Agnihotra. ¹⁴

The substances used for Yajña are special type of wood or samidhā, materials that create odour like camphor, saffron, sandalwood etc, healthy

¹⁴ Parnjape, Vasant V. Light Towards Divine Path, The Agnihotra Press, Inc., Maryland, 1976, p. 38.

constituents like clarified butter, milk, rice, sesame seeds etc., medicinal herbs, sweet substance like honey, sugar, gud (used in preparing certain haviṣānnā). They are offered in combination or some times as a single offering. The specifications depend upon the desired achievement. For Agnihotra clarified butter made out of cow's milk is used, that is a tonic and a cardiac stimulant according to Āyurveda. This ghee removes all pathogenic bacteria and works effectively in purification of the atmosphere and makes it sufficiently fit for all - human beings, plants and the life on the earth.

All the alphabets of the Sanskrit language are endowed with special vibrations. They set out harmonious wave patterns when pronounced. This power of sound vibrations is acknowledged in the field of science. The mantras, that are chanted during Agnihotra, produce positive vibrations. They create a soothing effect on human mind as well as on plants and animal life. These vibrations help in spreading special energy waves in the surrounding atmosphere.

Hence in the Agnihotra one can see the remedy to different problems in the modern world. The practitioners can experience the changes in their situation clearly.

Agnihotra acts as an enhancer of the environment from a preventive angle. For minimal effort and even more minimal expense anyone can today begin to experience the effects of Agnihotra on mind. In a month or less he will be able to observe easily the effects of Yajña on nearby plants. Interested scientists could work within simple experimental models to demonstrate efficacy of Yajña.

After Chernobyl nuclear accident, in 1986, scientist in some Eastern European countries became more curious and wondered how this Agnihotra results on pollution. They found out that if they try to investigate the results of Agnihotra merely from the point of view of chemistry they might not be able to make much progress, but if they would try to examine Agnihotra from the point of view of Quantum Physics, they would find huge knowledge hidden behind this ancient Vedic science. After several experiments, one senior scientist made following remarks :

The chemical reactions which take place when Agnihotra pyramid fire, mentioned in Homa Therapy, burns are less important. Important is the radiation. We know the chemical aspects of fire. In the end we get H₂O, CO₂ and CO. Then there is visible light and infrared. This is the classical view today about fire. If you look into the more subtle structure of fire, you find that electrons jump from one atom to another (like a flash of lightening) and this causes some emissions on a very subtle level which hardly fits into modern quantum theory.¹⁵

When Agnihotra is practised nutrients and fragrance are injected into the atmosphere. One experiences phenomenal change in the atmosphere after Agnihotra. Practice of Agnihotra nullifies the effect of pathogenic bacteria. Homa therapy, the science of Yajña given through the Vedas, take care of all the problems faced by modernisation. It lays stress on purifying the atmosphere in order to bring about changes in the functioning of mind. Any change in the atmosphere automatically leads to a change in Prāṇa, the life energy. The effect of change in the atmosphere is automatically transported to the realm of mind. In Homa therapy the change in the atmosphere is brought about through fire. By burning specific organic substances in copper pyramid of specific size. The procedure is performed in tune with the bio-rhythms. A beneficial change is brought about, which affects the universal mind.

Atmosphere pollution is now proving devastating to planet life as never before. The public actually has no idea of the enormity of the situation. What public reads in papers has been watered down and delivered in gentler terms. Otherwise there would be mass hysteria. But there is terrible destruction of the planet, which is easy to witness in this 21st century. Many diseases are increasing and spreading rapidly with no known cure in sight. Yet people continue to live in their folly and feel, they can pollute and destroy wherever and whatever. Some of the people in Europa have witnessed and experienced

¹⁵ Paranjpe, V. V. Homa Therapy : Our last chance, p 6.

the atom-bomb devastations, nuclear power plants accidents, effects of harmful pollution on the soil, chemical spills, poisoning water resources and the pollution has enacted on human minds as well. Many people are like walking time bombs - ready to explode anytime. One sees escalation of crime, child abuse, domestic violence, drug abuse and alcoholism becoming the wave of today's life. Today pollution has reached at a level where one is not sure of having reliable uncontaminated natural resources. In some parts of world is terrible flood, in some severe drought, in some acidic rains are experienced at a time. The scientist are aware of the rapidly deteriorating conditions of the planet. Some of them are trying to find out solution and are interested in finding solution in the way of life as discussed in the Vedas.

In Europe, U. S. A., South American countries and in some states of India Agnihotra has been widely practised in farming, psychotherapy, disease prevention and cure. As Agnihotra removes tension from the mind and makes the mind full of love. Agnihotra atmosphere and Agnihotra ash give nourishment to plant life and protection from disease. Agnihotra comes from the ancient sciences of bio-energy, bio-genetics, medicine, agriculture and climate engineering as given in the Vedas.

Agnihotra tuned to the biorhythm of sunrise sunset harmonizes the energy cycle of the planet. The harmony between the life energy in the atmosphere is balanced by performing Yajña. Due to the combine effect of the specific time, specific recitation of word vibrations and specific organic elements burnt in the fire the imbalance of energy in the atmosphere is attacked and harmonised balance is acquired. Many different types of energies are the product of Yajña. As these energies, tolerance and love power are an outcome of Yajña, that works in co-operation of these energies. These energies work on human mind at a subtle level to reduce the anxiety, fear, tension, jealousy etc. In the process of striving towards the mental perfection the practice of daily Agnihotra proves to be an important instrument.

In Chile they call Agnihotra ash 'saviour', as miraculous healing have taken place with this ash. The scientists, if they wish, can look into isotope analysis, spectrum analysis of the ash to unravel its potency no negate the effects of

harmful radioactivity on the atmosphere.

In simple word one can say about the Vedas and Vedic knowledge : tray to believe in what you experience or develop scientific means of experiments, both the answers should be the same. Some of the people have no need of scientific results, calculated studies for Vedic laws, but some need. Agnihotra - Yajña is not just to be believed, but to be experienced.

Since 1974 some people in Germany are performing Agnihotra. Some of them have built Aghiotra - Houses or Yajñaśālās, in the main hall of which there is no idol of any God, but only Yajña is performed and in that hall silence is maintained. If any word is uttered there those are Vedic mantras. Werner Metzger, who performs daily Agnihotra since 1974 has opened a Agnihotra - Hause that is Kriya-Yoga-Schule, where one can get training of Agnihotra and Yoga. In the fields of Homa-Hof in Heidenberg 'Homa Organic Farming' is practised. The visitors of this farm, who enjoy the farm-trip, get the information about Agnihotra and its effects. Their agricultural produces are kept for sale in the supermarkets. They get handsome prizes, as they are organic products. In Haldenberg since September 1997 Dr. Ulrich Berk is running a homa organic farm and in 1998 he has built Agniśālā to introduce Agnihotra. Monika Jele, who is a pharmacist by profession, has experimented on Agnihotra-ash and has prepared medicines. Her experiments are still continuing till today's date. The name of Klaus Wunderlich is known as a greatest musician in Europe. But his contribution in this field of Agnihotra is important. He has prepared a computer software by which one can get the exact local time of sunrise and sunset. It changes according to the geographical position of the place. Dr Hobber- the Yugoslavian nuclear scientist- performed many experiments and gathered their observations, especially regarding the effects on radio-activity and magnetic field that is generated around the Agnihotra pot and in the atmosphere. He has stated by his observations that Agnihotra generates a good amount of positive energy. There are many more who are working on these grounds all over the world. But these are the pioneering persons in Germany regarding Agnihotra studies.

7.3.1 : Further Research Opportunities

It has been already stated that different branches of knowledge should be involved in the analysing the effects of Agnihotra - Yajña. It is a great challenge in front of scientists and scholars. In the seminar in collaboration with Indian Planning Commission many scientists, agriculture experts, scholars and the persons, who are using Agnihotra for better results in various fields, suggested many dimension of research opportunities.

According to Dr. Ulrich Berk, a German scientist in this field, the fundamental research on Agnihotra should be carried on the following points :

Fundamental Research

Understanding the Agnihotra process on a deeper level

... if the proposed experiments in plant physiology do actually corroborate the hypothesis that chlorophyll activity is being enhanced in Homa atmosphere, then this would give us one explanation why plants grow faster, yields increase, etc.

Similarly with all the other underlying mechanisms which will be examined in the different fields like plant physiology, plant pathology, soil science, etc. If these mechanisms are validated by the research in these different fields, then we understand the effect of Homa on plants much better.

Acoustics

the physics of sound, vibration, and resonance, will help us to understand better how the vibration of mantras is reflected by the sides of the pyramids, which role the steps of the (ziggurat shaped) pyramids play and whether we can find proof of the following statement from Vedic knowledge.

>There is a sound that comes from the ash. It is this sound that heals. All the other physical things are there, such as nutrients, vitamins, minerals. But the key is sound. One subtle enough to detect can show this.<

Only recently it has been shown that sound waves have an effect on the growth of plants. Most popular were experiments on that subject described in the book "The Secret Life of Plants" by Tompkins/Bird. ... How will these amino acids react on the sound of the mantras of Agnihotra and Tryambakam fires and on the sounds reflected by the

different steps of the pyramid ... will be an interesting topic for further research.

Electronic Fields

Especially studies of very high and very low frequencies will be interesting. One approach is taken by Dr. Abhay Shendye who examines the Far Infra Red spectrum - what are the emissions of the Agnihotra process and how do these FIR fields created by Agnihotra affect plants and all living organisms.

Some Eastern European physicists claim that there must be electromagnetic field of very high frequency (and agnihotra pyramid acts as a Horn antenna radiating these waves), but this hypothesis still to be examined.

Plasma physics

Plasma-the forth state of matter- is known to react with many different kinds of pollutants and thus can eliminate different forms of contamination.

Studies should clarify how the effect of the pyramid and the specific vibrations can help in this process.

Quantum physics

According to some nuclear physicists of Eastern Europe, after so many nuclear tests, using highly enriched uranium in weapons, and after the Chernobyl disastrous nuclear accident all our environment is radioactive. So also the cow dung you use for Agnihotra has an increased level of radioactivity but the Agnihotra ash does not. The physicists who conducted these experiments were much surprised and they concluded that one has to go deep into quantum physics in order to understand how such changes can happen. Chemistry is not enough to understand these changes.

Again it is interesting to compare th work of modern physics with statements from the ancient knowledge of Vedas

>Ancient tradition of Vedic knowledge states that due to performance of Yajnya 'APOORVA' comes about. This means some special effect occurs due to Yajnya.

The effect goes to the subatomic level.

Biophysics

There is some effect of magnetic fields on the growth of plants. Agnihotra creates some magnetic-type of field around the pyramid.

We can test the hypothesis ...

Recent research, especially in Germany and in Russia, shows that bio-photons are crucial for the communication between cells in living organisms. If this communication is disturbed, diseases occur. ...

To lay out experiments in order to find out possible changes would be a worthwhile project.

Subtle energies

... quantum theory might be the key to understanding such notions and in the end hopefully the ancient knowledge of the Vedas and modern

science in its advanced form could come together.¹⁶

The chief consultant of National Horticulture Mission Ministry of Agriculture and Cooperation Dr. R. K. Pathak is of the opinion that :

After critical study of different aspects of Homa Organic Farming, it is apparent that sincere research efforts have not initiated on this novel technology. ...Hence, sincere research efforts are required to resolve many mysteries of this novel technology. ... With 12 years of my association with different organic systems, I am of the view that Homa can resolve number of issues and there is dire need to promote this novel technology to assure Sujalam, Suphalam and Malayaj Sheetalam and thus good human life by preaching and advocating the ancient knowledge of Vedas. ... Homa Organic Farming has become the need of the hour to resolve a number of crises being faced on every continent. ... The impact of Homa needs to be systematically assessed for its impact on water quality, environment, quality of produce and sustainability through cost benefit study.¹⁷

He added further that organic farming and Homa farming subjects should be added in the syllabus of the Universities.

Dr. Pramod W. Basarkar, Professor and Head, Department of Biochemistry, University of Agricultural Sciences, Dharwad, is of the opinion :

The successful Homa experiments need to be documented and shown to farmeres through modern gadgets and equipments. Such successful farmeres need to be projected in public. They should be made to express

¹⁶ Berk, Ulrich. Agnihotra and Homa Therapy- Scientific Perspective. Berk, Ulrich and Johnson, Bruce (Ed.), Brainstorming Conference in Co-operation with Planning Commission, Government of India, Bringing Homa Organic Farming into the Mainstream of Indian Agriculture System, Fivefold Path Publishers, Parola, 2009. Pp. 49-51.

¹⁷ Op cit, pp. 66-68.

themselves freely in public and suitably rewarded for their achievements.

There should be a Directory of Homa farmers. The mass awakening process needs powerful speakers to speak with authority. ...

Farmers are slowly becoming aware of the impact of Homa Organic Farming and have started believing in its efficacy. Wide publicity and public awareness programmes will do the trick. ...

Great future awaits Homa Organic Farming in India.¹⁸

On these grounds new Homa-organic-farms are established in different parts of the country, eg. in Navasari, Kodinar (in the vicinity of Sorti- Somanath) Saurashtra, Bhanavad (70 km from Junagadh) in Gujarat , in village Sajiwali, Tal Shahapur, Thane district of Maharashtra Mr. Vyankatesh Kulkarni is working on the Mango and Cashew plants, under the guidance of Dr. R. K. Pathak Mr. Ramesh Chandra Tiwari is experimenting on Dashahari Mango, in Maheshwar Karin Heschl is using Homa effects for soyabean plants and under her technical guidance some activities on Homa Organic Farming are initiated at Central Institute for Subtropical Horticulture at Lucknow and in few farms Uttar Pradesh and in Parola, Jalgaon district Bruce Johnson enjoys the results of Agnihotra on Bt cotton.

Some bio-technologists from Pune are working on the new advanced version of Kirlion-Photography, known as PIP technique. With this PIP imaging one can monitor the minute changes and details in the aura - human as well as plants. Dr. Abhay Shende is trying to investigate the changes due to Agnihotra at different levels, like a person not known to Agnihotra to a daily performer of Agnihotra for years or the same way on plants, like a plant in the atmosphere of Agnihotra and not kept in the surroundings of Agnihotra. Some basic experiments are followed in Pune, but still much more has to be experimented yet. The outcome of these experiments will be interesting and can throw light on various important aspects of Yajña.

Here the Nitya-Yajña - Agnihotra is discussed with various aspects and its relevance in the daily life of common man in this IT era. In 2007 and 2009

¹⁸ Op cit, pp. 69-70.

some experiments were undertaken while Somayaga was being performed by Dr. Puchalski, for measuring the life-energy that is emitted through the performance of this Yajña. The experiments should be undertaken for discovering further more effects and their details that are achieved through this and other different Yajñas, like, eg. Darśapūrṇamāseṣṭi, which is again performed in the transition period of full-moon and new-moon day. The ritualistic significance is known through the scriptures. The importance of relevance of these ritualistic performances in the daily life should be found out, when the common man is facing the adverse effects of pollution everyday. As Agnihotra is proved as solution to the problem of pollution by experts, many more aspects of other sacrifices that are still unknown and are not yet noticed should be discovered with the help of the yardsticks of modern sciences. These effects of sacrifices should be made available to all and efforts should be made to literate people about these homogenous results and benefits.

7.4 : Summary

Agnihotra is a multi-disciplinary science. An attempt has been made to project Agnihotra from as many angles as possible. There is much more to be done in the field of experiments regarding Agnihotra, which would prove many more dimensions of Vedic knowledge. For these experiments scholars of different disciplines will have to work hand in hand.

In para-psychological impact on the present day world, dominated by economic considerations, is of prime importance. Agnihotra is therefore a worship, a prayer or a meditation, accompanied by what looks like a ritual or a physical act, performed much more as a sequence. Thousands of people on all continents belonging to different races, languages, regions and spiritual groups, who practice Agnihotra have remarked that simply by performing Agnihotra at sunrise and sunset, feel as if a protection film surrounds them. The scriptures call it a supreme act, Śreṣṭhatam karma, not only because it is

selfless action but also because of its multi-dimensional effects. The ancient vedic seers have given in the hands of man, Agnihotra as a replica of cosmic working and have thus opened before him the way to Vedic cosmology.

The fundamental books all different religions declare actually one basic concept. When the God created universe, he told the benevolent and right lifestyle with a basic ritualistic performance. As time and region needed many incarnations, prophets, messengers and saints took birth on this earth. According to their birth place, they used the language to convey the message. But this difference is just superficial. The original fundamental message is one and only one. Practice sharing your assets in a spirit of humanity (Dāna), practice self-discipline to train the body and mind (Tapa), practice doing good action without attachment to name, fame or reward (Karma), practice self-study of 'who I am' (Swādhāya), is the teaching of the Vedas. It is also the basis of all scriptures, teachings of all saints and prophets.

Thus it is observed that the Vedas, which were given at the beginning of life on the earth, have imparted the fundamental knowledge. The same is revealed again and again in various countries, in different languages - as and when required. Sometimes much detailed and clearly, sometimes symbolically. But principally the facts are just one and same. There cannot be any reason to tell many types of paths, as the truth is one and only one. Hence by different prophets the Vedic knowledge is explained as the benevolent way of life again and again, time, place and language may differ and the Vedas are to be defined as the working manuals of the universe.

... ..

Bibliography :

1. Primary Sources:

1. *Ṛgveda Samhitā*, S. D. Satavlekar, Swadhyaya Mandal, Paradi, 1957.
2. *Ṛgveda Samhitā*, (with commentary of Sāyaṇacārya), Vol. I, II, III, IV & V, Vedic Samshodhan Mandal, Pune, 1972.
3. *Śuklayajurveda*, (Vājasaneyi Mādhyandin Samhitā), Purvardha and Uttarardha, Dhundiram Ganesh Dixit (Ed), Shrimant Rajesaheb Samsthan, Aundh, Satara, 1862.
4. *Atharvaveda Samhitā*, S. D. Satavlekar, Swadhyaya Mandal, Paradi, 1957.
5. *Samaveda*, S. D. Satavlekar, Swadhyaya Mandal, Paradi, 1963.
6. *The Mahābhārata*, (Text as constituted in the Critical Edition), Vol. I, II, III & IV, The Bhandarkar Oriental Research Institute, Poona, 1971.
7. *Śatapatha Brāhmaṇa*, Swami Satyaprakash Saraswati (Ed), Govindram Hasanand, Delhi, 1988.
8. *Taittirīya Brāhmaṇa*, Vol. I & II, Narayanshastri Godbole, Anadashram, Pune, 1898.
9. *Jaiminīya Brāhmaṇa of Samaveda*, Raghu Vira and Lokesh Chandra, Saraswati Vihara, Nagpur, 1954.
10. *Gopatha Brāhmaṇa of Atharvaveda*, Rajendralal Mitra, Indological Book House, Varanasi, 1972.
11. *Muṇḍakōpaniṣda*, Upaniṣadasangraha, vyankatrao Ramchandra, Gyanprakash Prakashan, Pune, 1817.
12. *Śivapurāṇa*, Hanumanprasad Poddar & Chimmanlal Goswami, Geeta Press, Gorakhpur, 1962.
13. *Śrimadbhāgawata Mahāpurāṇa*, Second edition, Geeta Press, Gorkhapur, 1985.

14. *Kātyāyan Śrauta Sūtra*, H.G. Ranade, M. S. Latkar Pub., Pune, 1978.
15. *Suttanipata*, P. V. Bapat, Dharmanand Smarak Trust, Bombay, 1924.
16. *Saṅgyuttanikaya*, Vol. I & II , Bhikshu Jagadish Kashyap & Bhikshu Tripatakacharya, Mahabodhi Sabha, Sarnath, Varanasi, 1954.
17. *Śrimad Bhagvat Gītā*, Geeta Press, Gorkhapur, 1985.
18. Koran Majid, (with English translation), Seventh Edition, Makatava Alahasanat, Rampur (UP), 1977.
19. **Good News Bible**, United Bible Societies, New York, 1976.

2. Modern Texts :

1. Acharya, Sankara. **The Vedas and Brahmanas**, Caxton Publishers, Delhi, Reprinted, 1988.
2. Achaval, Gopal Ganesh. **Vishwawyapi Vaidic Sanskriti Va Jagachya Navin Vishwasaniy Etihastil Sadhane**, Adarsha Mudranalay, Pune, 1949.
3. Apate, V. R. **Vedateel Vidyanacha Shodh**, First edition, Om Shanti Prakashan, Dombiwali, 1994.
4. Berk, Ulrich and Johnson, Bruce (Ed.), **Brainstorming Coference in Co-operation with Planning Commission, Government of India, Bringing Homa Organic Farming into the Mainstream of Indian Agriculture System**, Fivefold Path Publishers, Parola, 2009.
5. Berk, Ulrich, **Die physikalischen Erscheinungen der Agni-Hotra-Pyramide Wirkung, Deutsche Gesellschaft für Homa Therapie**, Mühlingen, 1986.
6. Bhate, Saroja (Ed.). **Indology: Past, Present and Future**, Sahitya Academy, New Delhi, 2002.
7. Bhattacharyya, Sibajiban. **Indological Studies In India, Progress And Prospects, Indolpgical Studies and Research in India**, (Being the

- proceedings of a seminar held at the Institute on 4th and 5th January 1991), The Ramkrishna Mission Institute of Calcutta, Calcutta, 1992.
8. Bhave, H. A.(Tra.) ***Bharatakadun 'Amhi (Englandne)' kaay Shikave ?***, Varada Prakashan, Pune, 2000.
 9. Bizberg, Jerak. ***Homa Farming fot the New Age. A practical guide to Homa Farming based on the ancient science of Agnihotra***, Fundacja Aghnihotra, Jordanow, 1999.
 10. Bloomfield, Maurice. ***The Religion of the Veda. The Ancient religion of India.(From Rig-Veda to Upanishadas)***, Indological Book House, Delhi, 1972.
 11. Bodewitz, H. W. ***Daily Evening And Morning Offering(Agnihotra)***, E. J. Brill, Leiden, Nederlands, 1974.
 12. Buitenun, Van J. A. B. ***The Pravargya (An Ancient Indian Ritual - Described and Annotated)***, Deccan College Post Graduate And Research Institute, Pune, First Ed., 1968.
 13. Chaubey, Braj Bihari. ***Treatment of Nature in The R̥gveda***, First Edition, Vedic Sahitya Sadan, Hoshiarpur, 1970.
 14. Chaudhari, Nirad C. ***Scholar Extraordinary, The Life of Professor the Rt. Hon. Friederich Max Müller***, P.C. Chatto & Windus, London, 1974.
 15. Chaudhari, Nirad C. ***An Autobiography of an Unknown Indian***, Oxford University Press, 1972.
 16. Dandekar, R. N. ***Recent Trends In Indology***, Bhandarkar Oriental Research Institute, Pune, 1978.
 17. Dandekar, R. N. ***Decade of Vedic Studies in India and Abroad***, Reprinted from Annals of Bhandarkar Oriental Research Institute, Vol. 56. Bhandarkar Oriental Research Institute, Pune, 1975.
 18. Dandekar, R. N. ***Indological Miscellaner***, Bhandarkar Oriental Research Institute, Pune.
 19. Devasthali, G.V. ***Religion And Mythology Of The Brāhmaṇas***, University of Poona, Pune, 1965.

20. Dharmadhikari, T. N. **Vedas- A Broad Perspective**, *Samvijñānam*, Felicitation Volume of Dr. T. N. Dharmadhikari, Pune, 2006.
21. Dharampal-Frick, Gita. **Indien im Spiegel deutscher Quellen der Frühen Neuzeit (1500-1750) , Studien zu einer interkulturellen Konstellation**, Max Niemeyer Verlag, Tübingen, 1994.
22. Divekar, Mahadevshastri. **Aarya Sanskriticha Utarshapkarsh, (Purvardha)**, Hindusamajodharak Vagamaymala, Vai, 1929.
23. Fehringer, Mathias. **Agnihotra und Kirlionfotografie**, Nov. 1987, Radolfzell.
24. Frawley, David. **Vedic Culture, The Difference It Can Make In Your Life**, First Ed., Black and White , an imprint of Sandeep Prakashan, Delhi, 2006.
25. Gandhe, Shyamsunder. **Gomay, Panchsadhan**, Pune, 17 November 1979
26. Ganeshan , Vridhagiri. **Deutsche Dichter und Indien, Indien in der Gegenwart**, Band II, Nummer 4, Indian Council for Cultural Relations, 1997.
27. Gautier, Francois. **Hindus and India, In the Eyes of a Frenchman**, The Pionier, International Opinion.
28. Gonda, Jan. **Die Religionen Indiens, I, Veda und älterer Hinduismus**, Verlag W. Kohlhammer, zweite überarbeitete und ergänzte Auflage, Stuttgart, 1978.
29. Gonda, Jan. **Veda und älterer Hinduismus**, Verlag W. Kohlhammer Stuttgart, zweite überarbeitete und ergänzte Auflage, 1978.
30. Griswold, H. D. **The Religion Of The Rigveda**, First reprinted Edition, Motilal Banarasidas Publishers, Delhi, 1999.
31. Hebalkar, Sharad P. **Bharatiy Sanskriticha Vishwasanchar**, 5th Edition, Bharatiya Vichar Sadhana, Pune, 2004.
32. Hillebrandt, Alfred. **Vedic Mythology**, Vol. One, Sarma, Sreeramula Rajeswara (Tr.), First English Edition, Motilal Banarasidas Publishers, Delhi, Reprinted 1999.
33. Hogge, Helmut. **Woher kamen die Heiligen Drei Könige?**, Die Zeit,

Hamburg, Nr. 51 vom 20.12.1963.

34. Houben, Jan, M. (Ed.) ***The Pravargya Brāhmaṇa Of The Taittirīya Āraṇyaka, an ancient commentary on the Pravargya ritual***, Motilal Banarasidas Publishers, Delhi, 1991.
35. Institute For Studies In Vedic Sciences. ***Significant Role Of Agnihotra In Alcohol De-Addiction***, Shivapuri, Akkalkot.
36. Janardana, M. ***Mangalore, the cradle of Kannada Journalism, Mangalore, a Souvenir - a Survey of the Place and its People*** (Inauguration of the New Building of the Canara Ind. A. Bank. Synd. Udipi-Mangalore on 31st May 1958), Manipal 1958
37. Joshi Mahadevshastri.(Ed.) ***Bharatiya Sanskritee Kosh, Khanda 9th***, Bharatiya Sanskritee Kosh Mandal, Pune, 2005.
38. Kaegi, Adolf. ***The Rigveda : The oldest Literature of the Indians, Arrowsmith, R. (Tr.), Authorised Translation with Additions to the Notes, First Ed., Amarko Book Agency, New Delhi, 1972.***
39. Kane, Pandurang Vaman. ***History of Dharmaśāstra (Ancient and Medieval Religious and Civil Law)***, Vol II, Part I, Second Edition, Bahandarkar Oriental Research Institute, Poona, 1974.
40. Kashikar, C. G. ***Śrautadharmācīśvarupćikitsya***, Pune University, 1977.
41. Karambelkar, V.V. ***Sanskrit Sahityacha Sopapattik Itihas***, Shri Sharada Prakashan, Second Edition, Nagpur, 1993.
42. Keith. ***Religion and Philosophy of the Veda and Upanishads***, Harward Oriental Series Vol. 31, Harward University Press, 1925.
43. Kinjavadekar, Vamanshastri. ***Agnihotrachandrika***, Apate, Vinayak Ganesh (Ed.), Anandashramsanskritgranthavali, Granthanka 8, Pune, 1921.
44. Kolangade, R. G. ***Shree Sayanacharya, Vedamahabhashyakara***, R. G. Kolangade, Mumbai, 1956.
45. Kolhatkar, Madhavi and Deshpande, Pradnya (Ed.). ***Sarvījñānam***, Felicitation Volume of Dr. T. N. Dharmadhikari, Pune, 2006.
46. Kolte, V.B.(Edi.) ***Mhaimbhat Sankalit Shri Chrakradhar Lilacharitra***,

- Second edition, Maharashtra Rajya Sahitya Sankriti Mandal, Mumbai, 1982.
47. Kulkarni, Aravind, Agrawal, Ramesh and Ambike, Subhash (Ed), '**Govnsha'-
Ek Shashvat Vardan**', Purushartha and Govidnyan Sanshodhan Sanstha
Sanyukta Visheshanka, Pune, 2009.
48. Kulkarni, E. D. **Vedatvadashaka - Ahimsa, Panchasadhan**, 17 July
1977, Pune.
49. Kulkarni, S.K. **Devayaan**, 12th Edition, Satyabodh Prakashan, Pune,
2010.
50. Kulkarni, S.K. **Panchsadhan**, Satyabodh Prakashan, Pune, 1987.
51. Kulkarni, S.K. **Saptashoki Aarthat Vedarahasya**, Satyabodh Prakashan,
Pune, 1998.
52. Kulkarni, S. K. **Path Of Light**, Satyabodh Prakashan, Pune.
53. Kulkarni, S.K. **Paramapuruṣa**, Satyabodh Prakashan, Pune, 2008.
54. Kratz, Sylvia and Schnug, Edward. **Homa Farming - a Vedic Fire for
Agriculature : Influence of Agnihotra ash on water solubility of soil P.
Federal Agricultural Research Center (FAL)**, Institute of Plant Nutrition and
Soil Science, Braunschweig, Germany.
55. Leifer, Walter. **Indien und Deutschen. 500 Jahre Begegnung und
Partnerschaft- Kunst Dichtung Religion Philosophie Forschung Medizin
Wirtschaft Politik**, Horst Ermann Verlag, Tübingen und Basel, 1969.
56. Leifer, Walter. **India and the Germans, 500 Years of Indo-German
Contact, Art Poetry Religion Philosophy Research Medicine Economics
Politics**, Shakuntala Publishing House, Bombay, 1977.
57. Macdonell, Ather A., **A History Of Sanskrit Literature**, Motilal
Banarasidas, New Delhi, 1965.
58. Macdonell, A.A., **Vedic Mythology**, Motilal Banarasidas, New Delhi,
Reprinted 1981.
59. Majumdar (R.C.) (Ed.): **The History and Culture of The India Pople.
Vol. I, II, III. - The Age of Imperial Unity**. Bharatiya Vidya Bhavan. 8th Edition.
Bombay. 1990.

60. Majumdar (R.C.): ***Hindu Colonies in The Far East***. Second Edition. Calcutta. 1986.
61. Majumdar (R.C.): ***Champa, History and Culture of an Indian Colonial Kingdom in the Far East***. Calcutta. 1927.
62. Matela, Leszek. ***Radioactivity and Agnihotra, Bharatiya Satsang***, Vol.VIII, No. 10.11 &12, March, April, May 1988.
63. Mehendale, M. A. ***Vedarth Nirnayacha Itihas***, Bhandarkar Oriental Research Institute, Pune, 2006.
64. Mette (Adelheid): ***Indische Kulturstiftungsberichte und ihr Verhältnis zur Zeitaltersage. Akademie der Wissenschaften und der Literatur in Kommission***, Franz Steiner Verlag. Wiesbaden. 1973. (Bhandarkar)
65. Metzger (Werner): ***Leben und Werk des Menschensohnes und Kalki-Awatars Parama Sadguru Schri Gadschanan Maharadsch***. Krida-Yoga-Schule Fünffältiger Pfad. Engenbittelbrunn. 1982.
66. Metzger, Werner.(Ed) ***Satang***, Institute für Vedischen Wissenschaften, Engen, 2007.
67. Mimansak , Yudhishtir. ***Mimāṃsā Śābar Bhāṣyam***, first ed.,Yudhishtir Mimansak, Bahalgadha,Hariyana, 1977.
68. Mimansak , Yudhishtir. ***Śrauta Yajño Ka Sankshipta Parichay***, Ramlal Kapur Trust, Bahalgadha,Hariyana, 1984.
69. Müller, Max. ***India What can it teach us ?***, Pengin Books India, New Delhi, 2002.
70. Müller, Max. ***The Vedas***,Indological Book House, Varanasi, 1969.
71. Nadkarni, Sureshchandra. ***Prithvivar Manus Uparach***, Pune.
72. Nehru, Jwaharlal. ***The Discovery of India***,Sixteenth Impression, Jawaharlal Nehru Memorial Fund, New Delhi,1996.
73. Oberlies, Thomas. ***Die Religion des Rgveda***, Vol. XXVI, Institute für Indologie des Universität Wien, Wien, 1998.
74. Parkhe, M.S. ***Agnihotra, The Vedic Solution For Present-day Problems***, Vaidika Saṁśodhan Maṇḍala, Poona, 1982.

75. Parkhe, M. S., **Lailutul Kadar, Divya Prakashachi Ratra, Panchasadhan**, 17 August 1979.
76. Paranjape, Abjay, V.(Ed), **Homa Therapy as Treatment for Drug Abuse, Bharatiya Satsang**, Vol. VIII, No. 10,11 &12, March, April, May, 1988.
77. Paranjape, Vasant V. **Light Towards Divine Path**, The Agnihotra Press, Inc.,Maryland, 1976.
78. Paranjape, Vasant V. **Zehn Gebote von Parama Sadguru**, Agnihotra Press, Maryland, U.S.A.,1978.
79. Paranjape, V.V. (Ed). **Not Man Apart**, November 1983, **Satsang**, Vol 12 No.8, Fivefold Path, Inc., Madison, 6 Sept 1984.
80. Paranjape, Vasant. **Agnihotra in the forests of Germany, Satsang**, Vol. 12, No. 8, Fivefold Path, Inc., Madison, 6 Sept 1984.
81. Paranjape, Vasant V. (Ed.), **Satsang**, Vol 12 No.8, Fivefold Path, Inc., Madison, 6 Sept 1984.
82. Paranjape, Vasant, V. **Homa Therapy. Our Last Chance**, Five Fold Path Inc., Madison, 1989.
83. Paranjape, Vasant, V.(Ed.), **Agnihotra Radioactivity - Brainwaves - Resonance from the Pyramid**, Deutsche Gesellschaft für Homa Therapie Satsang, Vol. 21 No. 14 & 15, Fivefold Path, Inc., 2-16 December 1993, Madison.
84. Pathak, P.V. **Vedahnchi Olakh**, Parampara Aani Adhunik Dristikon.
85. Patil, Vasant. **Bharatiya Asmiteche Pradeep Pashchatya sanskrit Pandit**, Vishwashanti Kendra, Maeers, MIT, Pune, 2007.
86. Powers, Lisa (Ed.). **Tsunami and Agriculture, Homa Farming, Satsang**, Vol. 32, No. 5, Fivefold Path Mission, Madison, January & February 2005.
87. Rajimvale, Shrikant, **Parmapityachi Denagi : Ved, Panchasadhan**, 17 June 1977.
88. Ranade, Eknath.(Ed.), **Yajna- The Basis of The Life**, Vivekanand

- Kendra, Madras, Vol.20, No. 2, August 1991.
89. Rathner, Barry. ***Fight the Disease Pyramid with Copper Pyramid Fire***, ***Satsang***, Vol 12 No.11, Fivefold Path, Inc., Madison, 18 Oct 1984.
90. Rau, Johannes. ***German President Johannes Rau in India***, ***German News***, VOL XLIV, German Embassy New Delhi, April 2003.
91. Sarup, Lakshman. ***The Nighaṅṭu and The Nirukta***, Motilal Banarsidass, Delhi, First Edition, Reprinted 1998.
92. Satavalekar, Shripad, Damodar. ***Yajña-Yajñatil HavirdravyanCHA Vichar***, Da. Haidrabad. Keshavarao Vakil, Su. Da. Cha, Shake 1824.(Prushthe)86,5.3.4.3. Reprinted Mondkar, J.A. , Pune, 1970.
93. Schlender (Friedemann).: ***Traumflieger ohne Landeplatz. Max Müller-eine deutsche Legende in Indien***. VISTAS Verlag. Berlin. 2000.
94. Sharma, Umashankar 'Rishi'. ***Sanskrit Sahitya ka Etihās***, Chaukhamba Bharati Academy, Varanasi, Second Edi., 2004.
95. Sharma. ***Agniṣṭoma Yajñapadhati*** Vimarsh, Chowkhamba Sanskrit Series, 455, Banaras, 1937.
96. Sohoini, Y.B. ***Air-Pollution, Agnihotra and Human-beings, Manav-Dharma-Sammelan***, Bhopal, 1973, ***Panchasadhan***, 17 August 1977, Pune.
97. Sonde, Nagesh D. ***Rigveda. A study of the forty hymns***. Nagesh d. Sonde Publisher, Mumbai, First Ed., 2006.
98. Sri Aurobindo. ***The Secret of the Veda***, Sri Aurobindo Ashram, Pondicherry, Third Reprinted Ed., 1990.
99. Staal, Frits. ***Science of Ritual***, Bhandarkar Oriental Research Institute, Pune, 1982.
100. Staal, Frits. ***Agni : Vedic Ritual of the Fire Altar***, Vol. I & II, Asien Humanities Press, Berkeley, 1983.
101. Staal. ***Ritual and Mantras : Rules without meaning***, Motilal Banarasidas, Delhi, 1996.
102. Stache-Rosen (Valentinia).: ***German Insologists. Biographies of Scholars in Indian Studies Writing in German***. Max Müller Bhavan. New

Delhi. 1981.

103. Swami Harshananda. **The R̥gveda, A Brief Study**, Ramakrishna Math, Bangalore, First Edi., 2003.

104. Swami Vivekananda.: **The Complete Works of Swami Vivekananda**. Vol. IV. Advaita Aschram. 14th reprint. Calcutta. 1992.

105. **Swami Vivekanand Granthavali**, Vol. 4, Swami Vivekanand Shatavarshik Jayanti Smarak Granth, Ramakrishan Math, Nagpur, 1991.

106. Tembe, Bhaskar **Mahadev.Hindustancha Sagarvikram, Athava (Hindivasiyanchya Prachin va Arvachin Sagaravaril Chalvalicya Mahitinchi Tipane.)**, Yavatmal Distrikt Assoziation Purskrit Granthmala, Pushpa 11, 1943.

107. Tilak, B. G. **The Orion, Or Researches In The Antiquity Of The Vedas**, Cosmo Publications, New Delhi, 1984

108. Tompkins, Peter and Bird, Christopher. **Secrets of Soil. A fascinating account of recent breakthroughs-scientific and spiritual-that can saver your garden or farm**, Harper & Row Publishers, New York, 1989.

109. Tripathi. **Vaidik Devata : Udbhav aur Vikas**, Vol I & II. Bharatiya Vidya Prakashan, Delhi, 1981.

110. Upadyay, Gangaprasad. **Sayan aur Dayanand**, Satyarth Prakashan Nyas, Kurukshetra, 2008.

111. Van Buitenen,J.A.B. **The Pravargya, An Ancient Indian Ritual-Described and Annotated**, Deccan College Post Graduate and Research Institute, Pune, first edition, 1968.

112. Vedalankar, Ramnath. **Yajñamimānsā (Agnihotra ki Vishad Vyakhya sahita)**, Sanskar Prakashan, Delhi, 2000.

113. Vedashrami, Veersen. **Vaidik Sampada**, Aryasamaj Sthapana Shatabdi Sanskaran, Govindram Hasanand, Delhi, 1975.

114. **Vedaśāstradīpikā**, Hirak-Mohotsava-Smarak-Grantha, Vedashastrottejak Sabha, Pune.

115. Walimbe, R.S. and others (Ed.).: **Bharatuya Itihas aani Sanskrittee**.

Paryalochan. Bharatiya Itihas Sankalan Yojana. Shri. Babasaheb Apate Smarak Samiti, Pune. 1985.

116. Wunderlich, Klaus. **Die große Wende.** Wunderlich. Engen. 1994.

117. Wunderlich, Klaus. **Towards A Positive Future,** Eifert Druck und Verlag, Engen, 1994.

3. Dictionaries :

1. **Brockhaus Lexikon.** Band 8. Dtv. F.A. Brockhaus GmbH, Mannheim, 1988.

2. **Meyers Grosses Taschen Lexikon in 24 Bänden,** Band 10. B.I. Taschenbuch Verlag, Mannheim.

3. **Sanskrit-English Dictionary** (Etymologically And Philologically Arranged), Sir Monier Monier-Williams, F. Leumann, C. Cappeller, Motilal Banarasidas, Delhi, reprinted 1986.

4. **Wahrig Deutsches Wörterbuch,** mit einem Lexikon der Deutschen Sprachlehre, Gerhard Wahrig, Mosaik Verlag, 1980.

4. Websites :

1. www.wikipedia.com

2. http://en.wikipedia.org/wiki/Oligodynamic_effect

3. www.wikipedia.org

4. www.tapovan.net

5. www.homatherapy.org

6. www.homatherapyindia.com

7. www.rosecircles.com

8. www.narmadanaturals.com

9. www.wildblackberrygarments.com
10. www.homa1.com
11. www.agnihotra.org
12. terapiahoma@yahoo.com
13. agnihotra@terapiahoma.com
14. www.chefr.com
15. www.Kriya-Yoga-Schule.de
16. www.csauk.ac.in

... ..

10. Appendix

10.1: Fire-worship around the world

1. Xerox of Certificate of Peru Government
2. Xerox of Map of Homa Plantation from Peru
3. Xerox of Krishi Pandit Award, Government of Karnataka.