Indian Traditional Knowledge System

Evolution Process

In the contemporary world when human civilization was facing the challenges of climate change, natural disaster, biodiversity loss, destabilized ecological services, food and nutritional inequality, problems of sanitation and health, and many others challenges.

At that point in time, there is a need to give emphasis on alternative solutions or ways to face the challenges and to design a sustainable lifestyle. For this purpose the indigenous and local communities around the world are endeavored to find out the alternative solutions which are based on practices and developed from experience gained over the centuries and based on the local culture and environment requirements and transmitted orally from generation to generation.

Human beings gather knowledge basically for two purposes: survival and development. We try to understand and come to grips with the environment in order to survive, and we try to find reasons for our survival that go beyond the intuitive reaction to physical threats. This is, in short, the basis for all kind of activities which aim at building up knowledge systems.

TK Definition

Traditional knowledge is transmitted orally from generation to generation. It tends to be collectively owned and takes the form of stories, songs, folklore, proverbs, cultural values, beliefs, rituals, community laws, the local language, and agricultural practices, including the development of plant species and animal breeds. Sometimes it is referred to as an oral tradition for it is practiced, sung, danced, painted, carved, chanted, and performed down through millennia.

World Intellectual Property Office (WIPO) TK includes indigenous knowledge relating to categories such as agricultural knowledge, medicinal knowledge, biodiversity-related knowledge, and expressions of folklore in the form of music, dance, song, handicraft, designs, stories, and artwork. The process leading to the creation of TK may not be formally documented in the way that much scientific and technological information is recorded. The apparent non-systematic manner of the creation of traditional knowledge does not diminish its cultural value or its value from the point of view of technical benefit.

Traditional knowledge: Includes, but is not limited to knowledge of:

- Local behavior, distribution or cycles of fish, wildlife and plant life;
- Broader climatic changes or cycles;
- Local ecosystem or geomorphologic responses to natural or human disturbances;
- Local population densities or changes in fish and wildlife;

- Qualitative information about the utility of a variety of medicinal, edible, or material resource plants;
- Requirements or activities needed to maintain or enhance local ecosystems."
- Nature of TK
- Traditional Knowledge (TK) is essentially culturally oriented or culturally based and it is integral to the cultural identity of the social group in which it operates and is preserved.
- Traditional knowledge is an open-ended way to refer to tradition-based literary, artistic, or scientific works; performances; inventions; scientific discoveries; designs; marks, names, and symbols; undisclosed information; and all other tradition-based innovations and creations resulting from intellectual activity.
- Traditional knowledge is mainly of a practical nature, particularly in such fields as agriculture, fisheries, health, horticulture, forestry, and environmental management in general.
- TK is very much local in nature and associated with a particular environmental or socio-cultural context.
- TK is designed and developed by the local community through their constant observation, trial and modification, and customized to match with its appropriateness.
- TK is always handed over or transferred from one generation to another and also between communities mostly orally and/or visually.
- TK is dynamic and Empirically tested

Characteristics of traditional knowledge

- Holistic: all things are interconnected and nothing is comprehended in isolation;
- Intuitive: based on a deeply held holistic understanding and knowledge;
- Qualitative: knowledge is gained through intimate contact with the local environment, while noting patterns or trends in its flora, fauna, and natural phenomena. It is based on data collected by resource users through observation and hands-on experience;
- Transmitted intergenerational by oral tradition: teaching is accomplished through stories and participation of children in culturally important activities; •Governed by a Supreme Being: the Creator defines a moral universe with appropriate laws;

- Moral: there are right ways and wrong ways to relate to the environment;
- •Spiritual: rooted in a social context that sees the world in terms of social and spiritual relations among all life forms. All parts of the natural world are infused with spirit. Mind, matter, and spirit are perceived as inseparable. Traditional ecological knowledge, in practice, exhibits humility and a refined sense of responsibility; it does not aim to control nature;
- Based on mutual well-being, reciprocity, and cooperation: these promote balance and harmony between the well-being of the individual and the well-being of the social group;
- Non-linear: views time and processes as cyclical;

- Often contextualized within the spiritual: may be based on cumulative, collective practical, and spiritual experience. Traditional ecological knowledge may be revised daily and seasonally through the annual cycle of activities (as required);
- Communal: general knowledge and meaning are shared among individuals horizontally, not hierarchically; and
- Promoting stewardship: takes a proactive approach to environmental protection and an ecosystem approach to resource management."

Categories of TK

Long before the development of modern science, which is quite young, indigenous people have developed their ways of knowing how to survive and also of ideas about meanings, purposes, and values. They have taken care of the natural landscape for thousands of years. If we lose their wisdom, we lose the land as well. As long as native peoples are not heard, non-native audiences will continue to deal in caricatures. It has become customary to refer to this kind of knowledge as "indigenous knowledge" or "traditional knowledge", "local knowledge", "traditional ecological knowledge" "ethno ecology"

- Local knowledge (LK) is a collection of facts and relates to the entire system of concepts, beliefs, and perceptions that people hold about the world around them. This includes the way people observe and measure their surroundings, how they solve problems, and validate new information. It includes the processes whereby knowledge is generated, stored, applied, and transmitted to others.
- Traditional knowledge (TK) implies that people living in rural areas are isolated from the rest of the world and that their knowledge systems are static and do not interact with other knowledge systems.
- Traditional Ecological Knowledge (TEK)

TEK refers to the evolving knowledge acquired by indigenous and local people over hundreds or thousands of years through direct contact with the environment. This knowledge is specific to a location and includes the relationships between plants, animals, natural phenomena, and the landscape that are used for livelihood and sustenance of life, such as resource gathering through hunting, fishing, agriculture, livestock farming, forestry, agro forestry, etc. All these can be categorized as natural resource management23, as these practices are linked with the management of land, water, flora, and fauna. Such practices are linked to prioritization of uses along the line of sustainable harnessing, wise use, equitable sharing of benefits, management of future stocks through conservation, defining threshold limits, etc. There are practices for weather forecasting too24. Such TEK considers natural landscape characteristics (topography, slope, soil and rock characteristics), weather and climate as well as types of flora and fauna. The community takes the necessary decision based on abundance/ scarcity and seasonality of biotic and biotic resources, natural disasters, and associated problems It is a process of indigenous communities for

observation, classification, analysis, interpretation, and decision making for a daily walk of life along with the development of worldviews.

Ethno-ecology- is the study of local or native people's interaction with the environment in which they live and work, including their perceptions, use, and management, and knowledge. Sub-disciplines of ethno ecology include ethno biology, ethno botany, ethno zoology, and ethno pharmacology

- Traditional Value and Ethics (TVE)
  TVE is linked to traditional cultural practices which prioritize does and don'ts in the aspects in relation to natural resource harvesting, conservation, and equitable sharing etc. During the process, it evolves the concept of sacred species, space, forests, water bodies, etc. This involves seasonality based practices like restriction of fishing during the breeding season, harvesting forest resources during the flowering period, etc. Sometimes institutions are developed to manage human habitation, controlling human practices related to health and sanitation, like the restriction of food in different seasons, restriction of waste disposal, norms for the location of animal sheds, toilets, etc Exploration and documentation of such practices in local context will help in understanding these practices, creating a knowledgebase and analysis and validation of its scientific base. This will help to identify the prospects for the future adopting lifestyles, habitat management, environment, natural resource management, wildlife protection, etc.

- Traditional Technical Knowledge (TTK)
  Represents the knowledge related to design and development of tools, implements, and gears for different application in the context of natural resource management by the indigenous communities. Such practices are related to agriculture26, fisheries28, animal husbandry, forestry, handloom, and handicraft, etc. Moreover, TTK also represents the knowledge and skill about design and construction like housing, water harvesting structure, roads and bridges, etc

Indigenous knowledge

Learning from indigenous knowledge, by investigating what local communities know and how can improve understanding of agriculture, healthcare, food security education, and natural resource

management issues. So In this report, I tried to clarify what is indigenous and the indigenous knowledge and what are the basic differences between this kind of knowledge and modern or western knowledge.

The term "Indigenous" defined according to the UN as "Groups of people whose social, cultural and economic conditions distinguish them from other sections of the national communities, and whose status is regulated wholly or partially by their own customs or traditions or by special laws or regulations. People in independent countries who are regarded as indigenous are considered as descent people who inhabited geographical region to which belongs, at the time of colonization or the establishment of present state boundaries". Considering the diversity of indigenous people, an official definition of "indigenous" has not been adopted by any UN-system body. Instead, the system has developed a modern understanding of this term based on the following criteria:

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Indigenous knowledge can be also defined as "A body of knowledge built up by a group of people through generations of living in close contact with nature" (Johnson1992). Generally speaking, such knowledge evolves in the local environment, so that it is specifically adapted to the requirements of local people and conditions. It is also creative and experimental, constantly incorporating outside influences and inside innovations to meet new conditions. It is usually a mistake to think of indigenous knowledge as 'old-fashioned,' 'backward,' 'static' or 'unchanging

- • Historical continuity with pre-colonial and/or pre-settler societies.
- • Strong link to territories and surrounding natural resources.
- • Distinct social, economic, or political systems.
- • Distinct language, culture, and beliefs.
- • Form non-dominant group of society.
- • Resolve to maintain and reproduce their ancestral environments and systems as distinctive people and communities

Characteristics of IK

It is dynamic, systematic, and universal in principle. It is unwritten and known through oral traditions.

- • It is practically common sense, based on teachings and experience passed on from generation to generation.
- • It is holistic -it cannot be compartmentalized and It is rooted in the spiritual health, culture, and language of the people.
- • It sets out the rules governing the use of resources -respect; an obligation to share. It is dynamic, cumulative, and stable.
- • It is a way of life -wisdom is using knowledge in good ways. It is using the heart and the head together. It comes from the spirit in order to survive.
- • It gives credibility to people.

- It is based on experience, acquired from observations over time -it is argued that it may be most useful for local scale decision-making;
- It can show an understanding of the complex relationships between these individual components and the dynamic ecosystems within which they act;
- It is frequently linked with the sustainable use of local resources.
- It describes the health of the local environment, wildlife, etc., promotes consideration of the relationships between human and biological systems;
- It often describes these symbiotic relationships and provides the basis for life-sustaining decisions about how to relate to the environment

Significance of Indigenous/ Traditional knowledge

Indigenous/Traditional knowledge is simple and practical.

- It links the survival of every human being to the wholeness of nature and its elements that support life. It provides the concrete situations of communities in relation to the environment and provides practical solutions to the problems of the people.
- Indigenous/Traditional knowledge defines a worldview of people and provides direction for their survival socially, economically, politically and spiritually.
- It explains the evolution of cultural behaviors that resulted from the efforts of people to adjust to their environment.
- It resolves a particular problem, and became an opportunity for them to gain deeper understanding of the human situations.
- It develops the capability to understand the world in a very simple manner as understanding the human self.
- It deals with simple but based applied education, economics, politics, religion, sciences, and technologies of indigenous societies.
- This knowledge is basic but provides a rich ground for the development of the other society. Finally, the significance of Indigenous/Traditional knowledge is sustainability based on the holistic understanding of the relationship between human beings and nature.
- It needs the recognition and support to local knowledge and cultures which can make environmental conservation more meaningful, efficient, and effective.

Objectives of Indigenous knowledge

In the course of these processes the COMPAS partners have identified the following components for supporting endogenous development:

1. Building on locally available resources;
2. Objectives based on locally felt needs and values, acknowledging the interests of different social categories;
3. in future construction and development of local knowledge systems: understanding, testing and improving local practices, and enhancing the dynamics of the local knowledge processes;
4. Maximizing local control of development;

5. Identifying development niches based on the characteristics of each local situation;
6. Selective use of external resources;
7. Retention of the benefits in the local area;
8. Exchange experiences between different localities and cultures;
9. Training and capacity-building for rural people, development staff, and researchers;
10. Networking and strategic partnerships;
11. Further understanding of systems of knowing, learning and experimenting.

INDIGENOUS KNOWLEDGE FIELDS

- Agriculture, knowledge related to crop selection, intercropping, planting times.
- Animal's husbandry and ethnic veterinary medicine, knowledge of breeding strategies, livestock characteristics and requirements, plant uses to treat common illnesses.
- Pastoral systems —herd movement; range evaluation and monitoring; animal breeding and production; traditional fodder and forage species and their specific uses; animal diseases and traditional ethnoveterinary medicine.
- Use and management of natural resources, knowledge of soil fertility management, sustainable management of wild species.
- Health care, knowledge of plant properties for medicinal purposes.
- Community development, common or shared knowledge provides links between community members and generations;
- Poverty elevation, knowledge of survival strategies based on local resources.
- Conservational approaches.
- Water: traditional water-management and water conservation systems; traditional techniques for irrigation; and use of specific species for water conservation.
- Soil: soil conservation practices; the use of specific species for soil conservation; and soil fertility enhancement practices.
- Plants: as a source of wild food, building material, household tools, personal uses (dyes, perfumes, and soaps), fuelwood and charcoal, medicinal purposes.
- Wildlife: animal behavior, habitats, uses.
- Worldview: views of the universe and humanity`s place within it, the relationship between humans and nature, myths, beliefs, customs.

Why is Indigenous Knowledge Important?

Indigenous knowledge provides problem-solving strategies for local communities, especially the poor. Indigenous knowledge represents an important component of global knowledge on development issues.

- Indigenous knowledge is an underutilized resource in the development process.
- Learning from indigenous knowledge can improve understanding of local conditions.
- Understanding indigenous knowledge can increase responsiveness to clients.
- Adapting international practices to local conditions can improve the impact and sustainability of our work.

- Investing in disseminating indigenous knowledge can help to reduce poverty.
- Sharing of Indigenous Knowledge within and across communities can enhance cross-cultural understanding.
- In general indigenous knowledge represents a way of life that has evolved with the local environment, so it is specifically adapted to the requirements of local conditions as:
- Restraint in resource exploitation: production is for subsistence needs only; what is needed for immediate survival is taken from the environment
- Diversified production systems: there is no overexploitation of a single resource; the risk is often spread out by utilizing a number of subsistence strategies.
- Respect for nature: a 'conservation ethic' often exists. The land is considered sacred, humans are dependent on nature for survival, and all species are interconnected.
- Flexible: IK is able to adapt to new conditions and incorporate outside knowledge.
- Social responsibility: there are strong family and community ties and with them feelings of obligation and responsibility to preserve the land for future generations. (Source: Murphree1991).
- Also, Indigenous knowledge has various essential applications that make IK more important

FURTHER APPLICATIONS OF IK

- Recognition that indigenous people who live in an area have understood the insights about resources, environment and ecosystems have been extended to include a greater acceptance of a participatory approach to resource management -co-management has been an important development in resource management in some cases.
- Cultural preservation -knowledge and images of the past keep a culture alive and reinforce a sense of place and the notion of home.
- Land claim processes -indigenous geographies used as the basis for land selection and for developing approaches to native control.
- Resource management practices -involving a wide array of knowledge concerning species and species habitats.
- Land-use regulation -TK used in locally-based planning processes to determine local and regional perspectives about who is most affected by developments.
- Environmental monitoring -to depict and record changes related to the well-being of people over time.
- Conservation of plant diversity-against overexploitation; habitat loss and fragmentation; global climate change; species introductions & invasions.

INDIGENOUS KNOWLEDGE CHALLENGES

- Lack of adequate documentation of local practices.

- Lack of documentation and promotion of adaptations and improvements in traditional systems which increase productivity and efficiency.
- Decreasing faith of many people in their own knowledge and practices in the face of aggressive promotion of modern methods by both commercial interests, as well as the government systems.
- Increasing competition from heavily subsidized external inputs.

What are the Methods for Recording Indigenous Knowledge?

There are a number of tools used by IK researchers to enable local people to share their knowledge in a meaningful manner.

The planning stages are:

- Background research: identify area/people to plan with, review of secondary sources of information.
- Develop a rapport with local people: build a positive relationship based on trust.
- Jointly identifying problems and opportunities, and agreeing on what will be done.
- Develop draft project proposal: set goal, objectives, methodology.
- Meet with local leaders and people to fully disclose plans of the proposed research and obtain permission to carry out the project. A village meeting is a good approach

RESEARCHERS CAN ASSIST IN PRESERVING IK

Through the following:

- Documentation of IK is first so that both the scientific and local community has access to it and can utilize it in the formulation of sustainable development plans.
- Raise awareness in the community about the value of IK: record and share IK success stories in songs, plays, story-telling, videos and other traditional or modern means of communication. Encourage people to take pride in their knowledge.
- Help communities record and document their local practices: Get local people involved in recording their IK by training them as researchers and providing means of documentation. (Computers, video equipment, etc.)
- Make IK available: disseminate IK back to the community through newsletters, videos, books, and other media.
- Observe intellectual property rights: have agreements so that IK is not misused and benefits return to the community from which it originates. (Source: IIRR, 1996a)
- Reformulate proposal based on feedback from community

- Select methods and prepare for each thoroughly.
- Field data collection and analysis with these local people: it is suggested that local people be trained as facilitators to carry out the field research.
- Jointly evaluating and re-planning activities.

Distinguish between Weston and indigenous Knowledge

- Indigenous knowledge is oral, usually not written. While western science tries to understand a whole from the pieces.
- Indigenous knowledge sees things as wholes. Western science believes itself to be objective.
- Indigenous knowledge is deliberately subjective and sees human beings as part of the whole. Classification systems can be very different from western ways. One example is in the taxonomic classification of living organisms which is more based on ecological thought than genetic relatedness. We could go on with this list.
- Most western scientists reject indigenous knowledge as methodical and non-scientific. It is true that western science is sometimes superior in its ways of accumulating data and makes predictions. It is selective and very dependent on the way data are selected.
- Indigenous knowledge-systems are said to be "high context" systems which mean that they are designed to incorporate very high level of contextual information specific to a given locale. Indigenous knowledge-systems can consequently be very different from each other and there is no single indigenous system: "Each group has a system specific to their locale"
- In Western science, change occurs through human intervention and experimentation. Western science produces man-made technologies that are largely dependent on human action while indigenous knowledge depends on the natural conditions of the environment.

Similarity between them

The common misconception about indigenous, local, or traditional knowledge is that it is unscientific, backward, and opposes change or development in the modern world. Unfortunately, human manipulation and exploitation destroyed the riches of creation. Thus, the riches of indigenous knowledge were also destroyed.

Like modern science, indigenous knowledge observes a system that involves the theory and practice of learning. Indigenous knowledge begins with the concept that develops into ideas, philosophies, and principles that are evaluated and verified scientifically. The final form of indigenous knowledge is not simply a scientific investigation but a reality based on the actual experiences of the people.

The link between indigenous knowledge and modern science is common sense. The indigenous knowledge learning system involves the brain and the senses. Learning begins with a concept that develops into an idea and philosophy based on affirmative and negative arguments.

When the philosophy of a particular idea has been achieved, the result becomes a principle or theory. The theory or principle, however, remains a theory until it is verified by the human senses.

Like modern science, the indigenous knowledge system strictly follows reason and logic. For example, an indigenous idea can never go ahead of a concept because, without a concept, an idea will never exist.

Moreover, the indigenous philosophy is developed through the argumentation of contrasting ideas. Philosophy can never exist as a single thought. The resolution of contrasting ideas finally becomes a principle or theory that serves as the basis of field investigation or verification of particular knowledge.

Modern science can solely exist with complicated machines. Complicated machines are guided by the human conscience.

Modern science cannot isolate itself from the framework and structure of indigenous knowledge that includes concepts, ideas, philosophies, and principles that are similarly employed in scientific procedures.

Moreover, the verification of practical realities through the senses of hearing, seeing, touching, smelling, tasting, feeling, and moving is also inevitable to the global scientific understanding. Unlike indigenous knowledge, however, that can sustain itself with the inexpensive conditions of nature, the survival of modern science largely depends on highly complicated and expensive machines. In the absence of complicated machines, however, modern science can still survive, like indigenous knowledge, on the basis of the human conscience. Thus, common sense evidently serves as the inevitable link between indigenous knowledge and the global science.

International focus on TKS

The international focus on TKS began in Rio-declaration of the Convention on Biological Diversity, which was the the outcome of the World Summit on Sustainable Development, where it was described.

Concurrently, different international forums started to focus on the relevance of TKS. Organizations like World Intellectual Property Organization (WIPO), the International Labor Organization (ILO), especially its convention 1693, the Food and Agricultural Organization(FAO), World Health Organization (WHO), United Nation Educational, Scientific and Cultural Organization (UNESCO), United Nation Environment Programme (UNEP), United National Development Programme (UNDP), United National Commission on Human Right (UNCHR) took initiatives to document the TKS and research for its validation along with developing different protocols for preservation, protection of rights, appropriate application as well as facilitating fair and equitable sharing of the benefits from their applications.

It is noteworthy that the World Conference on Science, organized by UNESCO and the International Council for Science (ICSU), in its Declaration on Science and the Use of Scientific Knowledge, explicitly recognized the importance of TK and the need to respect and encourage its use for various forms of human endeavor (ICSU 2002). Moreover, World Conference on Science (Budapest, June 1999), focused on TKS and recommended through 'Science Agenda: Framework for Action' (UNESCO, 2000), that, "modern scientific knowledge and traditional knowledge should be brought closer together in interdisciplinary projects dealing with the links between culture, environment and development in such

areas as the conservation of biological diversity, management of natural resources, understanding of natural hazards and mitigation of their impact. Local communities and other relevant players should be involved in these projects. Individual scientists and the scientific community have a responsibility to communicate in clear language the scientific explanations of these issues and the ways in which science can play a key role in addressing them."

In India

In India, a similar focus is also given on TKS by National Knowledge Commission for proper documentation and protection of Intellectual Property Rights. Different organizations and institutions have taken up activities for research and documentation and the development of the TKS application. It is to be noted that the Indian Journal of Traditional Knowledge was evolved to share such endeavors of research and documentation. Moreover, legal instruments have also been developed like National Biodiversity Act (NBA), 2002. There are many examples of TKS-based practices in the country on natural resource management, agricultural practices, medicine and health, housing, and allied design and construction, which have the potential to act as leverage to sustainable development.

In the fifteen different agro-climatic zones of India there is diversity in terms of environmental and cultural practices, which nurture different traditional knowledge-based practices to adjust the way of life of the people to their respective environmental set-up. All these practices have some age-old history, progression, and empirically tested observation, which essentially need not only documentation but also validation and applicability in a contemporary context to meet the requirement for sustainable development.

Role and value

Now a day there is a growing appreciation of the value of traditional knowledge. This knowledge is valuable not only to those who depend on it in their daily lives, but to modern industry and agriculture as well.

Many widely used products, such as plant-based medicines, health products, and cosmetics are derived from traditional knowledge. Other valuable products based on traditional knowledge include agricultural and non-wood forest products as well as a handicraft.

Traditional knowledge can make a significant contribution to sustainable development. Most indigenous and local communities are situated in areas where the vast majority of the world's genetic resources are found. Many of them have cultivated and used biological diversity in a sustainable way for thousands of years. Some of their practices have been proven to enhance and promote biodiversity at the local level and aid in maintaining healthy ecosystems. However, the contribution of indigenous and local communities to the conservation and sustainable use of TKs goes far beyond their role as natural resource managers.

Their skills and techniques provide valuable information to the global community and a useful model for accepting Change. Furthermore, as on-site communities with extensive knowledge of local environments, indigenous and local communities are most directly involved with conservation and sustainable use of it.

What is the Debate About?

Several combined forces have recently led to commercialization of TKs on a global scale without due respect being given to the cultural or economic interests of the communities from which they originate. The Internet provides pervasive access to TKs. The demand of western consumers for what is sometimes (disrespectfully) called "primitive art" has increased. Finally, tourism in developing countries has exposed more potential consumers to manifestations of folklore that can be found there. As a result, indigenous groups are seeking protection for their TKs and their responses have affected legislation at national, regional and international levels.

What types of Traditional Knowledge are most frequently used?

Exploitation of TK occurs in different forms. Examples include the unauthorized production of indigenous craft objects in the souvenir market, the unauthorized use of indigenous imagery on clothing, food products, or toys, the unauthorized use of indigenous names or phrases as trademarks, the unauthorized incorporation of traditional dance into commercial performances, and the unauthorized use of traditional music in commercial musical productions.

What Kind of Legal Liability Governs?

What kinds of legal rules (if any) should govern use of traditional knowledge by people who are not members of communities from which the TK originates? This issue is being addressed on national, regional and international levels. TK might be protected through conventional IP law -- for example, through the use of Copyright law, Patent law, Geographical Indicators, or Certification Trademarks. However, many regions and countries have found it difficult to fit TK into traditional IP protection schemes. As a result, some have adopted sui generis laws that apply specifically to TK. Examples of these different approaches are discussed below.

Future directions

As part of a programme of work addressing the commitments embodied in Article 8 (j) and other provisions of the Convention dealing with traditional knowledge, Governments and Contracting Parties have undertaken:

- to establish mechanisms to ensure the effective participation of indigenous and local communities in decision-making and policy planning;

- to respect, preserve and maintain traditional knowledge relevant to the conservation and sustainable use of biological diversity;
- to promote its wider application with the approval and involvement of the indigenous and local communities concerned; and
- to encourage the equitable sharing of the benefits arising from the utilization of such traditional knowledge.

While these elements are equally important, the last one has taken on a special significance for indigenous and local communities.

This is because traditional knowledge has often been used in recent years by modern industry to develop new products and techniques without the involvement and consent of the holders of such knowledge, who have also received none of the resulting benefits.

Governments and Contracting Parties have established a working group under the Convention with a mandate to make concrete proposals on how to translate all of these commitments into reality. Within the current Programme of Work, the Ad hoc open ended Working Group on Article 8(j) and related provisions' main tasks include:

- the development of elements of sui generis systems;
- developing indicators for the retention of traditional knowledge and methods and measures to address the underlying causes of the loss of such knowledge;
- the development of an ethical code of conduct to ensure respect for the cultural and intellectual heritage of indigenous and local communities relevant to the conservation and sustainable use of biological diversity; and
- contribute to the negotiation of an international regime on access and benefit sharing, research on the impact of climate change into highly vulnerable indigenous and local communities, among others.

The Secretariat has invited Parties, other governments, indigenous and local communities and non-governmental organizations to submit views on the aforementioned matters. The contribution of indigenous and local communities will remain crucial to the overall success of the Convention on Biological Diversity.

Other elements to be considered at a later stage include the development of guidelines:

- to ensure that indigenous and local communities obtain a fair and equitable share of the benefits arising from the use and application of their traditional knowledge;
- to ensure that private and public institutions interested in using such knowledge obtain the prior informed approval of indigenous and local communities;
- to regulate how impact assessments are carried out regarding any proposed development on sacred sites or on land and waters occupied or used by indigenous and local communities; and
- to assist Governments in the development of legislation or other mechanisms to ensure that traditional knowledge, and its wider applications, is respected, preserved, and maintained.

- Other international initiatives
- In addition to the Convention, a number of international bodies, instruments and initiatives are of particular relevance to traditional knowledge. They include but are not limited to the following:
- Agenda 21: Principle 22 of the main document that came out of the 1992 Earth Summit in Rio de Janeiro recognizes that indigenous peoples have a vital role to play in environmental management and development because of their traditional knowledge and practices;
- The International Labour Organization's Convention 169 on Indigenous and Tribal Peoples : This Convention calls for action to protect the rights of indigenous peoples;
- The Declaration on the Rights of Indigenous Peoples;
- The Inter-American Development Bank and its Strategy and Policy on Indigenous Peoples, approved by the IDB in 2006;
- The Inter-American Draft Declaration on the Rights of Indigenous Peoples ;
- The United Nations Permanent Forum on Indigenous Issues;
- The World Intellectual Property Organization;
- The United Nations Education, Scientific and cultural Organization;
- The European Bank for Reconstruction and Development , the Asian Development Bank and the African Development Bank: These Banks are committed to ensuring that the development process promotes indigenous peoples' participation;
- United Nations Development Programme (UNDP) and the World Bank : Both organizations have launched programmes to promote indigenous peoples' development and to ensure that the development process fosters the full respect for the dignity, human rights and uniqueness of indigenous peoples;
- United Nations Conference on Trade and Development (UNCTAD): Protecting and Promoting Traditional Knowledge: Systems, National Experiences and International Dimensions

As indicated above, the questions of whether and how to protect traditional knowledge are currently being debated and are highly controversial. At the international level and within many individual countries, strong differences of opinion can be found. Set forth below are summaries of the primary arguments made in this debate.

Argument in fever of protection of TK?

Arguments from Personhood. For many indigenous groups, TK encompasses cultural elements that are integral to the group's sense of identity. One can argue that objects and expressions that are fundamental to a person's or group's identity merit protection, and at the extreme, could be considered inalienable. Similarly, some advocates for TK protection have proposed a "cultural stewardship" justification for this protection. For example, Kristen Carpenter, Sonya Katyal and Angela Riley advocate allowing indigenous communities to retain control, if not exclusive access and ownership, of TK because of its importance in shaping the identity of the indigenous group and its culture.

Closely related to arguments from personhood are arguments from moral rights, It is argued, just as an individual artist should enjoy a right of attribution and integrity with respect to her creations, so should a community enjoy a right of attribution and integrity with respect to its collective creations.

Arguments based on Preservation. Another reason to advocate for protection of TK is that unlike many forms of intellectual property, cultural expressions may require protection in order to preserve their value. For example, religious ceremonies and sacred rituals may be valuable to a culture in part because they are not widespread; their rarity is integral to their place in the culture. In order to maintain the value of these traditions, it may be necessary to restrict their use.

Arguments based on Reparations. A third argument in favor of protection for TK is based upon the idea that many indigenous cultures have been damaged by invasive colonialism practiced by Western countries in the past few centuries. Supporters of this argument believe that protection of TK is a way of providing reparations, symbolic as well as monetary, for the wrongs committed against these indigenous groups.

Why to protect TK?

Protection of TK would involve perpetuation of illiberal social hierarchies and oppressive customs within indigenous groups. Another argument against providing protection for TK is that doing so may perpetuate inequality and oppression within indigenous groups. When an indigenous group is given the right to control the use of TK, the powerful members of that indigenous group may benefit at the expense of the group's minorities. Paul Kuruk argues that protection of TK may further the oppression of women and subordinated social and economic groups within an indigenous culture.

Protection of TK may deprive the world community of valuable knowledge. Some might argue that principles of liberal democracy dictate that knowledge should be freely shared rather than restricted to certain people or groups. Protection of TK might deprive outsiders of a chance to benefit from the traditions, medicinal or otherwise, of an indigenous culture. When advancing this argument, however, one should keep in mind that principles of liberal democracy, while widely accepted in the Western world, are not necessarily an agreed-upon starting point for this debate.

Increase awareness rather than changing the law. Some organizations have advocated protection of TK through nongovernmental organizations and projects rather than through legislation. For example, the Intergovernmental Committee for the Safeguarding of Intangible Cultural Heritage has compiled a List of Intangible Heritage in Need of Urgent Safeguarding. UNESCO lists projects for safeguarding intangible cultural heritage in African countries here. Finally, groups of academics and activists have created community standards for those, such as anthropologists, whose work impacts indigenous cultures and may involve sensitive issues of disclosure of TK.

Traditional IP Modes of Protection

Copyright

As we have seen, many nations have used copyright law (either alone or in conjunction with sui generis laws) to protect TK. However, there are many arguments against using standard copyright to protect TK.

1. The fixation requirement. Some copyright systems require that a work be fixed in a material form. This is an obstacle in the protection of TCEs, which are not always manifested in tangible expressions.
2. Originality. Copyright law requires that a work be "original" in order to merit protection. Since most TK is "traditional" rather than new, this originality requirement will often be difficult to satisfy.
3. Authorship. Much cultural expression develops gradually over time, through the contributions of several members of a community. If no single author or group of authors can be identified, it will be difficult for copyright protection to be obtained.
4. The term of protection. The term of protection for copyright in most countries is traditionally limited, and not infinite. Many forms of TK are in fact older than the copyright term. As a result, copyright protection may be unavailable for them.

To avoid these difficulties, it is possible for countries to modify copyright legislation so that it has different requirements for folklore or cultural expression. For example, the Tunis Model Law for Copyright in the Developing Countries, adopted in 1976, advocates extending copyright protection to works of folklore without requiring fixation and with an unlimited term of protection.

Trademark Law

Some expressions of folklore might be registered as trademarks. Trademark law protects not only graphic representations, but also words and (in some countries) sounds. An advantage of protection through trademark law is its near indefinite term of protection, and its lack of a novelty requirement; it is sufficient for purposes of protection that the trademark has a "distinctive character." However, at least in some countries, trademark protection, unlike copyright and patent protection, requires that the applicant demonstrate use of the mark in commerce. Many cultural expressions do not have a direct link to commerce and are not used as designations of source to the consuming public. Furthermore, the application of trademark law to TK is complicated, since by registering a mark the community makes public TK that the community may desire to keep secret for religious or other reasons.

Collective Trademarks, Certification Marks, and Geographic Indicators

Collective trademarks, certification marks, and geographic indicators form a subset of trademark law that could be particularly useful for the protection of TK. Collective trademarks are trademarks that are used by a group of producers rather than one producer. Collective marks are held by an association rather than an individual; in order to be useful for protecting TK, members of indigenous groups would need to form an association for the purpose of marking their cultural expressions.

Certification marks indicate that the producer of a good has met certain standards of quality. (A popular example is the Good Housekeeping certification prominent on household products sold in the United States.) Certification marks could be used to specify which TCEs meet the standards of the indigenous community in which they originated. This, like a collective trademark, would require the formation an official oversight organization to act on behalf of the indigenous community in determining which expressions can bear the certification mark.

Geographic indicators, as the name suggests, are marks that can be placed on products that come from a specific geographic area. Geographic indicators are often used for food products, such as wines, but some indigenous groups have experimented with using geographic indicators as a means of protecting cultural expressions by authenticating products that are sold elsewhere. One example of such a program is the Alaskan Silver Hand Program.

Sui Generis Laws

As we have seen, where TK does not map onto traditional intellectual property regimes, sui generis laws may be adopted. Sui generis legislation is a promising route for advocates of TK protection, as it can provide strong protection while avoiding the hurdles that separate TK from traditional IP subject matter.

Absolute Ownership

One possibility for TK protection is to give absolute ownership of the cultural expression to the indigenous group from which it originated. However, this is relatively unpopular option, as it would impede the spread of knowledge and risk the loss of cultural expressions and information in the event that the group is disbanded or its members are assimilated into the general population.

Negotiation and Mutual Respect

Michael Brown argues that the law should, at most, foster "negotiation and mutual respect" between indigenous cultures and those who seek to employ a culture's traditional expressions. This approach would give indigenous groups much less protection, but would facilitate, he argues, beneficial cultural interchange.

International Human Rights

Other scholars, such as Laurence R. Helfer, approach the issue as one of Human Rights. They advocate granting TK protection that is fair and balanced and not overreaching. Their ambition is to balance the needs of indigenous groups and the benefits of a robust public domain.

In this vein, Duncan M. Matthews points out that "a human rights approach takes what is often an implicit balance between the rights of inventors and creators and the interests of the wider society within intellectual property paradigms and it makes it far more explicit and exacting.... [T]he rights of the creator are not absolute but conditional on contributing to the common good and welfare of society.... [B]ecause a human rights approach also establishes a different and often more exacting standard for evaluating the appropriateness of granting intellectual property protection, in order for

intellectual property to fulfill the conditions necessary to be recognised as a universal human right, intellectual property regimes and the manner they are implemented first and foremost must be consistent with the realisation of the other human rights, particularly those enumerated in the Covenant."

System of Domain Public Payant

The doctrine of domain public payant, advocated by the Tunis Model Law and discussed at WIPO's 1999 Round Table on IP and TK (section 3 b of the Round Table minutes), advocates payment of royalties for works, including TCEs, that are in the public domain because they do not qualify for protection under traditional intellectual property law. This would provide monetary compensation for indigenous communities, but would not be a satisfactory solution for communities whose priority is control over their TCEs rather than remuneration. For more on different versions of domain public payant, see the UNESCO Copyright Bulletin from 1994.

<u>**Vedas**</u>

The Vedas are ancient Hindu texts, constituting the oldest written material of Sanskrit literature and scriptures ever available to Hinduism. Composed in Vedic Sanskrit, these texts are considered to be apauruseva; meaning, "not of a man, but of a superhuman" or "authorless".

The Vedas are also referred to as Sruti (that which is heard) and Smriti (that which is remembered). Hindus consider these texts as sacrosanct, as they are believed to be revelations made by ancient sages, after years of intense meditation. According to the Epic Mahabharata, Brahma is credited with the creation of the Vedas, while the Vedic hymns are believed to be given to us by great Rishis. They have therefore been carefully preserved since the ancient times.

There are four Vedas, namely, the Rigveda, the Yajurveda, the Samaveda and the Atharvaveda. Each one of these Vedas is subclassified into four major text types, namely, the Samhitas (mantras), the Aranyakas (information on rituals, ceremonies and so on), the Brahmanas (commentaries on rituals, ceremonies and so on) and the Upanishads (discussion on meditation, philosophy and spirituality). Some scholars include an additional fifth category, the Upasanas (worship).

There are various schools of thought regarding the Vedas and their significance to Hindu philosophy, culture and tradition. Those which cite the Vedas as the ultimate scriptural authority are classified as Astika (orthodox). Other Sramana (parallel schools of thought) traditions, which do not regard these

texts as the greatest authority, are classified as Nastika (heterodox or non-orthodox). This category includes Buddhism, Jainism, Lokayata, Carvaka and Ajivika traditions.

Etymology

The Sanskrit word "Veda" stands for "knowledge" or "wisdom" and is derived from the root "vid", meaning, "to know". In some other contexts, it implies "finding or begetting wealth and property". Interestingly, a related word "Vedena" features in one of the hymns of the Rigveda. This could be roughly translated both as "along with the Veda" and as "a bundle of grass bound together" (as is used in a ritual sacrifice).

Down South, Vedas are also referred to as Marai or Vaaymozhi. Marai literally means "hidden" or a "mystery". In Iyengar and some other communities, the term includes writings by Tamil Alvar saints, such as the Divya Prabandham. One such example is the Tiruvaaymozhi.

Menology

As mentioned earlier, the Vedas are among the most ancient texts of Hinduism. The Samhitas roughly date back as early as 1700-1100 BC and the Shakhas (branches or schools) of the Samhitas date back to around 1000-500 BC. This indicates that there was a Vedic period, which ranged from the mid 2nd to the mid 1st millennium BC; or what is more popularly referred to as the Late Bronze Age and the Iron Age.

This Vedic era reached its peak only after the composition of the mantras or hymns, along with the establishment of the various Shakhas all over India. It ended around the age of the Buddha, Panini and the rise of the Mahajanapadas (from the 6th century to the 4th century BC).

Passing on the Vedic Teachings across Generations

During the Vedic period, the texts were transmitted from generation to generation via the oral tradition prevalent then. It was carefully preserved with the help of elaborate mnemonic techniques. A literary tradition too is found in the post-Vedic times, after the emergence of Buddhism, round about the Maurya period. However, even during that time, the oral tradition was the most popular method of passing on the teachings to the next generation of students.

The Vedas - Book

The Vedic manuscripts were penned on natural materials including palm leaves and birch bark. This made it challenging for scholars to preserve the writings after a few hundred years. However, efforts are constantly on to conserve what little we have of them. The Sampurnanand Sanskrit University still maintains a Rigveda manuscript from the 14th century. Older Vedic manuscripts can be found in Nepal – they date back around the 11th century or so.

Ancient Vedic Universities

The Vedas and the Vedangas (ancillary sciences) formed a vital part of the curriculum at ancient Vedic universities, such as Nalanda, Takshashila (or Taxila) and Vikramashila. The syllabus, at these institutions, included both texts in Vedic Sanskrit, as well as texts that were considered to be "connected to the Vedas".

The major volume of Vedic Sanskrit texts includes the following:

- Samhitas: The Samhitas are a collection of four metric texts (of mantras), including the Rig-veda, Yajur-veda, Sama-veda and Atharva-veda. The Samhitas differ slightly in content, in accordance with the Shakhas (recensions) where they are maintained. The complete corpus of Vedic mantras consists of close to 90,000 padas (metrical units), of which about 72,000 feature in the four Samhitas. This is the oldest layer of the Vedic texts – they are believed to have been completed around 1200 BC.
- Brahmanas: The Brahmanas are in prose format. They explain and comment on the rituals, while also talking in detail about their meaning and connected rites as well. Each of the Brahmanas deals in detail with one of the Samhitas or its recensions. They either form a separate text or can be seamlessly integrated with the Samhita they are dealing with. The Brahmanas also sometimes include the Aranyakas and Upanishads.
- Aranyakas: The Aranyakas, literally meaning "forest texts", were essentially composed by sages who undertook severe penance, deep in the woods. These texts contain elaborate discussions and interpretations of the various rites, rituals and ceremonies mentioned in the Vedic texts. The interpretations featuring herein range from religious, to ritualistic, to symbolic and meta-ritualistic points of view. The Aranyakas often form a part of secondary Vedic literature.
- Upanishads: The older principal Mukhya Upanishads are considered as yet another vital part of Vedic study. These Upanishads, such as the Brihadaranyaka, Katha, Kena, Aitareya, Chandogya, Prasna, Mundaka and so on, discuss different aspects of meditation, spirituality and philosophy.

It is important to note here, that the Vedas (Sruti) are different from the texts of the Vedic era, such as Shrauta Sutras and Gryha Sutras. These are part of the Smriti texts. Taken together, the Vedas and the Sutras form the entire corpus of Vedic Sanskrit. More Upanishads were composed and added on during the post-Vedic period.

The Brahmanas, Aranyakas and Upanishads together interpret and deal in detail with the Samhitas from the philosophical and metaphorical angles. They go on to explore abstract concepts such as the Brahman (Absolute) and the Atman (Self), thus ushering in an era of Vedanta philosophy, which went on to become a major trend in Hinduism. This inspired scholars and seers such as Adi Shankara to delve deeper and further classify each of the Vedas into karma-kanda (action-related sections) and jnana-kanda (knowledge and spirituality-related sections).

Shruti Texts

The numerous texts constituting Shruti are too vast to be formally compartmentalized and compiled. Hence, there is no single collection – several hundreds of texts were handed down by the different Vedic schools. These works feature various dialects and adopt the local traditions of each Vedic school.

Max Müller and the Vedas

Interestingly, the German-born author, philologist and Orientalist, Max Müller, who was one of the founders of the western academic field of Indian studies, developed a fascination for the Indian perspective of religion and philosophy. He believed that the earliest documents of Vedic culture would be the key to the development of Pagan European religions, highly prevalent then. He then devoted himself to the study of Sanskrit, then emerging as one of the major Sanskrit scholars of his time. Meeting Ramakrishna Paramahamsa and being impressed by his Vedantic philosophy, he went on to write several essays and books about him.

Max Müller strongly believed that the study of a language should relate to the study of the culture of the place where it was used. At the time, the West did not have much of knowledge about the Vedas or the Vedic scriptures. However, there was a rising interest in the philosophy of the Upanishads. Müller realized that he could use the sophisticated Upanishadic philosophy to further understand the key fundamentals of the Vedic teachings.

At present, Müller's edition is rated among the most consistent, as it reflects the Indian tradition, follows the historical sequence fairly closely and sticks with the current editions and translations on Vedic literature.

Vedic Shakhas

The four Vedas were propagated and transmitted in various Shakhas or recensions; each one representing an ancient community; as part of a particular kingdom or province; and following its own local tradition and canons. There were multiple recensions for each of the Vedas and hence, there was no one single canon or one set of scriptures. Some of these texts have been preserved to date, but most have been lost to time. Some other texts were revised to suit the modern era. This has given rise to much debate on having corrupted the texts in the present time.

The Rigveda texts are the most well-preserved in modern times. These come from the school of Sakalya, from a region called Videha, situated in present-day North Bihar, south of Nepal. This Vedic canon consists of texts from several Vedic schools, assembled together to form one whole.

Each of the Vedas has an Index or Anukramani. The principal work of this kind is the general Index or the Sarvanukramani. Much effort and energy was spent by our predecessors in ensuring that these texts were transmitted from generation to generation, retaining their fidelity to the maximum possible level.

Memorization of the Vedas included up to eleven forms of recitation of the selfsame text. These texts were then proof-read many times over, to ensure that the material therein was preserved in its original form. Thanks to the efforts of the great scholars of yore, the Rigveda, which was redacted into a single text during the Brahmana period, is the most consistent and contains no variants within that school.

The Vedas were most probably penned for the first ever time around 500 BC. However, all the printed editions that survive in the present day are most likely the version which came about around the 16th century AD.

The Four Vedas

There are four Vedas or canonical divisions, according to Hinduism. Among these, the first three form the main original division, commonly referred to as "trayi vidya" or the "triple science" of reciting hymns (Rigveda), performing austerities and rituals (Yajurveda) and singing songs (Samaveda). The Rigveda is

considered to be the most ancient text, probably from about 1900 to 1100 BC. Incidentally, this period marked the Vedic era itself, when they were divided into the four branches.

As mentioned earlier, each of the Vedas are subclassified into four major text categories; the Samhitas, the Aranyakas, the Brahmanas and the Upanishads. Some scholars consider Upasanas as the fifth part. Only one version of the Rigveda is available to us in this modern era. Several different versions of the Samaveda, Yajurveda and Atharvaveda can be found in different parts of India and South Asia.

Set of Four Vedas in English - (Sookta-wise Translation)

Let us now look at each one of the Vedas in detail:

Rigveda

The Rigveda Samhita, which is the most ancient Indic text, is a collection of 1,028 Vedic Sanskrit hymns and comprises 10,600 verses in total. The hymns are all in praise of Rigvedic deities and they are organized into ten books or mandalas.

The mandalas were composed by poets and scholars belonging to different groups, over a period of several centuries. The process is believed to have started from approximately the second half of the 2nd millennium BC (which marked the start of the Vedic period), starting with Sapta Sindhu (Punjab) region in Northwest India.

Each mandala consists of suktas or hymns, which are chanted during various rituals. The suktas in turn are divided into individual stanzas or rcas, which are further classified into units of verse, called padas.

One Rishi or sage-composer is associated with each of the rcas of the Rigveda. Interestingly, 10 families of Rishis account for over 95% of the rcas. These Rishis include Angirasa, Kanva, Vasishtha, Vishwamitra, Atri, Bhrigu, Kashyapa, Grtsamada, Agastya and Bharata.

The Rigveda is systematically structured and is based on clear principles. This Veda begins with a small book dedicated to Agni (God of Fire) and Indra (King of the Gods). Also invoked in the Rigveda are Savitr, Vishnu, Pushan, Brihaspati, Brahmanaspati and Rudra. Some natural phenomena too are invoked in the hymns, including Dyaus Pita (Father Heaven), Prithvi (Mother Earth), Surya (Sun God), Apas (the waters), Vayu (the wind), Parjanya (thunder and rain) and the Sapta Sindhu and the Saraswati River. Additionally, the Adityas, Ashvins, Vasus, Rudras, Sadhyas, Maruts, Rohus and the Vishvadevas (all the Gods of the Universe) receive due mention in the hymns as well.

Structure-wise, the hymns are arranged in decreasing order for each collection of deities. For each deity, the hymns gradually progress from longer to shorter. The number of hymns per book, though, increases. The poetic meter, too, is systematically arranged from jagati, to tristubh, to anustubh and Gayathri.

The nature of the hymns change from praising the deities to Nasadiya Sukta, with questions about the creation and the emergence of the Universe, such as, "How was the Universe created? What is its origin? Can even Gods answer this question?" and so on. Metaphysical issues, the value of Dana (charity) are yet other subjects featuring herein.

It would be worthwhile to note here that one can find many similarities between the mythology, legends, ritual practices and linguistics in the Rigveda, and those found in ancient central Asia, Iranian and Hindukush (Afghanistan) regions.

Rig-Veda

Rigveda is one of the four sacred Vedas. It is also called as Rigveda Samhita. Rigveda is a collection of over a thousand hymns known as suktas and well above ten thousand verses which have been created into ten mandalas or books.

The Rigveda denotes "verses of wisdom" is one of the most ancient scripture in the Hindu religion or Sanatan Dharma, as well as revelation for numberless gurus and seers who devoted their entire life for the growth of Vedic tradition.

Introduction

Rigveda was originally written in Sanskrit, and then it was compounded in hymns and dedicated to various gods, Rigveda is numbered among the four official sacred texts (śruti) of Hinduism, and these texts are the foundation of ancient traditions in all regularities of Hindu philosophy.

The Rigveda is the oldest and biggest among all four Vedas. One can easily trace specialities of Indian Sanskrit poetry through Rigveda. In it, we can find the cuttings of India's religious and philosophical development. Thus, one who wants to understand the roots of Indian literature and spiritual traditions must study Rigveda. The importance of the Rigveda today is not only limited to India, It reached the cultures of the entire world because of its well-preserved language and mythology which helped a lot to gain a better understanding of languages.

What is RigVed Samhita

 (Image Source)

The whole work of the Rigveda-Samhita is in the form of verses, known as Rik.

'Rik' is the title given to those Mantras which are meditated to get the blessings of the deities. The group (Samhita) of Riks are acknowledged as Rigveda-Samhita. Only one school (Shakha) of the Rigveda is available today and it is the Shaakala.

The Rigveda Samhita consists of about 10552 Mantras, arranged into ten books called Mandalas. Individually every Mandala is separated into various sections called Anuvakas. Each Anuvaka consists of several hymns called Suktas and each Sukta is made by some verses called riks.

A Sukta is a collection of Mantras. Number of Mantras in a Sukta is not fixed. Some Suktas have a small number of Mantras while others have a large number of Mantras. It is important to note that every Sukta has a seer i.e. Rishi, a deity i.e. Devata and a metre i.e. Chandas.

Samhita of the Rigveda contains 10 Mandalas, 85 Anuvakas, 1028 Suktas and 10552 Mantras. Usually, Anuvaka is not specified for the reference of a Mantra in Rigveda. For example, Rigveda 3.16.7 simply means the seventh Mantra of the sixteenth Sukta of the third Mandala of the Rigveda.

Who Consolidated RigVed Samhita

As per the Hindu traditions, Rigvedic hymns were consolidated by Paila under the supervision of Sage Vyāsa, who then formed Rigveda Samhita as we know it today. According to the Śatapatha Brāhmana, the number of syllables in the Rigveda is 432,000, equalling the number of muhurtas (1 day = 30 muhurtas) in forty years.

Hymns of RigVeda

Rigvedic hymns are devoted to many deities, King of them is Indra, a god of wind and rain. Other prominent gods are the Adityas or demon gods Mitra-Varuna and Ushas (the dawn). Also invoked are Savitr, Vishnu, Rudra, Pushan, Brihaspati or Brahmanaspati, as well as deified natural phenomena such as Dyaus Pita (the shining sky, Father Heaven), Prithivi (the earth, Mother Earth), Surya (the sun god), Vayu or Vata (the wind), Apas (the waters), Parjanya (the thunder and rain), Vac (the word), many rivers (notably the Sapta Sindhu, and the Sarasvati River).

Hymns specify several minor gods, persons, concepts, phenomena and items, but it contains sketchy references to the most likely historical events, notably the struggle between the early Vedic people (known as Vedic Aryans, a subgroup of the Indo-Aryans).

Classification of Rigveda

The manuscript is arranged in 10 separate books, known as Mandalas, of fluctuating age and length. The mandalas 2-7 are the oldest part of the Rigveda, they are drafted by length and account for 38 per cent of the text.

The eighth and ninth mandalas, comprising hymns of mixed age, account for 15 per cent and 9 per cent. The first and the tenth mandalas are the youngest; they are also the longest books, of 191 suktas each, accounting for 37 per cent of the text.

Manuscripts of RigVeda

There are 30 manuscripts of Rigveda at the Bhandarkar Oriental Research Institute, collected in the nineteenth century by Georg Bühler, Franz Kielhorn and others, originating from different parts of India, including Kashmir, Gujarat, the then Rajputana, Central Provinces etc. They were then transferred to Deccan College, Pune, in the late nineteenth century.

The oldest of them is dated to 1464. The 30 manuscripts were added to UNESCO's "Memory of the World" Register in 2007.

Out of these 30 manuscripts, nine contain the Samhita text, five have the pada path in addition. Thirteen contain Sayana's commentary. At least five manuscripts (MS. no. 1/A1879-80, 1/A1881-82, 331/1883-84 and 5/Viś I) have preserved the complete text of the Rigveda. MS no. 5/1875-76, written on birch bark in bold Sharada, was used by Max Müller for his edition of the Rigveda with Sayana's commentary.

Nature and Importance:

The Rigveda is the oldest compilation of human wisdom. This Samhita (Collection) is unique in its nature. In fact, it is not a book, but a compilation composed of several books which can be individually distinguished from each other. The present from of this Samhita clearly indicates that the collection is not a single work, but consists of older and later elements. Various indications of language, style and ideas prove this point. Different hymns of this Samhita were composed long before they were systematically arranged. Being a compilation of different stages, there is something which stamps the Rigveda with an individuality of its own. It is much more natural in character and form than other Samhitas.

The Rigveda represents the earliest sacred book of India. It is oldest and biggest amongst all the four Vedas. All the features of Classical Sanskrit poetry can be traced to the Rigveda. In it we find the seeds of India's religious and philosophical development. Thus, both for its poetry and its religious and philosophical importance, the Rigveda should be studied by one who wants to understand Indian literature and spiritual culture. The value of the Rigveda today is not confined to India, for its well-

preserved language and mythology have helped a better understanding of languages, literatures and cultures of a whole world.

B. Form and Division:

The whole of the Rigveda-Samhita is in form of verses, known as Rik.

'Rik' is the name given to those Mantras which are meant for the praise of the deities. Thus the collection (Samhita) of Riks is known as Rigveda-Samhita. Only one recession or school (Shakha) of the Rigveda is available today and it is the Shaakala. The Rigveda Samhita contains about 10552 Mantras, classified into ten books called Mandalas. Each Mandala is divided into several sections called Anuvakas. Each Anuvaka consists of a number of hymns called Suktas and each Sukta is made up of a number of verses called riks. This division of the Rigveda is most popular and systematic. There are two ways of dividing the contents of the Rigveda, but today other division is uncommon among the students of the Veda.

A Sukta is a group of Mantras. The number of Mantras in a Sukta is not fixed. Some Suktas have a small number of Mantras while others have a large number of Mantras. It is important to note that every Sukta has a seer i.e. Rishi, a deity i.e. Devata and a metre i.e. Chandas . The Samhita of the Rigveda comprises 10 Mandalas, 85 Anuvakas, 1028 Suktas and 10552 Mantras. Usually Anuvaka is not mentioned for the reference of a Mantra of the Rigveda. For example RV 3.16.7 simply means the seventh Mantra of the sixteenth Sukta of the third Mandala of the Rigveda.

Through this chart we can know the division of Mandalas, number of Suktas in each Mandala and name of Rishis of some Mandalas.

Mandala	Suktas	Mantras	Name Of Rishis
01	191	2006	Maducchanda, Medhatithi, Gotama And Many Others
02	43	429	Gritasamada And His Family
03			

62

617

Vishvamitra And His Family

04

58

589

Vamadeva And His Family

05

87

727

Atri And His Family

06

75

765

Bhardvaja And His Family

07

104

841

Vashistha And His Family

08

103

1716

Kanva, Angira And Their Family

09

114

1108

Soma Devata But Different Rishis

10

191

1754

Vimada, Indra, Shachi And Many Other

C. Some Important Hymns:

Among 1028 Suktas of the Rigveda Samhita some suktas are very popular and frequently referred by the readers of Vedas. Some of them are:

1.   Purusha Sukta

2.   Hiranya-garbha Sukta

3.   Dhana-anna-dana Sukta

4.   Aksha Sukta

5.   Nasadiya Sukta

6.   Duhsvapna-nashna Sukta

7.   Yama-yami-samvada Sukta

Besides, there are Suktas offered to different deities, such as, Indra, Maruta, Varuna, Usha, Surya, Bhumi, Soma, Agni etc.

Thus we can briefly say about the contents of Rigveda that it has various subjects, which are narrated by Vedic seers poetically, philosophically or religiously.

Rigveda:

The oldest Veda is the Rigveda. It has 1028 hymns called 'Suktas' and is a collection of 10 books called 'Mandalas.' The features of Rigveda are given in the table below:

Features of Rigveda

It is the oldest form of Veda and oldest known Vedic Sanskrit text(1800 – 1100 BCE)

The meaning of the word 'Rigveda' is Praise Knowledge

It has 10600 verses

Out of 10 books or mandalas, book number 1 and 10 are the youngest ones as they were written later than books 2 to 9

Rigvedic books 2-9 deal with cosmology and deities

Rigvedic books 1 and 10 deal with philosophical questions and also talk about various virtues including a charity in the society

Rigvedic books 2-7 are the oldest and shortest also called family books

Rigvedic books 1 & 10 are the youngest and longest

1028 hymns deal with deities including Agni, Indra and are attributed and dedicated to a sage rishi

The ninth Rigvedic book/mandala is solely dedicated to Soma

The meters used to form hymns are Gayatri, Anushtubh, Trishtubh and Jagati (Trishtubh and Gayatri are most important)

Rigveda is regarded as one of the most sacred texts of Hinduism. It has fascinated scholars and historians due to its significance and antiquity. It is a collection of ancient Indian collection of Vedic Sanskrit hymns.

• The Rigveda is divided into ten books which are known as Mandalas

• It is a collection of 10,600 verses and 1,028 hymns

• It is the oldest text in any Indo-European language

• It has originated from early as 1700 BC

• The Angiras (rishi family) has composed 35% of the hymns and the Kanva family who has composed 25% of Rig Veda.

• Many verses of the Rig Veda are still used as very significant Hindu prayers and during rituals.

• It contains numerous secrets and clarifications about the origin of the world, the importance of the Gods and a lot of advice for living a satisfying and successful life.

- As per to the Rig Veda, the Universe devised from Prajapati, the initial God and the principle basis of creation.

- The hymns are known as Sukta that were composed to be used in rituals.

- Indra is the chief deity cited in the Rig Veda.

- The sky God Varuna, fire God Agni, and the Sun God Surya were some of the other chief deities who were important in the Rig Veda beside older Aryan deities.

- The God of storms and mountains Rudra, as cited in the Rig Veda is the origin for Lord Shiva, the Hindu God.

- Lord Vishnu who is one of the Trimurti of Hindu Gods was also a minor deity, as mentioned in the Rig Veda.

- The universally famous Gayatri mantra (Savitri) is also in Rig-Veda.

- The varna system, Four-fold division of society, 'Sudra', Gamester's Lament, Purusha Shukta Hymns are mentioned in this Vedic text

- Rig Veda had the original concept of the caste system which is still practiced in modern Hindu society today

Yajurveda

"Yajus" means "sacrificial formula" and Yajurveda is the book of sacrificial prayers. It contains the rituals of the Yajnas. It is estimated to have been composed between 1,400 and 1000 BC. It prescribes the rituals for performing different sacrifices. It was the manual of the Adhvaryus.

Adhvarus were the people prepared the ground and the altar offered the sacrificial victims and poured out the libations.

Distinction between Black and White Yajurveda

World's oldest prose literature of the Indo-Europeans is contained in Yajurveda. There are two distant forms of this Veda. In the oldest, the instructions about rituals are mingled with the verses from the Rig-Veda. The chief recession of this is that taught by a school of teachers called the Taitttiriyans. This was called Black Yajurveda.

At a later date other scholars called the Vajasaneyins separated the explanatory matter from the verses to be recited and hence were called white (Shukla) Yajur-Veda, the other being called the black (Krishna) Yajur-Veda.

This implies that the Krishna Yajurveda includes the Brahmana prose discussions within the Samhita (i.e. it has no Brahman) while the Shukla Yajurveda has separately a Brahmana text, the Shatapatha Brahmana.

Yajurveda

The term "Yajurveda" is the combination of two Sanskrit words, "Yajus" and "Veda". The former can be roughly translated as religious worship, reverence, sacrifice, sacrificial prayer or the mantras to be uttered during a sacrificial ritual. The latter part of the word, of course, means "knowledge". Hence, the term would mean "knowledge of the mantras used during ritual worship". The Yajurveda Samhita, which is in prose format, is a compilation of ritual offering formulae and methods that a priest should follow while guiding an individual to perform a yagna (fire ritual/sacrifice).

Though the Vedas cannot be dated accurately, it is believed that the main text of the Yajurveda was composed around the end of the 2nd millennium BC, which falls within the classic Mantra era of Vedic Sanskrit. Hence, this Veda is not as ancient as the Rigveda and falls somewhere during the same time period as of the Samaveda and the Atharvaveda.

The oldest layer of the Yajurveda samhita features about 1,875 verses, which, though distinct, build upon the foundation laid by the Rigveda. It is important to note here that the Yajurveda samhitas are entirely in prose format and linguistically, are completely set apart from earlier Vedic texts. This samhita is also a primary source of information regarding Vedic rites and rituals, plus all associated rituals as well.

This samhita could be split into two groups, namely, the Krishna (Black) and the Shukla (White) divisions. The Krishna group refers to the "un-arranged", mostly random collection of verses in the Yajurveda. In contrast, the Shukla group features well-arranged verses, clearly separating the Samhita from its Brahmana (Satapatha Brahmana or the Brahmana of the Hundred Paths). Incidentally, this is one of the largest Brahmana texts to survive to the present day.

Of the Krishna Yajurveda, texts from four major schools have survived – these are Maitrayani, Katha, Kapisthala-Katha and Taittiriya. Of the Shukla Yajurveda, only two major schools of Kanva and Madhyandina have survived the ravages of time. Interestingly, the most recent layer of text is not related to rituals or sacrifice. It features the largest possible collection of primary Upanishads, which influenced major schools of Hindu philosophy and thought.

Yajurveda:

Stands to mean 'Worship Knowledge', Yajurveda dates back to 1100-800 BCE; corresponding with Samaveda. It compiles ritual-offering mantras/chants. These chants were offered by the priest alongside a person who used to perform a ritual (in most cases yajna fire.) The key features of Yajurveda are given below:

Features of Yajurveda

It has two types – Krishna (Black/Dark) & Shukla (White/Bright)

Krishna Yajurveda has an un-arranged, unclear, motley collection of verses

Shukla Yajurveda has arranged and clear verses

The oldest layer of Yajurveda has 1875 verses mostly taken up from Rigveda

The middle layer of the Veda has Satapatha Brahmana which is a commentary of Shukla Yajurveda

The youngest layer of Yajurveda consists of various Upanishads – Brihadaranyaka Upanishad, the Isha Upanishad, the Taittiriya Upanishad, the Katha Upanishad, the Shvetashvatara Upanishad and the Maitri Upanishad

Vajasaneyi Samhita is the Samhita in the Shukla Yajurveda

There are four surviving recensions of the Krishna Yajurveda – Taittiriya saṃhita, Maitrayani saṃhita, Kaṭha saṃhita, and Kapisthala saṃhita

Aspirants can read about Upanishads, Brahmanas in the Vedic literature page linked in the article.

Sam Veda

"Saman" means melody and it contains the Rhythmic compilation of Hymns of Rigveda. It ranks next in sanctity and liturgical importance to the Rigveda. It contains 1549 hymns which are meant to be sung at the soma sacrifice by a special class of Brahmans called "Udgatris". It has three shakhas or recensions:

- Kauthuma : Panchvish Brahmana

- The Jaiminiya : Jaiminiya Brahmana

- Rāvāyanīya : Shadvish Brahmana

There are two Aranyakas: Chadogya Aranyaka and jaiminiya Aranyaka. Chadogya Aranyaka has Chadogya Upnishad and Jaiminiya Aranyaka has Jaiminiya Upnishad. .

Gandharveveda is Samveda's Upveda is is a technical treatise on Music, Dance and Drama. Bharat's Natyashashtra is based upon Gandharvaveda.

Samavedas

The Samaveda is the Veda of chants and music. The entire musical text is systematically notated, keeping with the traditions of the Shakha where it was maintained. Since it has to be sung, it could be considered as the Rigveda set to music. Though it has fewer verses as compared to the Rigveda, it is textually lengthier, due to its elaborate lists, chants and elongated modes of singing.

The Samaveda Samhita comprises 1,549 stanzas, with some verses repeating more than once. Except for a set of 75 mantras, has taken almost entirely from the Rigveda. The Samaveda, which is believed to have given rise to music itself, is divided into two major sections. The first section includes four Gaanas or melodic collections. The second section consists of three verse "books", called Archikas. A melody in the song book corresponds to a verse in the Archika book.

As with the Rigveda, this samhita too starts with the worship of Agni, Indra and other Gods, soon shifting to the abstract. The poetic meter here too, follows the Rigveda scheme. The songs in the later section too are much like the hymns featuring in the Rigveda.

The two major Shakhas or recensions of the Samaveda that are surviving in the present time, include the Kauthuma/Ranayaniya and the Jainminiya schools.

Samaveda and Indian Classical Music: Legend and Fact

Indian classical music and dance have their roots in the musical curves and dimensions of the Samaveda. Apart from vocal music, this Veda mentions the existence of musical instruments; even clearly specifying how each instrument must be played. The Veda has a dedicated section for this, called the Gandharva-Veda. This Upaveda is closely attached to the main Samaveda. The fact that Indian music has risen from

the Samaveda is widely acknowledged by musicians and musicologists all over India and the world in general.

According to popular legend, Lord Shiva gave us the Saptaswaras (seven notes) of music, via the Samaveda. The story goes that the Panchamukha (five-faced) Shiva was once addressing a celestial congregation of the Devas and other divine beings. Each of his five faces, namely, Satyojaata, Vaamaka, Eeshaana, Tathpurusha and Aghora, was addressing a different section of the audience (extreme left, left, center, right and extreme right). While the content of his speech became the Vedas, the tone in which he delivered his speech became the seven swaras of Sa, Re, Ga, Ma, Pa, Dha and Ni.

Panchamukhi Shiva - Resin Statue

Some experts suggest that melodies most likely existed in ancient India, much before the emergence of the Samaveda. The words of the Rigveda verses were probably mapped into those pre-existing melodies, so as to create a flow and a rhythm for the structure. The text sometimes uses Stobha or creative structures to make the words fit in better with the tune. Sometimes, meaningless sounds are added on so as to make it more pleasant-sounding and soothing to the ear. Thus, the Samaveda represented the start of fusing creative music with meaning and deep spiritual intent.

Samaveda:

Known as the Veda of melodies and chants, Samaveda dates back to 1200-800 BCE. This Veda is related to public worship. The key features of Samaveda are given in the table below:

Features of Samaveda

There are 1549 verses (except 75 verses, all have been taken from Rigveda)

There are two Upanishads embedded in Samaveda – Chandogya Upanishad and Kena Upanishad

The Samaveda is considered as the root of the Indian classical music and dance

It is considered as the storehouse of the melodious chants

Though it has lesser verses than Rigveda, however, its texts are larger

There are three recensions of the text of the Samaveda – Kauthuma, Raṇayaniya and Jaimaniya

Samaveda is categorised into two parts – Part-I includes melodies called Gana & Part-II includes three verses book called Archika.

Samaveda Samhita is not meant to be read as a text, it is like a musical score sheet that must be heard

Atharvaveda

The Atharva veda Samhita belongs to the poets, Atharvan and Angirasa. It comprises about 760 hymns. Around 160 of these hymns are the same as the Rigveda. Most of these verses follow the typical metric system of the Rigveda, but some sections are also in prose format. Today, we have two different sections of the text, namely, the Paippalada and the Saunakiya.

Interestingly, the Atharva veda was not considered as a Veda during the Vedic period. It achieved that status towards the end of the 1st millennium BC. This text is believed to have been compiled around 900 BC.

The Atharva veda is sometimes referred to as the "Veda of magic formulas". The Samhita layer of this text represents an evolving 2nd millennium BC tradition of conducting religious rites, with a view to address superstition anxiety. It supposedly tried to cure ailments caused by spells, demons and other dark and paranormal forces.

This text deals with developing and administering herbs and nature-derived potions to cure a variety of ailments, both physiological and psychosomatic in nature. Hence, this was probably one of earliest texts to record the evolution of Medicine, medical treatment and healing. Hence, Ayurveda is sometimes considered to be an Upa veda of the Atharva veda. Other experts, however, consider Ayurveda to be a different, Panchama (fifth) Veda.

That apart, several books of the Atharva veda Samhita also talk about "magic-less" rituals, philosophy and theosophy. It speaks about Vedic culture, general customs and beliefs, and, most importantly, two major rituals of passage, namely, marriage and cremation. It not only explains how to conduct these rituals, but also elucidates the reasons why Hindus should correctly follow prescribed procedures for the same.

B. Contents :

The Atharvaveda is looked upon as the Veda of varied knowledge. It contains numerous Mantras, which according to their subject-matter, can be broadly divided into three categories: 1. Related to the cure of diseases and destruction of adverse forces. 2. Related to establish peace, protection, health, wealth, friendship and long life. 3. Related to the nature of Supreme Reality, time, death and immortality.

Bloomfield has divided the subject of Atharvaveda into many categories, such as Bhashijya, Paushtika, Prayashctta, Rajakarma, Strikarma,Darshana, Kuntapa etc. Here some Important and famous Suktas of Atharvaveda are listed to have a general view its subject:

1.   Bhumi-Sukta (12.1)

2.   Brahmacarya-Sukta (11.5)

3.   Kala-Suktas (11.53, 54)

4.   Vivaha-Sukta (14th Kanda)

5.   Madhuvidya-Sukta (9.1)

6.   Samanasya-Sukta (3.30)

7.   Rohita-Sukta (13.1-9)

8.   Skambha-Sukla (10.7)

So, the Atharvaveda is an encyclopedia of many subjects. It reflects the life of the Vedic people. Their thoughts related to philosophical, social, educational, political, agricultural, scientific and medical matters are found in this Samhita.

Atharvaveda:

Stands to mean a tat purusha compound of Atharvan, an ancient sage, and knowledge (atharvan+knowledge), it dates back to 1000-800 BCE. The key features of Atharva veda are given the table below:

Features of Atharvaveda

The daily procedures of life are very well enumerated in this Veda

It has 730 hymns/suktas, 6000 mantras, and 20 books

Paippalada and the Saunakiya are two surviving recensions of Atharvaveda

Called a Veda of magical formulas, it includes three primary Upanishads – Mundaka Upanishad, the Mandukya Upanishad, and the Prashna Upanishad

The 20 books are arranged by the length of hymns they contain

Unlike Samaveda where hymns are borrowed from Rigveda, hymns of Atharvaveda are unique except a few

This Veda contains hymns many of which were charms and magic spells which are meant to be pronounced by the person who seeks some benefit, or more often by a sorcerer who would say it on his or her behalf

Post-Vedic Literature

The post-Vedic era gave rise to a number of ancillary subjects, which were closely associated with the original Vedas. They are as follows:

Vedangas

The Vedangas evolved towards the end of the Vedic era. These subsidiary studies emerged, because the original language used by the Vedas had become too archaic for people of that time. The Vedangas were sciences that aimed to help people understand and appreciate the teachings of the Vedas, which had been composed centuries ago. The six main subjects of Vedanga are Siksha (phonetics), Chandas (poetic

meter), Vyakarana (grammar), Nirukta (linguistics), Kalpa (rituals and rites) and Jyotisha (astronomy and time-keeping).

The Vedangas went on to have a great influence on post-Vedic studies, schools, art and philosophical though. For example, the Kalpa Vedanga gave birth to the Dharma-sutras, which later expanded into Dharma-shastras.

Parisishta

Parisishta mainly aimed to explore the rituals and commentaries mentioned in the Samhitas, Brahmanas, Aranyakas and Sutras in more detail. Each of the Vedas has a Parisishta dedicated to its study. The literature associated with the Atharvaveda, though, is the most elaborate and extensive one.

Upaveda

Upaveda or "applied knowledge" is literature dealing with different technical subjects. The Charanavyuha makes mention of four Upavedas, namely, Dhanurveda (Archery), Sthapatyaveda (Architecture), Gandharvaveda (Classical Music and Dance; naturally associated with the Samaveda) and Ayurveda (Medicine; associated with the Atharvaveda).

Fifth and Other Vedas

Some post-Vedic works, including the Mahabharata, the Natyashastra (an elaborate treatise on Dance) and certain Puranas, consider themselves to be the "fifth Veda". References to the same can be found in the Chandogya Upanishad. South Indians consider the Divya Prabandham to be a parallel vernacular Veda.

Some Hindu schools of thought consider the Bhagavad Gita and the Vedanta Sutras as Shruti. Later, the Bhakti Movement, especially the Gaudiya Vaishnavite sect, extended the scope of the term "Veda" to include the Sanskrit Epics and works such as the Pancharatra (Vaishnava Sanskrit Agamic texts). However, these are not universally accepted as Vedas by all Hindus.

The Puranas

The Puranas constitute a vast body of Indian literature, dealing with a wide range of topics, myths and legends. Many of these texts are named after major Hindu deities such as Vishnu, Shiva, Devi and so on. There are 18 Maha Puranas (Great Puranas) and 18 Upa Puranas (Minor Puranas). Together, they feature over 400,000 verses.

The Puranas A View and Review

The Puranas have greatly influenced Hindu art and culture and are considered as being Vaidika (similar to Vedic literature).

The Vedas: Relevant Then and Now

The Vedas are the most ancient texts in Hindus. Nevertheless, these vast repositories of knowledge are relevant for all time. The wisdom contained in these texts is applicable for the entire humanity and surpasses all geographical, ideological, historical and sociological barriers. By studying the viewpoints in different topics found in Vedic culture, we would definitely be able to put several of them to practical use in this time and day. We are trapped in today's busy and complicated world and sometimes lose track of the right path. The knowledge offered by those treatises can indeed help us in fields we cannot even begin to imagine.

India's Vedic culture has made immense contribution to several fields of activity and has verily influenced the thinking process of the entire world. It has given the world advanced knowledge in music, art, astronomy, martial arts, yoga, philosophy, mathematics, science, holistic medicine in the form of Ayurveda, and much more.

The following are some fields where Vedic culture has made great strides, thereby influencing the entire world:

Vedic Mathematics and Jyotisha

Vedic mathematics is an ancient subject, that dates back as far as 2500 BC. It continues to play an important role in modern society, not only in India, but all over world. It made calculation and computing much simpler than the traditional Egyptian, Greek and Roman methods prevalent then. The Vedic system also invented the numeral zero, which is considered to be among the greatest ever inventions in the history of mathematics.

The subject then evolved further to include the Jyotisha or Vedic astronomy, which used mathematics in different forms. In the 5th century, Aryabhatta introduced the concept of sines and versed sines and also brought in Algebra to solve many problems in astronomy. He is considered to be the first person to state that the Earth moved around the sun. However, ancient Vedic texts have described the phenomenon several centuries earlier. This shows the immense wisdom of those seers and sages.

The 9th century saw the advent of Mahavira, who used fractions to solve problems in a more efficient manner. Bhaskara II (12th century) extended the scope of the subject by working on spherical trigonometry and calculus. He then used that to determine the daily movement of the planets.

Vedic mathematics is now being introduced in many schools – this has helped make students brighter, faster, more accurate and more productive in class.

Medicine and Ayurveda

Way back in 600 BC, Sushruta held a record of performing complicated surgeries including cesareans, fractures, urinary stones, cataracts, brain surgery and even plastic surgery. India was quite advanced in Medicine even back then and used anesthesia as well. Recording the use of over 125 surgical instruments, the doctors of yore had great knowledge of anatomy, metabolism, digestion, genetics, immunity and all other subjects related to human physiology. A well-developed system of Medicine was set in place by the 1st century AD.

Over time, the existing medical system evolved further, giving rise to the holistic system of Ayurveda. Starting with extensive use in India, it is now popular the world over. The term "Ayurveda" is derived from two Sanskrit words, "Ayus" (life) and "Veda" (knowledge). Hence, it can be defined as the knowledge of healthy living overall; not just limited to the treatment of diseases. Ayurveda is all about living a holistic and healthy life; about improving and enhancing the general quality of life. This is why, Ayurveda, unlike English Medicine, tries to get to the root of the problem and aims to heal the mind, rather than just treat the ailment as such.

Ayurveda the Ultimate Medicine

On the one hand, Ayurveda offers types of treatment such as Panchakarma; sometimes even recommending surgery; to cure certain ailments. On the other hand, it also offers preventive measures for those who are in good health. These measures include elaborate daily and seasonal routines; diet patterns to boost immunity; Rasayana Chikitsa to promote health; Vajikarana Chikitsa to enhance libido; Swasthavritta, which are details to sustain health with exercise and other routines; Sadachar, which focuses on social hygiene and so on.

As a whole, Ayurveda advocates eight major clinical branches of medicine, namely, Kayachikitsa (Medicine), Salya Tantra (Surgery), Salakya Tantra (ENT), Kaumatabhritya (Pediatrics), Bhutvidya (Psychiatry), Agad Tantra (Toxicology), Rasayan Tantra (Nutrition) and Vajikarana (Sexology).

Interestingly, both the Rigveda and the Atharvaveda make mention of Ayurveda and state that there were thousands of medicines and medical practitioners even back then. Furthermore, the three Rigvedic Gods, Indra, Agni and Soma, are associated with the three biological humors of Vata, Pitta and Kapha respectively.

Vedic Gemology

Vedic gemology aims to determine which precious or semi-precious gem one should wear in order to attract the best possibilities and circumstances in one's life. This branch works in conjunction with Ayurveda and Jyotisha to help a person enjoy better health and positive mindset. This field, which uses gems and precious stones to control conditions; both mental and physical; has now begun to gain popularity the world over.

Gemology tries to tap into the prana or the cosmic energy force that resides in all living beings. Each gemstone has a particular vibration and the correct combination of Ayurveda and astrology reveals the exact gemstone a person should wear in order for it to amplify his physical and mental energy to the maximum possible extent.

Vedic Arts

Vedic art is yet another ancient branch, which holds much value even today. The Vedic arts are never merely a creative representation of an artist – they always contain a much deeper spiritual and philosophical meaning. The arts are considered sacred and many times, enable both the artist and his or her audience to transcend to higher realms of existence.

Vedic paintings are capable of delivering this type of spiritual vibration and energy. Hence, the painting itself becomes a sort of doorway for contemplation; finally leading to spiritual realization. In order to convey a higher purpose, the painter or sculptor uses colors, designs and instruments, which sometimes need to be explained to onlookers to help them gain better understanding of the fundamental thought behind it; then contemplate upon it.

Indian dance and music too are spiritual in nature. A method for the jeevatma (individual soul) to reach the paramatma (the Universal One), these arts too are designed to be a pathway for both artists and their audience to reach the state of bliss. Vedic dance and music date back to prehistoric times. In his treatise, the Natya Shastra (penned over 2000 years ago), Bharata Muni explains how Brahma presented dance and drama to earthlings, millions of years ago, just after the Earth had been created.

In fact, the image of the Lord of Dance, Lord Shiva, as Nataraja, itself proves that point. His dance is based on the energy and the rhythm of the cosmos. His tandava taps into that unseen energy that pervades the entire Universe, also destroying all the negative forces, thus helping the practitioner to attain moksha or liberation.

Nataraja

This is the reason why Indian classical music and dance follow a strict discipline. These arts require students to painstakingly learn it the proper way, spending years on delving deeper into the art. There are precise instructions and exercises to follow in both music and dance, which students must strictly adhere to. Also, the students are required to realize that the learning process is an endless one and that he or she will continue to study the discipline for an entire lifetime. This helps them understand the

underlying sanctity of the art, revering it as God itself. This, in turn, helps them practice their art as yoga or a form of meditation, ultimately leading them towards spiritual fulfillment.

Today, Indian music and dance are extensively studied, practiced and performed all over the world. We can find countless schools imparting knowledge on Hindustani and Carnatic music (both vocal and instrumental) and classical, semi-classical and folk dance forms including Bharata Natyam, Kathak, Kathakali, Odissi, Mohini Attam, Manipuri, Krishna Attam and many more.

Atharva Veda

Atharva-Veda is entirely different from the other three Vedas and is chronologtically the last of the four. It is important and interesting as it describes the popular beliefs and superstitions of the humble folk. Atharvaveda contains the magic spells, incorporates much of early traditions of healing and magic that are paralleled in other Indo-European literatures.

For a very long time it was not included in the category of the Vedas.' Atharvan' was a legendary Rishi and is considered to have sung the Atharvaveda. He is also said to have first instituted the fire-sacrifice or yagna. Atharvaveda was mainly composed by two groups of rishis known as the Atharvanas and the Angirasa, hence its oldest name is Ātharvāṅgirasa.

• There are two surviving recensions or Shakhas known as Śaunakīya (AVS) and Paippalāda (AVP).

• Gopath Brahmana is the Brahmana of Yajurveda.

• There are three Unishads viz. Prasna, Mundaka and Mandukya.

• Satyamev Jayate, India's Motto comes from Mundaka Upanishad.

Brahmanas

The Brahmanas are the prose texts which explain the hymns in the Vedas, give explanation and applications and related stories of their origin. They also have some stories related to the certain persons related to the Vedic Text.

The following diagram shows the Brahmans of Vedas.

Aranyakas

The Aranyakas were written in Forests and are concluding parts of the Brahmans.

Importance of Aranyakas

Aranyakas don't lay much emphasis on rites, ritual and sacrifices but have philosophy and mysticism. This is because aranyakas were written mainly for the hermits and students living in the jungles. They lay emphasis not on sacrifices but on meditation. They are in fact, opposed to sacrifices and many of the early rituals. Their stress is on moral values. They form a bridge between way of work (karma marga) which was the sole concern of the Brahmanas and the way of knowledge (gyan marga) which the Upanishads advocated. In other words, Aranyakas are focussed on moral science and philosophy. They also provide the details of the Rishis who lived in jungles.

The Upanishads

"Upa" means nearby and "sada" means sit. So Upanishads contain the knowledge imparted by the gurus to their disciples.

Eventually the word began to be used for the secret knowledge imparted by the guru to his selected pupils. A number of treatises were prepared, first orally and then in writing, and were called by the same name of Upanishad. Today Upanishads specify philosophical knowledge and spiritual learning.

Why Upanishads are called Vedanta?

The main motto of the Upanishads is "Knowledge Awards Salvation". Upanishads are called Vedanta (the end of the Veda) firstly, because they denote the last phase of the Vedic period and secondly, because they reveal the final aim of the Veda.

The Oldest Upanishads are Brhadaranyaka and Chandogya Upanishads which date as back as the first millennium BC. Latest were composed in the medieval and early modern period. The latest Upnishad is Muktikā Upnishad and was recorded by Dara Shikoh. It dates to 1656. Dara Shikoh was son of Mughal emperor Shah Jahan and is known to have translated fifty Upanishads into Persian. There are 108 Upanishads. 11 are predominant and they are called "Mukhya Upanishads".

Smriti Texts

Vedangas

Vedangas are six auxiliary disciplines associated with the study and understanding of the Vedas. They include Shiksha (Phonetics), Kalpa (Ritual Canon), Vyakaran (Grammar), Nirukta (explanation), Chhanda (Vedic meter) and Jyotisha (Astrology)

Epics (Itihasa)

Ramayana

Created by Maharishi Valmiki. Consists of 24,000 verses in seven books (Kandas) and 500 sargas) and tells the story of Rama. Verses in the Ramayana are written in a 32-syllable meter called anustubh and

ranges in 50000 lines in total. Valmiki is also regarded as India's First Poet. Father Kamil Bulke, author of Ramakatha, has identified over 300 variants of Ramayana. It inspired Tulsikrita Ramayan "Ram Charit Manas" in 1576 by Tulsi Das.

Mahabharta

The Mahabharta is attributed to Maharishi Vyas and the tale known as Bharta is a shorter version of 24,000 verses, while the Mahabharta contains 1 Lakh verses and 1.8 million words which makes it 10 times longer than "Iliad and Odyssey combined" and 4 times of Ramayana.

Puranas

They are late descriptions of ancient legends and consist of history of the universe from creation to destruction, genealogies of kings, heroes, sages, and demigods, and descriptions of Hindu cosmology, philosophy, and geography. They are colored with superstitions and also represent a corrupt form of Hindu Philosophy. There are 18 major Puranas.

Upaveda

Upaveda means applied knowledge and are traditional literatures which contain the subjects of certain technical works. They are as follows:

- Āyurveda: Deals in Medicine and associated with the Rigveda

- Dhanurveda: Deals in Archery and associated with the Yajurveda

- Gāndharvaveda: Deals with Music and Dance and associated with the Samaveda

- Shastrashastra: Deals with military technology and associated with the Atharvaveda

AYURVEDA: A BRIEF INTRODUCTION AND GUIDE

Ayurveda is considered by many scholars to be the oldest healing science. In Sanskrit, Ayurveda means "The Science of Life." Ayurvedic knowledge originated in India more than 5,000 years ago and is often called the "Mother of All Healing." It stems from the ancient Vedic culture and was taught for many thousands of years in an oral tradition from accomplished masters to their disciples. Some of this knowledge was set to print a few thousand years ago, but much of it is inaccessible. The principles of many of the natural healing systems now familiar in the West have their roots in Ayurveda, including Homeopathy and Polarity Therapy.

The Strategy

Ayurveda places great emphasis on prevention and encourages the maintenance of health through close attention to balance in one's life, right thinking, diet, lifestyle and the use of herbs. Knowledge of Ayurveda enables one to understand how to create this balance of body, mind and consciousness

according to one's own individual constitution and how to make lifestyle changes to bring about and maintain this balance.

Just as everyone has a unique fingerprint, each person has a particular pattern of energy—an individual combination of physical, mental and emotional characteristics—which comprises their own constitution. This constitution is determined at conception by a number of factors and remains the same throughout one's life.

Many factors, both internal and external, act upon us to disturb this balance and are reflected as a change in one's constitution from the balanced state. Examples of these emotional and physical stresses include one's emotional state, diet and food choices, seasons and weather, physical trauma, work and family relationships. Once these factors are understood, one can take appropriate actions to nullify or minimize their effects or eliminate the causes of imbalance and re-establish one's original constitution. Balance is the natural order; imbalance is disorder. Health is order; disease is disorder. Within the body there is a constant interaction between order and disorder. When one understands the nature and structure of disorder, one can re-establish order.

Balancing the Three Principle Energies of the Body

Ayurveda identifies three basic types of energy or functional principles that are present in everyone and everything. Since there are no single words in English that convey these concepts, we use the original Sanskrit words vata, pitta and kapha. These principles can be related to the basic biology of the body.

Vata is the subtle energy associated with movement — composed of Space and Air. It governs breathing, blinking, muscle and tissue movement, pulsation of the heart, and all movements in the cytoplasm and cell membranes. In balance, vata promotes creativity and flexibility. Out of balance, vata produces fear and anxiety.

Pitta expresses as the body's metabolic system — made up of Fire and Water. It governs digestion, absorption, assimilation, nutrition, metabolism and body temperature. In balance, pitta promotes understanding and intelligence. Out of balance, pitta arouses anger, hatred and jealousy.

Kapha is the energy that forms the body's structure — bones, muscles, tendons — and provides the "glue" that holds the cells together, formed from Earth and Water. Kapha supplies the water for all bodily parts and systems. It lubricates joints, moisturizes the skin, and maintains immunity. In balance, kapha is expressed as love, calmness and forgiveness. Out of balance, it leads to attachment, greed and envy.

Life presents us with many challenges and opportunities. Although there is much over which we have little control, we do have the power to decide about some things, such as diet and lifestyle. To maintain balance and health, it is important to pay attention to these decisions. Diet and lifestyle appropriate to one's individual constitution strengthen the body, mind and consciousness.

Ayurveda as a Complementary System of Healing

The basic difference between Ayurveda and Western allopathic medicine is important to understand. Western allopathic medicine currently tends to focus on symptomatology and disease, and primarily uses drugs and surgery to rid the body of pathogens or diseased tissue. Many lives have been saved by this approach. In fact, surgery is encompassed by Ayurveda. However, drugs, because of their toxicity, often weaken the body. Ayurveda does not focus on disease. Rather, Ayurveda maintains that all life must be supported by energy in balance. When there is minimal stress and the flow of energy within a person is balanced, the body's natural defense systems will be strong and can more easily defend against disease.

It must be emphasized that Ayurveda is not a substitute for Western allopathic medicine. There are many instances when the disease process and acute conditions can best be treated with drugs or surgery. Ayurveda can be used in conjunction with Western medicine to make a person stronger and less likely to be afflicted with disease and/or to rebuild the body after being treated with drugs or surgery.

We all have times when we don't feel well and recognize that we're out of balance. Sometimes we go to the doctor only to be told there is nothing wrong. What is actually occurring is that this imbalance has not yet become recognizable as a disease. Yet it is serious enough to make us notice our discomfort. We may start to wonder whether it is just our imagination. We may also begin to consider alternative measures and actively seek to create balance in our body, mind and consciousness.

Evaluation and Treatment of Imbalances

Ayurveda encompasses various techniques for assessing health. The practitioner carefully evaluates key signs and symptoms of illness, especially in relation to the origin and cause of an imbalance. They also consider the patient's suitability for various treatments. The practitioner arrives at diagnosis through direct questioning, observation and a physical exam, as well as inference. Basic techniques such taking the pulse, observing the tongue, eyes and physical form; and listening to the tone of the voice are employed during an assessment.

Ayurveda addresses all aspects of life — the body, mind and spirit. It recognizes that each of us is unique, each responds differently to the many aspects of life, each possesses different strengths and weaknesses. Through insight, understanding and experience Ayurveda presents a vast wealth of information on the relationships between causes and their effects, both immediate and subtle, for each unique individual.

Vata

The Energy of Movement

General Description

 Vata provides the essential motion for all bodily processes and is extremely vital for health. On an annual basis, vāta is most prominent in the fall and at the change of seasons, and these are the most important times to be careful of diet and lifestyle. One purpose of lifestyle considerations is stabilize this

motion. Routine is very useful in assisting the vata individual to effectively ground all this moving energy.

A person with vata predominant is blessed with a quick mind, flexibility and creativity. Mentally, they usually grasp concepts quickly but then forget them just as quickly. Alert, restless and very active, vata people walk, talk and think fast, but are easily fatigued. They tend to have less willpower, confidence, boldness and tolerance for fluctuation than other types and often feel unstable and ungrounded. When unbalanced, vata types may become fearful, nervous and anxious. In the external world, vata types tend to earn money quickly and spend it quickly. They are not good planners and as a consequence may suffer economic hardship.

Vata types have variable appetite and digestion. They are often attracted to astringent foods like salad and raw vegetables, but their constitution is balanced by warm, cooked foods and sweet, sour and salty tastes. With a tendency to produce little urine, their feces are often hard, dry and small in size and quantity.

Vata resides in the colon, as well as the brain, ears, bones, joints, skin and thighs. Vata people are more susceptible to diseases involving the air principle, such as emphysema, pneumonia and arthritis. Other common vata disorders include flatulence, tics, twitches, aching joints, dry skin and hair, nerve disorders, constipation, and mental confusion. Vata in the body tends to increase with age as is exhibited by the drying and wrinkling of the skin.

Since the attributes of vata are dry, light, cold, rough, subtle, mobile and clear, any of these qualities in excess can cause imbalance. Frequent travel, especially by plane, loud noises, continual stimulation, drugs, sugar and alcohol all derange vata, as does exposure to cold and cold liquids and foods. Like the wind, vata types have a hard time becoming and staying grounded. Routine is difficult but essential if vata is to be lowered and controlled. It is best for vata types to go to bed by 10 PM as they need more rest than the other types. In general, people with excessive vata respond most rapidly to warm, moist, slightly oily, heavy foods. Steam baths, humidifiers and moisture in general are helpful. Daily oil massage before bath or shower is also recommended.

Dietary Considerations

General food guidelines for decreasing vata include warm, well-cooked, unctuous foods. One should have small meals three or four times a day and may snack as needed while maintaining a two hour gap between each meal. Regularity in meal times is important for vata. Those with vata-dominant constitutions do well with one- pot meals such as soups, stews and casseroles. They can use more oil in cooking their foods than the other two doshas and experience better digestion if they limit their intake of raw foods.

Well-cooked oats and rice are good for vata because they are not too drying when cooked with plenty of water and butter or ghee. While cooked vegetables are best for vata, the occasional salad with a good oily or creamy dressing is all right. Nightshades—tomatoes, potatoes, eggplants and peppers—as well as spinach should be avoided if the vata person has stiff, aching joints or muscles. Sweet, ripe and juicy

fruits are good for vata. The astringent and drying fruits, such as cranberries, pomegranates and raw apples, should be avoided. Fruit should always be eaten by itself on an empty stomach.

Many vata people can satisfy their need for protein by judicious use of dairy products, but can also use eggs, chicken, turkey, fresh fish and venison if they wish. Legumes are difficult to digest and should be consumed in limited quantity by those trying to pacify vata. The legumes should be the split type and soaked before cooking. Cooking them with a little oil and spices, such as turmeric, cumin, coriander, ginger, garlic and hing (asafoetida), will help prevent vata from being disturbed.

All nuts and seeds are good for vata, but are best used as butters or milks. Ten almonds, soaked in water overnight with skins removed the next morning, are a satisfying early morning food. Sesame oil is warming for vata, but all oils are good. All dairy products are good for vata with hard cheese being eaten sparingly. All spices are good, but should not be overused. Vatas can have half a glass of wine, diluted with water, during or after a meal. Since vata people tend to be prone to addiction, they should avoid sugar, caffeine and tobacco. Intensity itself can be intoxicating to vata, so one should seek relaxation and meditation to reduce vata.

General guidelines for balancing vata:

•   Keep warm

•   Keep calm

•   Avoid cold, frozen or raw foods

•   Avoid extreme cold

•   Eat warm foods and spices

•   Keep a regular routine

•   Get plenty of rest

Pitta

The Energy of Digestion and Metabolism

General Description

 Pitta types have many of the qualities of fire. Fire is hot, penetrating, sharp and agitating. Similarly, pitta people have warm bodies, penetrating ideas and sharp intelligence. When out of balance, they can become very agitated and short-tempered. The pitta body type is one of medium height and build, with ruddy or coppery skin. They may have many moles and freckles. Their skin is warm and less wrinkled than vata skin. Their hair tends to be silky and they often experience premature graying or hair loss. Their eyes are of medium size and the conjunctiva is moist. The nose is sharp and the tip tends to be reddish.

Those with pitta-dominant constitutions have a strong metabolism, good digestion and strong appetites. They like plenty of food and liquids and tend to love hot spices and cold drinks. However, their constitution is balanced by sweet, bitter and astringent tastes. Pitta people's sleep is sound and of medium duration. They produce large quantities of urine and feces, which tend to be yellowish, soft and plentiful. They perspire easily and their hands and feet stay warm. Pitta people have a lower tolerance for sunlight, heat and hard physical work.

Mentally, pitta types are alert and intelligent and have good powers of comprehension. However, they are easily agitated and aggressive and tend toward hate, anger and jealousy when imbalanced. In the external world, pitta people like to be leaders and planners and seek material prosperity. They like to exhibit their wealth and possessions. Pitta people tend to have diseases involving the fire principle such as fevers, inflammatory diseases and jaundice. Common symptoms include skin rashes, burning sensation, ulceration, fever, inflammations or irritations such as conjunctivitis, colitis or sore throats.

Since the attributes of pitta are oily, hot, light, mobile, dispersing and liquid, an excess of any of these qualities aggravates pitta. Summer is a time of heat, the pitta season. Sunburn, poison ivy, prickly heat and short tempers are common. These kinds of pitta disorders tend to calm down as the weather gets cooler. The diet and lifestyle changes emphasize coolness—cool foods, avoidance of chilies and spices (especially difficult for New Mexicans), and cool climates. People with excessive pitta need to exercise at the coolest part of the day.

Dietary Considerations

General food guidelines for pacifying pitta include avoiding sour, salty and pungent foods. Vegetarianism is best for pitta people and they should refrain from eating meat, eggs, alcohol and salt. To help calm their natural aggressiveness and compulsiveness, it is beneficial to incorporate sweet, cooling and bitter foods and tastes into their diets.

Barley, rice, oats and wheat are good grains for pitta dominant individuals and vegetables should form a substantial part of their diet. Tomatoes, radishes, chilies, garlic and raw onions should all be avoided. In fact, any vegetable that is too sour or hot will aggravate pitta, but most other vegetables will help to calm it. Daikon radishes are cleansing for the liver when pitta is in balance but should be avoided otherwise. Salads and raw vegetables are good for pitta types in the spring and summer as are any sweet fruits. Sour fruits should be avoided with the exception of limes, used sparingly.

Animal foods, especially seafood and eggs, should only be taken in moderation by pitta types. Chicken, turkey, rabbit and venison are all right. All legumes except red and yellow lentils are good in small amounts, with black lentils, chickpeas and mung beans being the best.

Most nuts and seeds have too much oil and are heating for pitta. However, coconut is cooling and sunflower and pumpkin seeds are all right occasionally. Small amounts of coconut, olive and sunflower oils are also good for pitta.

Sweet dairy products are good and include milk, unsalted butter, ghee and soft, unsalted cheeses. Yogurt can be used if it is blended with spices, a little sweetener and water. In fact, pitta people can use a sweetener better than the other two doshas because it relieves pitta. However, they should avoid hot spices, using cardamom, cinnamon, coriander, fennel and turmeric predominantly, with small amounts of cumin and black pepper.

Coffee, alcohol and tobacco should be completely avoided although the occasional beer may be relaxing for a pitta person. Black tea may also be used occasionally with a little milk and a pinch of cardamom.

General guidelines for balancing pitta:

•   Avoid excessive heat

•   Avoid excessive oil

•   Avoid excessive steam

•   Limit salt intake

•   Eat cooling, non-spicy foods

•   Exercise during the cooler part of the day

Kapha

The Energy of Lubrication

General Description

 Kapha types are blessed with strength, endurance and stamina. In balance, they tend to have sweet, loving dispositions and be stable and grounded. Their skin is oily and smooth. Physically, kapha people may gain weight easily and have a slow metabolism. They tend to shun exercise. They have thick skin and their bodies and muscles are well developed. Their eyes are large and attractive with thick, long lashes and brows. Kapha people evacuate slowly and feces tend to be soft, pale and oily. Perspiration is moderate. Sleep is deep and prolonged. Kapha types are attracted to sweet, salty and oily foods, but their constitutions are most balanced by bitter, astringent and pungent tastes.

Psychologically, kapha people tend to be calm, tolerant and forgiving. However, they may become lethargic. While they may be slow to comprehend, their long term memory is excellent. When out of balance, kaphas tend to experience greed, envy, attachment and possessiveness. In the external world, kapha tendencies toward groundedness, stability and attachment help them to earn and hold onto money.

They are more likely to have diseases connected to the water principle such as flu, sinus congestion, and other diseases involving mucous. Sluggishness, excess weight, diabetes, water retention, and headaches are also common. Kapha can become more aggravated as the moon gets full because there is a

tendency for water retention at that time. Winter is the time of greatest kapha accumulation and following the kapha-balancing dietary and lifestyle changes are most important during that season.

Dietary Considerations

Dietary guidelines for kapha people stress bitter, astringent and pungent tastes. They actually need foods that will invigorate their minds while limiting their overall consumption of food. They should avoid dairy products and fats of any kind, especially fried or greasy foods.

Those with kapha dominant constitutions need less grain than pitta or vata constitutions with buckwheat and millet (more heating) being optimal grains for them followed by barley, rice and corn. Roasted or dry cooked grains are best. All vegetables are good for kapha but one should emphasize leafy greens and vegetables grown above ground more than root vegetables while avoiding very sweet, sour or juicy vegetables. Generally kapha people can eat raw vegetables although steamed or stir-fried are easier to digest. Very sweet or sour fruits should be avoided with the more astringent and drying fruits being preferable such as apples, apricots, cranberries, mangoes, peaches and pears.

Only rarely do kapha people need animal foods and, when they do, it should be dry cooked—baked, roasted, broiled—never fried. They could eat chicken, eggs, rabbit, seafood and venison. As their bodies do not require large amounts of protein, they also should not overeat legumes although these are better for them than meat because of the lack of fat. Black beans, mung beans, pinto beans and red lentils are best for kapha types.

The heavy qualities of nuts and seeds aggravate kapha as does the oil in them. Occasional sunflower and pumpkin seeds are all right. Almond, corn, safflower or sunflower oils can be used in small amounts as well. The same holds true for dairy products: in general, kapha people should avoid the heavy, cooling, sweet qualities of dairy. A little ghee for cooking and some consumption of goat's milk is good for kapha types.

Since kapha people should avoid sweets, the only sweetener they should use is raw honey, which is heating. However, they can use all spices, except salt, with ginger and garlic being best for them. A person whose dominant dosha is kapha and who has very little influence from the other two doshas can benefit from the occasional use of stimulants such as coffee and tea. They are also not as harmed by tobacco and hard liquor. However, they really do not need alcohol at all. If they elect to use alcohol, wine is their best choice.

General guidelines for balancing kapha:

•   Get plenty of exercise

•   Avoid heavy foods

•   Keep active

•   Avoid dairy

- Avoid iced food or drinks

- Vary your routine

- Avoid fatty, oily foods

- Eat light, dry food

- No daytime naps

Remember that your progress toward balance and health is proportional to how well you stick to the guidelines of diet and lifestyle. Old habits sometimes die hard and your changes may be very gradual but, to achieve progress, the changes need to be made. You are in charge of your own rate of change.

If you wish to learn more about Ayurveda, we highly recommend Vasant Lad's book, Ayurveda: The Science of Self-Healing, for a conceptual understanding of vata, pitta and kapha. For guidelines and explanations about the Ayurvedic approach to food and healing, we also recommend Usha and Vasant Lad's cookbook, Ayurvedic Cooking for Self-Healing.

DHANURVEDA

Worked as an ANCIENT INDIAN ARTILLERIES

The term Dhanurveda is generally used by Sanskrit writers to denote the artillery science. Many Sanskrit texts on epics, Purāṇas and kāvyas have references in detail about artilleries. Further there are texts on this specific subject, by the name 'Dhanurveda'.

A number of weapons like bow and arrow, sword, spear and mace are discussed in full detail in such texts. The value and importance of the army were realized by ancient scholars very early in the history of India, and this led in course of time to the maintenance of a permanent armed force to put down dissensions. War or no war, the army was to be maintained, to meet any unexpected emergency. This gave rise to the Kṣatriya or warrior caste, and the kṣātram dharma came to mean the primary duty of war. To serve the country by participating in war became the svadhaṛma of the warrior community.

The necessary education, drill, and discipline to cultivate militarism were restricted to the members of Kṣatriya community. This prevented the militant attitude from spreading to other communities and kept the whole social structure unaffected by actual wars and war institutions. At that time the whole country looked upon the members of the Kṣatriya community as defenders of their country and thus did not complaint the high influence and power wield by the Kṣatriya, who were assigned a social rank next in importance to the intellectual and spiritual class of the society.

In the Brahmin hood. Ancestors are very sensitive people, and their heroes were instructed that they were defending the noble cause of God, Crown and Country. Viewed in this light, war departments were

'defense' departments and military expenditure were included in the cost of defense. In many cases, ancient India was ahead of modern ideas. Ancestors knew the methods of making swords and new metal combinations. In ancient texts,

Dhanurveda is the scientific word for the treatises on weapons. It narrates different kinds of weapon. The main division of this book deals with archery. So it is called Dhanurveda. A variety of weapons are mentioned in Dhanurveda texts. From ancient India, a number of texts were available on Dhanurveda which deal with ancient artillery. But most of these writings are now not available in full. Some texts on Dhanurveda have referred to the advantages of artillery as follows

In Dhanurveda, the importance of warriors in a society is highlighted in this verse. The above verse narrates that a good soldier can ensure the security of a society. So the soldiers have an important role for the social security. Hence practicing and training of weapons are of much important and it is the actual advantage of Dhanurveda. Ancestors were aware about the importance of weapon and its training. So they were trying to develop new weapons as and when it is needed in each part of Vasiṣṭha's Dhanurveda samhita

Vasiṣṭha's Dhanurveda samhita, Śukranīti, Agnipurāṇa and the like contain narration about weapon manufacturing and its training. Hence ancient writers in Sanskrit wrote not on spirituality alone but on warfare and the like also.

Many of the scholars are equally known in both the fields of spirituality and warfare. Mention may be made of Vasiṣṭha, Viśvāmitra, Paraśurāma, Kaśyapa, Parāśara, Śārngadhara, Bharata and Garga.

All these writers are well known in both fields of spirituality and material world alike. The ancient Sanskrit books to a great extent refer to a variety of new weapons. These weapons are generally used in wars. Sanskrit texts mention different types of weapons and the methods of manufacture and usage of weapons. Most of the scholars of ancient India considered Dhanurveda as the branch of Yajurveda. Prasthānabheda of Madhusudana swami considered Dhanurveda as a branch of Yajurveda. Śukranīti, Nītiprakāśika .

Prasthānabheda, Śukranīti , śKodaṇḍamandana and the like consider Dhanurveda as the upaveda of Yajurveda. According to Vasiṣṭha, on the other hand, Dhanurveda is considered as the branch of both Yajurveda and Aṭharvaveda. Because the Pracaraṇa of Dhanurveda is from Yajurveda and that of the knowledge about the divine weapons is adopted from Aṭharvaveda. So it can be concluded that Dhanurveda is also connected with Aṭharvaveda also.

There are a number of commentaries available on Dhanurveda. Mahābhārata, Agnipurāṇa, Prasthānabheda of Madhusūdana sarasvati and the like refer vivid pictures of Dhanurveda.

These books divide Dhanurveda into different divisions.

The scholars of ancient India divided Dhanurveda into four pādas. According to the Dhanurveda samhita, dīkṣa, saṃgraha, sidḍha and prayoga are the four pādas of Dhanurveda.

The dīkṣāpāda gives instructions on the principles.

The samgrahapāda contains the rules for collection and

 sidḍhipāda describes the ways of casting bows.

The prayogapāda tells about the application of the weapons.

According to Nīlakanṭhīya,

mantramukta, pāṇimukta, muktāmukta and amukta are the divisions of Dhanurveda.

According to Agnipurāṇa, chariot, elephant, horse and cavalry are the divisions of Dhanurveda.

Nītiprakāśika divided Dhanurveda as mukta, amukta, muktamukta and mantramukta.

 All these divisions are based on some particular areas of the science of artillery.

Angas of Dhanurveda

According to the Ādiparva of Mahābhārata, saint Saradva was an exponent of Dhanurveda. He taught Dhanurveda to Kṛpa and Kṛpa taught Dhanurveda to his students. Mahābhārata also narrates that Paraśurāma taught Dhanurveda to Droṇa and Droṇa taught it to his students, Kauravas and Pāṇḍavas.

 Sage Agastya was also an expert in Dhanurveda and he taught it to Agniveś

Mahābhārata, Agnipurāṇa and the like texts narrate the angas of Dhanurveda. According to Mahābhārata, Dhanurveda have ten angas and four caranas .

 The above verse of Mahābhārata narrates the ten angas of Dhanurveda. They are, ādāna, sanḍhāna, mokṣaṇa, vinivarttana, sṭhāna, muṣṭi, prayoga, prāyaścitta, mandala and rahasya.

 Agnipurāṇa narrates, Dhanurveda as having five angas, yantramukta, pāṇimukta, Muktasandhārita, amukta and bāhuyudḍha.

 Yantramukta means using weapons by the help of machines. It involves kṣepiṇi, bow machines etc.

Pāṇimukta means using the weapons by the hand, stone, mace etc.

Muktasandhārita means which can be used by either throwing or holding it. Kunta is an example for the Muktasandhārita type of weapons. Which is used by not renouncing from the hand, is known Amukta. Sword is an example for it.

Bāhuyudḍha means fighting by hand without using any weapons.

Some other scholars classified Dhanurveda into two, depending upon the classification of astra and śastra and which is again classified into ṛju and māyā.

From these classifications and narrations of Dhanurveda, one can assume that Dhanurveda and weaponry was one of the most relevant subjects in ancient time. Classification of weapons According to Dhanurveda weapons are divided into four kinds as per the use of such weapons.

Mukta, Amukta, Muktāmukta and Yantramukta are the main types of weapons

.Mukta means which is released completely from the user. The Mukta type of weapons can be thrown by hand. Discus is an example.

Amukta type of weapons cannot be released from the hand. The weapons like gadā, śūla are best examples.

Weapons which are sometimes released are called Muktamukta. Spear is an example of this variety. Weapons hurled with the help of machines are called Yantramukta and catapult ball is an example for this.

Karamukta is again classified into Yantramukta and Mantramukta. For example archery is Yantramukta and Braḥmāstra is Mantramukta.

In Yuktikalpataru, weapons are classified into two types. They are nirmāya and māyika. The sword, bow, arrow, ardhacandra, nārāca, paraśu, cakra, spear, parikha etc are included in nirmāya group of weapons. Dahanāgni [fire], water and taptataila (boiled oil) were included in māyika group of weapons.

In Ś ukranīti weapons are classified into two main groups. They are astra and śastra.

Weapons which are used by the help of mantra, yantra or fire are called śastra and other types of weapons are generally called astra. Astra type of weapons is again classified into two, ie.nālīkam and māntrikam.

Battle

Types of Battle According to the usage of weapons ancient scholars classified battle into different type. Śukranīti classified battle into daivikam, āsuram mānavam and bāhuyudḍha.

The divine weapons are used in daivīka type of battle. Nālīka type of weapons are used in āsuram and that of śastra and astra type of weapons are used is mānavam. Bāhuyudḍha is the fourth type of battle in Ś ukranīti.

Agni purana describes four types of battle. The battle which is fought by using dhanus is considered uttama and that of using prāsa is considered as madhyama type battle. Using khadga to fight in a battle is adhama and bāhuyuddha is considered as adhamādhama.

According to Vasiṣṭha, battle can be classified into seven as per the types of weapons used in it. They are by using bow and arrow (archery), discus, spear, gada, dagger, mace and dvandvayuddha (wrestling). In Śukranīti, battle is classified into four, i.e. uttama, madhyama, adhama, adhamādhama.

Astra group of weapons are used in battle with the support of mantras. This is the best class of war – uttama and the gun used in that war can be called madhyama. Ś astra group of weapons (spear) are considered as adhama and that of Bāhuyuddha (wrestling) is adhamādhama.

 Besides these varieties of battle another two types of battle are mentioned. They are Māyayuddham and Rājayuddham. Weapons which are released by the help of a string are called Yantramukta. Tomāram is released by hand, such is known as pāṇimukta. From these narrations, one can safely conclude that ancestors who have gone through with minute details of warfare and artilleries have provided a clear picture about ancient Indian warfare. War and weapon manufacturing is very closely related with their day to day life.

 Teachers In Dhanurveda, the quality of Ācārya is explained in a verse. He should be efficient in the seven types of battles

Those who knew seven ways of fighting are entitled as Ācārya and he who teaches the art of warfare is called as Ācārya. He who is accustomed with four ways of fighting is known as Bhārgava. Who knows only two type of fighting is Yoddhā (warrior) and the person who knows only one type of fighting is termed as gaṇaka. Bhārgava is a brahmanical family name commonly found in Punjab and Utharpradesh. So it is difficult to say whether the name is derived from the sage Bhṛgu or the teacher expert in four types of warfare. Divisions of weapons by casts Besides this classification of weapons on the usage of weapons, each weapon is again classified into a variety of classes.

The Brahmins use archery; Kṣatriyas use khadga (sword), Vaiśya use kunta (spear) and śūdra use gadā (mace) respectively. From the above verse one can understand the priority given to weapons by ancestors. The lower communities were engaged in making of weapons while the upper classes and saints were the theoretical authors of artillery science. Almost all scholars accept the classification of weapons by cast. There was no different opinion about the classification. From this Information, it is also revealed that the cast system has domination in ancient Indian society. Methods of teaching archery Dhanurveda also narrates training of weapon in detail. It deals with the training of student and also describes the ideal time and place for starting training.

The Ācārya will teach the science of archery only to the Brāhmins who have successfully come through the tests and they should not be greedy, ungrateful and foolish people. From the above verse, it is clear that ancient scholars tried their best to avoid some communities from weapon trainings. Auspicious time for training

Vasiṣṭha's Dhanurveda samhita narrates the ideal time for starting weapon training. The weapon training may be started after the keen observation of nakṣatra, tithi, day etc. The ideal time for initial teaching and learning of archery is found with some auspicious tithi and stars-hasta, punarvasu, puṣya, rohiṇi, uttaraphālguni, uttarabhādrapāda, uttarāṣāda, anurāda, aśvini, revati. Learning archery will be fruitful when the moon is present in one's zodiacal sign of lagna or occupies its third, sixth, seventh, tenth or eleventh position. Also the book tells that learning archery on the third, fifth, seventh, tenth twelth and thirteenth lunar day titḥi is very auspicious. They believed that Sunday, Thursday and Friday are good for starting the learning.

To start with the teaching the Ācārya should submit offerings to deities and also should arrange for putting up an oblation of fire, where an offering of clarified butter is made along with chanting hymns. The disciples should offer feast for the Brahmins and virgins and should also worship the hermits or yogins who are the ardent devotees of lord Śiva. Thereafter the disciple should salute his teacher by offering food, garlands, clothes and ornaments.

 The student who is on fast should wear the deer skin and with folded hands begs the teacher to teach him archery. The teacher then in order to destroy the evils and sins and also to bring success to his disciple, should touch different parts of the body along with recitation of different Vedic hymns or mantras as mentioned by lord Śiva. Then the teacher prays to lord Mahādeva to dwell at the crown of his head or palate, lord Kṛṣna at his arms, Lord Brahma on the navel and lord Gaṇeś a on the thighs. The teacher then offers the bow to his disciple after purifying it with the hymns mentioned in Dhanurveda. As referred to in the texts on war science, Brahmins are authorized to deal with bow and arrow. It indicates the fact that even Brahmin was engaged in battles. At least a section of Brahmins must have engaged in wars. In Kerala there are some Brahmins who are not entitled to study Vedas. They are known as śastradvija- Brahmin with weapon.

 In Malayalam, they are known as cāttiras. Sanghakali or cāttirānga was an interesting art form performed by such Brahmins. BOW AND ARROW In our ancient texts Dhanurveda is used as the scientific term for the treatises on weapon in general. The main division of Dhanurveda deals archery. So it is called Dhanurveda. Archery is the main part of Dhanurveda. Different types of bow and arrows are dealt with in it. Materials for bow Metal, wood and horn of some wild animals are used for good bow. Gold, copper, silver etc. are the metals commonly used for the manufacturing of bow. Sandal and bamboo are the commonly used.

Bamboo is the most commonly used wood. Ś arabha's (a kind of animal) horn is also said to be used for making bow Bow and Arrow

The bow made of bamboo having odd joints like three, five, seven and nine are always considered auspicious. And the bow having four, six and eight joints should be discarded.
Bow is the most important weapon of the ancestors in everywhere in the world. A variety of bows and arrows are referred to in Dhanurveda. The bow is classified into two major divisions. The two types of bow are yaugika and yuddhacāpa

. Yaugika or composite bow is made up of horn, wood and sinew and is mainly used for practice. Yuddhacāpa is for fighting.

Dhanurveda also gives importance to the archer [bow man]. If the archer is troubled by the bow, he can't see and shoot the aim easily. Hence the size of the bow should be proportional to the size and health of the archer. The length of the common man's bow should always be shorter than the divine bows. The bow measuring five and a half hasta is recognized as the best. This type of glorious and best bow was in possession of Lord Mahādeva. The measure of most auspicious and suitable bow for common man's use   is four hastas. Twenty four angulas make one hasta and four hastas make one bow.

According to some authorities the bow should measure nine vitasti (ie.41/2 Cubits).Vitasti is the distance between the wrist and the tip of the fingers and is said to be equal to 12 angulas or about 9 inches.2 Bows which are not useful The text also discusses about the bows which are not suitable for use. One should not use very old fragile bows and also the bows made up of unseasoned and unripe bamboo or cane and also the bow, which had earlier been used in the family by the ancestors. The bow without string and the bow encompared with string should be avoided. Vasiṣṭha says: One should not use very old fragile bows and also the bows made up of unseasoned and unripe bamboo or cane and also the bow which had earlier been used in the family by the ancestors. The burnt or perforated bow should also be avoided. The bow without string and the bow encompassed with string should be avoided. Due to the defect in the stem, joints may appear at the neck and also at the bottom of the bow. Such bows should not be used. The bows made up of unripe bamboo break up easily. Bows made up of very fragile bamboo do not possess the elasticity. Hence these are considered to be of inferior quality. Again bows used by the family   ancestors should never be used, since these may bring dispute among friends. String String is one of the important parts of a bow. Bow is tied up at both ends with a strong cord. It is named as string or guṇa or jyā in Sanskrit. The above verses of Vasiṣṭha's Dhanurveda samhita explain the qualities of string. The good string is made up of silken thread, which is twisted to the thickness of the little finger and its length is equal to that of bow. The string should be pure, polished and without joint. Three strings are taken and twisted in such a way that it becomes neither too thick nor too smooth and has a thickness equal to that of little finger. This string can sustain strain during battles. If silk is not available, the sinew of deer, buffalo or bull can also be used for making bow strings. The freshly killed hide of cow or goat devoid of hairs is made into threads. The bowstring made out of this thread is considered as best. The above verse narrates the ideal time for choosing bow string. In the month of bhādra pada, when bark of sun plant matures the fine threads of its skin can be taken out to make a fine bowstring. It will be lasting too. Arrows One of the most important and powerful part of archery is the arrow. An arrow usually consists of a shaft with an arrowhead attached to the front end, with fletching and nocks at the other.   The size of arrow varies greatly across cultures, ranging from eighteen inches to five feet. The shaft is the primary structural element of the arrow, to which the other components are attached. Traditional arrow shafts are made from lightweight wood, bamboo or reeds, while modern shafts may be made from aluminum, carbon fibre reinforced plastic or composite materials. Composite shafts are typically made of from an aluminum core wrapped with a carbon fibre outer .

Different types of Arrows   The arrowhead or projectile point is the primary functional part of the arrow, and plays the largest role in determining its purpose. Fletching are found at the back of the arrow and provide a small amount of drag used to stabilize the flight of the arrow. They are designed to keep the arrow pointed in the direction of travel by strongly damping down any tendency to pitch or yaw. Ancestors had done a great research in this field, so that   1 http://en.wikipedia.org/wiki/Arrow 80 there are sufficient descriptions of different type of arrows. A variety of arrows are used to achieve different target. The arrows are mainly classified into three. They are male, female and neuter. The classifications are under the range of defeating the aims. The male type is able to pierce an object placed at a long distance. The female type is a fast runner and the neuter type is helpful in practicing archery. Again the arrows are classified by the purpose. These classifications vary in each part of ancient India. Nature of Arrows Dhanurvēda of Vasiṣṭha refers to arrows as follows-

The arrow should be made out of matured pale yellowish reed plants. Odd number of joints like few trim is preferred. Also it should not be weak or split. The reed which is round but hard and which has been grown in a favorable place may be accepted. The arrow should measure a length of two cubits or five angulas. In thickness it should be equal to that of the smallest finger. A curved arrow should be made straight. The feathers of cow, swam, brown hawk, peacock, vulture, osprey are excellent for fetching the arrow. Length of these feathers should be six angulas, but for arrows of śarnga (lurn) bow, feathers of ten angula have been recommended. These should be tied strongly with sinew and thread at the rate of four feathers per reed arrow. Division of Arrows Arrow heads are known as phāla in Sanskrit. The shape of phāla is of many kinds. They are different type of arrows. The shapes of arrow heads vary according to different regions. As per Dhanurvēda they are, Ārāmukha, Kṣurapra, Gopuccha, Ardhacandra, Sūcīmukha, Bhalla, Vatsadanta, Dvibhalla, and Kākatunda. Ārāmukha or serrated arrow head is similar to an owl and Kṣurapra, razorblade, gopuccha, cow's tail, Ardhacandra, crescent shaped, Bhalla, a spear headed, Vatsadanta, teeth of a calf, Dvibhalla, two pronged, Karṇika, petal of a flower, Kākatunda, beak of a crow respectively. The Ārāmukha can cut through the skin, while Kṣurapra used for cutting up arrows of the enemy or aiming at his hand. Gopuccha is good for general aim ardhacandra can cut through enemy's head, neck and bow. The Sūcīmukha can pierce the armor of the enemy and Bhalla pierces enemy's heart. Vatsadanta is used for cutting up the bowstring. Dvibhalla is used for entangling enemy's arrow, karṇika is used for cutting up the arrow made up of nārāca (iron) and Kākatunda can pierce any unpiercable object. Gopuccha is a different type of arrow of which the head is made up of sapless wood and has got a thorn of three angulas length fixed at its tip. Applying poison over arrow head Ancestors made poisoned arrows to defeat their enemies. They were well aware about making of poisoned arrow heads.

The above verse narrates the method of Phālāpāyana. The technique of applying poison on arrowheads is called the Phālāpāyana. Phālāpāyana is done to harden the edges of the metals fitted with the arrow heads. It is done by the applications of pastes of certain plants on the arrowheads or shafts. These poisonous arrows are able to pierce even unpiercable iron armor of the enemy

The application of juices of poisonous plants was used for making poisonous arrow heads. When the colour of the white red plant turns yellow after receiving rain water on the day of svāti nakṣatra, its root becomes poisonous. This root, if applied on the arrow heads acts as fatal for enemies. The best way to recognize the plant is that it trembles always, even when the wind is not blowing

The above verses of Dhanurveda provide some techniques of phālāpāyana (making poisons arrow). The Peepul tree's bark along with saindhava (rock salt) and kuṣta (costus, a medicinal plant) should be mixed with cow's urine. The paste should be smeared over the arrow heads and then it should be heated in fire till it becomes blue in colour like the peacock's neck, then it has the poisonous effect. It should be washed in water then, and such arrows can pierce the strongest enemy. From this it can be safely concluded that ancestors had tried even to make poisoned weapons to defeat their enemies. Nārāca and Nālika .

Nārāca and Nālika are the other two important types of arrows. Nārāca is the name of those arrows which are entirely made up of iron. Five big feathers remain attached to nārāca. It is a very strong type of shaft, only a strong and skilled archer can use it.

 Nālika are shot through tubular instruments. These arrows can be shot at a great distance from high places and especially useful in the siege craft.   In the texts of Dhanurveda, there is an apt reference about the aim also. Aims are four in number

The aim is classified into four –sthira, sacala, calācala and dvayācala. Firstly the archer should stand still in front of a still object and then practice. If he becomes able to pierce the object in three different ways, then only he will be sthirabhēdi (archer- expert in piercing still object). When the archer stands still and able to pierce an unsteady object under instruction of the teacher, he will be considered as calabhēdi (able to pierce unsteady object). When the archer is himself in a moving or walking condition and tries to pierce a steady object, then it calācala but this is a very difficult position. When the shooter and his aim both are in moving state and the archer shoots his aim, then he is dvayacala. This can be learnt only through a hard labour and practice. Through labour and practice one learns to shoot perfectly and quickly. One becomes a successful citrayodhi and can win battles only through industry. To become a perfect archer one should practice archery only under the guidance of a teacher. Sanskrit texts mention a variety of weapons, the production, teaching methods and the place and time of learning arms in detail. From this we can safely conclude that our ancestors were well aware of not only spiritual but also physical world and the problems of the society life. SWORD- The royal weapon Sword is a long, edged piece of forged metal, used in many civilizations throughout the world, primarily as a cutting or thrusting weapon. Sword fundamentally consists of a blade, a hilt, and a cross 88 guard, typically with one or two edges for cutting, and a point for thrusting. In ancient times, sword was considered as the Royal weapon.

Gandharva Veda is the Veda or Science of Sound Vibration Healing Resonence. This is an ancient science that was revealed by Rshis through their inner realization of sound and it's effects to ordain peace and harmony on people and humanity. Gandharva Veda is the source of Indian Classical Music, here we present ancient texts on this illustrious subject.

Gandharva Veda is one of the structuring dynamics of Rk Veda. It highlights the INTEGRATING and HARMONIZING qualities involved in structuring Rk Veda. With reference to consciousness, Gandharva Veda comprises the specific sets of laws of Nature that are engaged in promoting the quality of Rishi — the observer, the witnessing quality — within the Samhita level of consciousness, providing a structure to the eternally silent, self-referral, self-sufficient, fully awake state of consciousness, which is intimately personal to everyone. (complete table of qualities)

Gandharva Veda represents the integrating quality of consciousness. It has predominantly a Rishi quality.

Gandharva Veda is all the cycles and rhythms of the physiology:

— hormonal secretion

— metabolism

— cardiac rhythms

— circadian rhythms, etc.

Which keep the mind and body in tune with the rhythms of Nature?

Vedanga

hiksha (Phonetics)

Its aim is the teaching of the correct pronunciation of the Vedic hymns and mantras. The oldest phonetic textbooks are the Pratishakyas (prātiśākhya), describing pronunciation, intonation of Sanskrit, as well as the Sanskrit rules of sandhi (word combination), specific to individual schools or Shakhas of the Vedas.

Kalpa (Ritual Canon)

It contains the sacrificial practice and systematic sutras. There are three kinds of Sutras part of Kalpa:

• Śrautasūtras, which are based on the Shruti, and teach the performance of the great sacrifices, requiring three or five sacrificial fires

• Smartasūtras,or rules based on the Smriti or tradition. The Smartasūtras have two classes viz.

• Grhyasutras, or domestic rules: They are basically treating the rites of passage, such as marriage, birth, namegiving, etc., connected with simple offerings into the domestic fire.

• Dharmasutras or customs and social duties:The Dharmasūtras are the first four texts of the Dharmasastra tradition and they focus on the idea of dharma, the principal guide by which Hindus strive to live their lives. The Dharmasūtras are written in concise prose, leaving much up to the educated reader to interpret.The most important of these texts are the sutras of Āpastamba, Gautama, Baudhāyana, and Vasiṣṭha.

• The Dharmasūtras can be called the guidebooks of dharma as they contain the rules of conduct and rites as practiced in the Vedic schools. They discuss about the duties of people at different stages of life like studenthood, householdership, retirement and renunciation. These stages are also called āśramas. They also discuss about the rites and duties of kings, judicial matters, and even personal practices like the regulations in diet, offenses and expiations, daily oblations, and funerary practice.

Vyakaran (Grammar)

Vyakaran includes the Aṣṭādhyāyī, of Panini. Most of the work of very early Indian grammarians ranging to 8th century BC is lost. There are 4 parts of Panini's Grammar:

• Śivasūtra: Contains phonology (notations for phonemes specified in 14 lines)

• Aṣṭadhyāyī: Contains morphology (construction rules for complexes)

• Dhātupāṭha:Contains list of roots (classes of verbal roots)

• Gaṇapāṭha: Contains list of classes of primitive nominal stems

Nirukta (explanation)

It is traditionally attributed to Yāska, an ancient Sanskrit grammarian. It deals with etymology, particularly of obscure words, especially those occurring in the Veda

Chhanda (Vedic meter)

It measures and divides Vedic Mantras by number of padas in a verse, which is called Padas. Number of padas divides each verse, hymn, or mantra and number of syllables divides each pada. There is a distinct taxonomy on this basis. For example a Gayatri Chhanda has 3 padas of 8 syllables containing 24 syllables in each stanza. Similarly, Anuṣṭup has 4 padas of 8 syllables containing 32 syllables in each stanza. Anustup is the typical shloka of classical Sanskrit poetry

Jyotisha (Astrology)

It describes rules for tracking the motions of the sun and the moon and the foundation of Vedic Jyotish.

Shastra

Shastra.

"Shastra" commonly refers to a treatise or text on a specific field of knowledge. In early Vedic literature, the word referred to any precept, rule, teaching, ritual instruction or direction.[1] In late and post Vedic literature of Hinduism, Shastra referred to any treatise, book or instrument of teaching, any manual or compendium on any subject in any field of knowledge, including religious.[1] It is often a suffix, added to the subject of the treatise, such as

1.   Yoga-Shastra,

2.   Nyaya-Shastra,

3.   Dharma-Shastra,

4.   Koka- or Kama-Shastra,[7]

5.   Moksha-Shastra,

6.   Artha-Shastra,

7.   Alamkara-Shastra (rhetoric),

8.   Kavya-Shastra (poetics),

9.   Sangita-Shastra (music),

10.   Natya-Shastra (theatre & dance) and others

The term Kama Sutra comes from an ancient Hindu textbook written in Sanskrit about erotic love called The Kamasutra. Very little is known about its author, Vatsyayana Mallanga, other than his name. It was written probably sometime in the third century.

Contrary to popular belief, The Kamasutra is not only a book about lovemaking and different sex positions. It covers other topics such as the art of living well, the nature of love, finding a life partner, and taking care of your love life. The sexual concepts that most people associate with the Kama Sutra became known in Western culture at the end of the 19th century, with the adaptation of the Kamasutra manual by a British explorer named Richard Francis Burton.

While considered in retrospect a wildly inaccurate and misleading translation, the sexual positions described in Burton's version are what caught people's attention. That's one reason people still think of the Kama Sutra as only a book of exotic sex positions.

How Does it Work?

The Kamasutra was written in an abstract and vague form of Sanskrit, which has made it hard to accurately translate it to modern English. It is made up of 1,250 verses that are split into 36 chapters. The overall book is separated into 7 different parts:

1.Dattaka — General Principles

The book begins with an introduction and history of the four aims of Hindu life. It includes advice and philosophy on topics such as how to live an honorable life and how to acquire knowledge.

2.Suvarnanabha — Amorous Advances and Sexual Union

Part two goes straight into the sexual content that many people associate with the Kamasutra. There are details on 64 different types of sexual acts, everything from embracing and kissing to more aggressive acts like grabbing and slapping.

3.Ghotakamukha — Acquiring a Wife

Part three focuses on the life of a bachelor and ways of courting a woman for marriage. They are mostly based on astrological compatibility and the benefits of marriage for the families involved — in accordance with the social caste system in India.

4. Gonardiya — Duties, and Privileges of The Wife

Part four discusses the author's view of the traditional duties of a wife: cooking, cleaning, and catering to her husband. This section seems out of place with modern relationships and views about gender roles, but keep in mind that it was written thousands of years ago, in a different time and place.

5.Gonikaputra — Friends and Family

Part five outlines roles of different genders in non-sexual relationships. It teaches how to understand emotions and discusses ways to deepen bonds between family and friends.

6.Charayana — Courtesans

Part six explores a man's use of courtesans, or prostitutes, to build confidence in his sexual abilities before pursuing a wife. It also gives advice on fixing past relationships with friends and lovers, how to become wealthy, and what to look for in a committed partner.

7.Kuchumara — Occult Practices

The book finishes with a section on sexual legends, myths, and practices. This includes personal grooming, the use of perfumes and oils, and homeopathic remedies for sexual problems.

Sex Positions of the Kama Sutra

While most of the poses are complex and difficult, there are some that are easy enough for most people to try. Examples include:

The Tigress

This position is similar to the reverse cowgirl position. To begin, one partner lies down on their back, and the other climbs on top, sitting upright but facing toward their partner's feet. The person on top rocks back and forth, controlling the pace and depth of the penetration.

The Milk and Water Embrace

One partner sits in a chair, preferably one with no arms. The other partner sits on top of them, facing away.

Clasping Position

This position is a variation of the missionary position. Both partners lie down across a comfortable surface, their legs stretched out, and aligned. One partner lies on top of the other, bellies touching, while the other partner thrusts from the bottom position.

Queen of Heaven

One partner lies on their back with knees bent to the chest. The other partner positions their thighs on the outside of the other person's bent legs and leans forward.

Ballet Dancer

One person stands and balances on one foot, then wraps their opposite leg around their partner's waist for support.

Splitting the Bamboo

One person stretches out flat and shifts their weight to one side, then raises a leg up and rests it on their partner's shoulder. Their other leg remains stretched out underneath their partner.

The Padlock

One partner sits on a firm surface like a table and reclines back slightly. The other partner leans in, lifting the other person's pelvis up, and cradling it securely. Then the seated person clasps their feet together behind the standing partner's back.

Myths about Kama Sutra

Contrary to popular belief, the Kama Sutra explores many aspects of love, marriage, and a connection with a partner.

How to Try Kama Sutra Safely

Make sure you and your partner are physically able to try some of the Kama Sutra's positions. If you feel any pain or discomfort in a pose, stop and try something else.

Natyashastra,

states Susan Schwartz, are "in part theatrical manual, part philosophy of aesthetics, part mythological history, part theology".[8] It is the oldest surviving encyclopedic treatise on dramaturgy from India, with sections on the theory and practice of various performance arts.[49][50] The text extends its reach into asking and understanding the goals of performance arts, the nature of the playwright, the artists and the

spectators, their intimate relationship during the performance.[8][51] Natya topics as envisioned in this text includes what in western performing arts would include drama, dance, theatre, poetry and music.[8] The text integrates its aesthetics, axiology and description of arts with mythologies associated with Hindu Devas and Devis.[2][8] Performance arts, states Natyashastra, are a form of Vedic ritual ceremony (yajna).[52][53]

The general approach of the text is treat entertainment as an effect, but not the primary goal of arts. The primary goal is to lift and transport the spectators, unto the expression of ultimate reality and transcendent values.[8][54] The text allows, states Schwartz, the artists "enormous innovation" as they connect the playwright and the spectators, through their performance, to Rasa (the essence, juice).[8][55]

The "rasa theory" of Natyashastra, states Daniel Meyer-Dinkgräfe, presumes that bliss is intrinsic and innate in man, it exists in oneself, that manifests non-materially through spiritual and personally subjective means.[55][56] Performance arts aim to empower man to experience this rasa, or re-experience it. Actors aim to journey the spectator to this aesthetic experience within him.[55] Rasa is prepared, states Natya Shastra, through a creative synthesis and expression of vibhava (determinants), anubhava (consequents) and vyabhicharibhava (transitory states).[55][57] In the process of emotionally engaging the individual in the audience, the text outlines the use of eight sentiments – erotic, comic, pathetic, terrible, furious, odious, heroic and marvellous.[55][58][59]

The text discusses a variety of performance arts as well as the design of the stage.[3][60]

Drama\

Various classical dance forms

The Natyashastra defines drama in verse 6.10 as that which aesthetically arouses joy in the spectator, through the medium of actor's art of communication, that helps connect and transport the individual into a super sensual inner state of being.[61] The Natya connects through abhinaya, that is applying body-speech-mind and scene, wherein asserts Natyashastra, the actors use two practices of dharmi (performance), in four styles and four regional variations, accompanied by song and music in a playhouse carefully designed to achieve siddhi (success in production).[61] Drama in this ancient Sanskrit text, thus is an art to engage every aspect of life, in order to glorify and gift a state of joyful consciousness.[62]

The text discusses the universal and inner principles of drama, that it asserts successfully affects and journeys the audience to a supersensual state of discovery and understanding. The stories and plots were provided by the Itihasas (epics), the Puranas and the Kathas genre of Hindu literature.[62]

The text states that the playwright should know the bhavas (inner state of being) of all characters in the story, and it is these bhavas that the audience of that drama connects with.[62] The hero is shown to be similar to everyone in some ways, trying to achieve the four goals of human life in Hindu philosophy, then the vastu (plot) emerges through the "representation of three worlds – the divine, the human, the

demonic".[63][64] Drama has dharma, it has artha, it has kama, it has humor, fighting and killing. The best drama shows the good and the bad, actions and feelings, of each character, whether god or man.[63][64]

According to Natyashastra, state Sally Banes and Andre Lepeck, drama is that art which accepts human beings are in different inner states when they arrive as audience, then through the art performed, it provides enjoyment to those wanting pleasure, solace to those in grief, calmness to those who are worried, energy to those who are brave, courage to those who are cowards, eroticism to those who want company, enjoyment to those who are rich, knowledge to those who are uneducated, wisdom to those who are educated.[63][65] Drama represents the truths about life and worlds, through emotions and circumstances, to deliver entertainment, but more importantly ethos, questions, peace and happiness.[63]

The function of drama and the art of theatre, as envisioned in Natyashastra states Daniel Meyer-Dinkgräfe, is to restore the human potential, man's journey of "delight at a higher level of consciousness", and a life that is enlightened.

The text goes into specifics to explain the means available within dramatic arts to achieve its goals. Just like the taste of food, states Natyashastra, is determined by combination of vegetables, spices and other articles such as sugar and salt, the audience tastes dominant states of a drama through expression of words, gestures and temperaments.[67] These dominant states are love, mirth, sorrow, anger, energy, terror, disgust and astonishment. Further, states the text, there are 33 psychological states which are transitory such as discouragement, weakness, apprehension, intoxication, tiredness, anxiety, agitation, despair, impatience.[68] There are eight temperamental states that a drama can deploy to carry its message.[69] The text describes four means of communication between the actors and the audience – words, gestures, dresses and aharya (make ups, cosmetics), all of which should be harmonious with the temperament envisioned in the drama.[70] The text discusses the dominant, transitory and temperamental states, for dramatic arts, and the means that an artist can use to express these states, in chapters 6 through 7.[71]

The Natyasastra describes the stage for performance arts as the sacred space for artists, and discusses the specifics of stage design, positioning the actors, the relative locations, movement on stage, entrance and exit, change in background, transition, objects displayed on the stage, and such architectural features of a theatre; the text asserts that these aspects help the audience get absorbed in the drama as well as understand the message and the meaning being communicated.[72][73][74] After the 10th-century, Hindu temples were designed to include stages for performance arts (for example, kuttampalams), or prayer halls (for example, namghar) that seconded as dramatic arts stage, based on the square principle described in the Natyasastra, such as those in the peninsular and eastern states of India.[

Kabya Sastra

so far in the series we have talked about Poetry (Kavya) and the Poetics (Kavya Shastra), let us round up the discussion with a few words about the Poet (Kavi) himself.

Poetry in India, of course, is very ancient; and has been in vogue even from the Vedic times. In the context of Rig Veda, Kavi refers to one who through his intuitional perception (prathibha), sees the unseen (kavihi-krantha-darshano- bhavathi) and gives expression to his vision (Darshana), spontaneously, through words. He is the wise Seer. It was said: one cannot be a Kavi unless one is a Rishi (naan rishir kuruthe kavyam). However, not all Rishis are Kavi-s. A Kavi is a class by himself.

But, the Kavi, the Poet, we are referring to in the series and here is not the Vedic Kavi. He is far different from the Vedic Kavi in almost every aspect; and, is vastly removed from him in space, time, environment, attitude, objective etc. And, his poetry is neither a Rik nor a mantra; but, is a cultivated art , ornate with brilliance and flashing elegance.

The Sanskrit poet who creates Kavya is neither a Rishi nor a seer; but, he is very much a person of the world who has taken up writing as a profession to earn his living. He usually sprang from a class that possessed considerable cultural refinement. And, Sanskrit being the language of the academia and the medium of his work, he was well versed in handling it.

He is urbane, educated and is usually employed in the service of a King. Apart from writing classy poetry, his other main concern is to please and entertain his patron. He is very much a part of the inner circle of the Court; and, is surrounded by other poets and scholars who invariable are his close rivals in grabbing the King's attention and favors.

During those times, a Great King would usually have in his service a number of poet-scholars who vied with each other to keep the King happy and pleased. Their main task was to entertain the King. Apart from such Court poets, there were a large number of wandering bards who   sang for the common people. They walked through towns and villages singing songs of love and war. Of course, their recitations were not classy or of the standard of the court poet-singers.

Court poet

As Vatsayana (in his Kama sutra) describes, the Court poet, generally: is an educated suave gentleman of leisure having refined taste and versatility; fairly well-off; lives in urban surroundings (Naagara or Nagarika); loves to dress well (bit of a dandy, indeed- smearing himself with sandal paste, fragranting his dress with Agaru smoke fumes, and wearing flowers); appreciates art, music and good food; and, loves his occasional drink in the company of friends and courtesans.

A Court poet, sometimes, is also portrayed as rather vain, nursing a king-sized ego; and, desperately yearning to be recognized and honored as the best, over and above all the poets in the Royal Court.

Thus, his attitudes find expressions in various ways – outwardly or otherwise. The dress, polished manners and cosmetics all seemed to matter. But, more importantly, it seemed necessary to have a sound educational foundation, idioms of social etiquette , and a devotion to classical literature (Sahitya) , music (Samgita) and other fine arts (lalita kala). Though his Poetry was developed in the court, its background was in the society at large.

The Poet

Rajasekhara an eminent scholar, critic and poet, was the Court poet of the Gurjara – Prathihara King Mahendrapala (Ca.880 to 920 AD) who ruled over Magadha. In his Kavyamimamsa, which is virtually an Handbook guiding aspiring poets, Rajasekhara outlines the desirable or the recommended environment, life-style, daily routine, dispositions etc for a poet,   as also the training and preparations that go to make a good poet.

Sanskrit Kavya, in middle and the later periods, grew under the patronage of Royal courts. And, sometime the King himself would be an accomplished scholar or a renowned poet.

According to Rajasekhara, many of the poets depended on the patronage of local rulers and kings. Among them, the more eminent ones were honored as Court-poets (Asthana Kavi). Those who performed brilliantly endeared themselves to the king; and, were richly rewarded.There was, therefore, a fierce rivalry among the poets in the King's court to perform better than the next poet; and , somehow, be the king's favorite.

A successful poet would usually be a good speaker with a clear voice; would understand the language of gestures and movements of the body; and would be familiar with other languages , arts as well.

An archetypical picture of a poet that Rajasekhara presents is very interesting. The Kavi, here, usually, lives in upper middle class society that is culturally sensitive. His house is kept clean and comfortable for living. He moves from places – changing his residence – about three times in an year, according to the seasons. His country residence has private resting places, surrounded by antelopes, peacocks and birds such as doves, Chakora, Krauncha and such other. The poet usually has a lover (apart from his wedded wife) to whom he addresses his love lyrics.

As regards the daily life of the poet, Rajasekhara mentions the Kavi would usually be a householder following a regulated way of life such as worshipping at the beginning of each day, followed by study of works on poetics or other subjects or works of other poets. All these activities are, however, preparatory; they stimulate his innate power of creativity and imagination (prathibha). His creative work proper (Kavya-kriya) takes part in the second part of the day.

Towards the afternoon, after lunch, he joins his other poet-friends,seated comfortably (tatra yathāsukhamāsīnaḥ kāvyagoṣṭīṃ pravarttayed) where they indulge in verse-riddle games structured around question-answers (Prashna-uttata). Sometimes, the poet discusses with close friends the work he is presently engaged with – antarāntarā ca kāvyagoṣthīṃ śāstra-vādā-nanujānīyāt.

In the evening, the poet spends time socializing with women and other friends, listening to music or going to the theater.   The second and the third parts of the night are for relaxation, pleasure and sleep.

Of course, not all poets followed a similar routine; each had his own priorities. Yet; they all seemed to be hard-working; valuing peace, quiet and the right working conditions. They were of four kinds: caturvidhaścāsau/asūryampaśyo,niṣaṇṇo, dattāvasaraḥ, prāyojanikaśca /

There were also those who chose to write when moved or inspired or during their leisure . They were, as Rajasekhara calls them, occasional poets (data-vasara). Among them was a class who wrote only on occasions (prayojanika) to celebrate certain events – dattāvasaraḥ, prāyojanikaśca.

Rajasekhara also mentions of those poets who were totally devoted to their poetic work. They invariably shut themselves from daylight (asūryampaśyo), dwelling in caves or remote private homes away from sundry noises and other disturbances

As regards the poet's writing materials and other tools, Rajasekhara mentions that the writing materials are almost always within the reach of the poet; and, are contained in a box. The contents of the box were generally: a slate and chalk; a stand for brushes and ink-wells; dried palm leaves (tāḍipatrāṇi) or birch bark (bhūrjatvaco); and an iron stylus (kaṇṭakāni). The common writing materials were palm leaves on which letters were sketched with metal stylus. The alternate writing surface was the birch bark cut into broad strips. The slate and chalk was for preparatory or draft work.

Sangita (Devanagari: □□□□, IAST: saṃgīta), also spelled Samgita or Sangeeta, refers to "music and associated performance arts" in the Indian traditions.[1] According to Guy Beck, the root "saṃ-" implies "combining, coming together, convergent wholesome blending, unison" in the context of musical arts.[2] Sangita connotes any form of singing with music, harmonious recitation or chorus singing in particular.[3] In some medieval era literary genre such as the Puranas and poetic texts such as Kathasaritsagar, a related term Sangita-shastra and Sangita-vidya mean the "art, science or knowledge of singing and dancing with music".[3] According to Alison Arnold and Bruno Nettl, the modern term music fails to capture the historic sense of "Sanskrit sangita and Greek mousike". In the Indian tradition, the term sangita includes melodious singing, rhythmic dancing, instrumental music, classical, provincial, ritual chanting and incidental forms of music-related performance arts.[4][5]

Sound

Nada (intelligible sound) is

the treasure of happiness for the happy,

the distraction of those who suffer,

the winner of the hearts of the hearers,

the first messenger of the god of love...

the fifth approach to the eternal wisdom, the Veda.

—Sangita Bhasya, A text on music

Sangita is broadly categorized as consisting of three interrelated knowledges: gita (vocal music, song), vadya (instrumental music), and nrtya (dance, movement).[7][8][9] These ideas appear in the Vedic literature of Hinduism such as in the Aitareya Brahmana, and in early post-Vedic era Sanskrit texts such as the Natya Shastra, Panchatantra, Malvikagnimitra and Kathasaritsagara. A stringed instrument is described with proportional lengths in Jaiminiya Brahmana and Aitareya Aranyaka, and these are compared to poetical meters.[10] It is referred to as "Gandharva Sangita" in the ancient Hindu texts,

whose leader is mentioned to be the Vedic sage Narada – the author of seven hymns of the Rigveda.[11] The Hindu goddess Saraswati in revered in these texts as the source and patron of sangita.[11]

Some important Sanskrit manuscripts relating to Sangita include Sangita Ratnakara,[12] Sangita Ratnavali, Sangita Ratnamala, Sangita Darpana, Sangita Siromani and Sangita Sagara.[3] One of the earliest known Sangita treatise is Sangita Meru, authored by Kohala – the student of Bharata Muni of Natya Shastra fame. The text is lost to history, but its existence is known because it has been quoted and cited in other Indian texts.[13]

The 13th-century Sangita Ratnakara text has been influential to North and South Indian music traditions, and is available in many languages. It states, according to Tarla Mehta, that "Sangita constitutes song, dance and musical instruments".[14] The fusion of experience and concept, states Mehta, established Sangita as an integral component of play production in the Indian tradition.[14]

Other known Sangita-related Hindu texts include, with exceptions as noted:

•

INTRODUCTION TO NYĀYA

(Tarka śāstra) The School of Logicians the Nyāya is the discipline of logic, and provides the only sound methodology of philosophical inquiry into the nature of knowledge and the objects of knowledge. It is the means to obtain Right Knowledge (pramā) about the Self and to discover the purpose of life. The only way we can impart our knowledge and experience to others and to elucidate for ourselves their implications for the rest of our lives and also to defend their validity against hostile criticism is by means of logic.

The term Nyāya in Sanskrit signifies "going into a subject," — that is, an analytical investigation of the subject through the process of logical reasoning. Vatsyāyana, the classic commentator on the Nyāya-Sūtra, defines it as: "a critical examination of the objects of knowledge by means of the canons of logical proof." The Nyāya is also called Tarka-vidya, "science of reasoning," or Vāda-vidya "science of argument."'

 The founder of the Nyāya was Gautama (Gotama) who is frequently-referred to in the literature as Akṣa-pāda, "Eye-footed," and Dīrgha-tapas, "Long-penance." In ancient India it was customary to give people nicknames which gave a descriptive characterization of the individual.

Gautama probably received these names from his habit of performing long penances during his periods of study and from the fact that he was customarily seen with his eyes directed toward his feet when walking, (probably due to his deep reflection while strolling). There is considerable argument about the exact date of Gautama but authorities place him about 550 BC., making him almost a contemporary of Buddha.

THE PROBLEM All systems of Indian philosophy begin with the problem of suffering – duḥkha.

The goal of the Nyāya is to enable us to attain the highest goal of life which is Liberation from duḥkha and the attendant cycle of births and deaths —

mokṣa, variously known as 'release', 'freedom', 'emancipation'

nirvāṇa – the state of non-return to birth/death.

According to nyāyikas the world presents itself to us as a chain of consequences which needs to be broken in order to attain Liberation from suffering. Misapprehension [ajñāna] distorted views [doṣa] activity [karma] rebirth [janma] suffering. [duḥkha]

Misapprehension — the inability to see things as they really are. We see things as we want to see them. We superimpose false ideas and concepts upon reality — we identify the Self with the mind/body complex. Distorted views — this refers to our tendency for ego-centrism, and the creation of a vast network of false identities and ideologies in order to bolster and maintain the ego-notions we hold dear. We identify through our genders, our race, class, tribes, family, nation, hobbies, ideologies etc.

Each of these roles has three dynamic forces of attraction – to those things, places, people etc. that confirm our identity, and aversion for anything, person or idea that challenges who we think we are. And these two forces contribute to our delusion – the psycho-drama which we inhabit.

Karma — we then perform activity in accordance with this false view of ourselves and the world; designed to perpetuate our transient selves and to give some meaning to our lives. All actions involving other beings have three possible outcomes; negative (cause suffering), positive (cause joy), or neutral. Negative and positive acts result in consequences which are experienced either now or later.

Rebirth — in order to actualise the karma that we have created for good or bad. Suffering — dis-ease, dissatisfaction, unhappiness, stress, depression etc.

The way to break this chain is to obtain insight and wisdom (jñāna).

Wisdom dissolves the delusive identification of the Self with the mind-body complex. The doṣas (distorted views) causing us to like and dislike a thing will no longer exist. When this disappears, there will no longer be any desire which is the stimulus for all goal orientated activity.

Cessation from action will break the eternal bond of Karma which will then free us from rebirth; the cause of all sorrow and suffering, and enable us to achieve the supreme end of life [mokṣa].

 This goal can be attained by thoroughly studying and understanding the four topics presented in the Nyāya sūtras, namely:

 (l) The thing to be avoided (i.e., duḥkha)

(2) Its cause (i.e., desire, attachment and ignorance)

 (3) Its solution i.e. absolute avoidance

 (4) The means of such avoidance (i.e., true knowledge of things as they really are)

The Nyāya examines the logic and coherence of philosophical or religious statements, and by comparing such statements with other widely-held beliefs about life, assess the appropriateness of accepting them as true.

What is rational? — The rational process is one in which conclusion are drawn from premises by a sequel of cognitive steps which can be followed, verified, and which others (provided they understand the meaning of the words used) would accept as being true — true for everyone, not just for one particular individual.

 The study of Nyāya enables us to discern the true from the false, and ensures the avoidance of false teachings and beliefs while knowledge matures into the dawning of insight and enlightenment. Today, as was the case centuries ago we are confronted by many gurus with many teachings, many different social and political ideologies all competing with each other.

The conflicting doctrines and ideologies of each new sect and teacher raises doubts as to which is the right path. The spiritual aspirant is confronted with the same problem of trying to discern the true from the false. The teachings of

the Nyāya System are intended to give us a rational basis for investigating and knowing the Truth.

 The Nyāya deals with critical inquiry. It explores all beliefs – traditional and modern and argues vigorously against all superstition and prejudiced and irrational beliefs.

Wherever there is constructive thinking directed at acquiring real understanding there is a need for Logic. This desire for seeking truth is innate in human nature and logic enables us to accomplish

constructive rational thinking. The purpose of logic is the realisation of the Self by providing the means of studying, listening, reflecting and judging. This culminates in the removal of doubt and leads to mature wisdom, or to confirm that which has been passed down through tradition. It is only by a thorough examination of the sources and expressions can Truth be ascertained. Therefore, all knowledge and traditional teaching offered to us, as well as our personal experiences and ideas must be submitted to critical inquiry.

The chief concern of the Nyāya methodology is the means of knowing and not the nature of knowledge. It investigates the objects of our present perception, not their origination. It lays down the rules of syllogistic reasoning for the purpose of examining the objects of perceptions.

It is the operative cause of Right knowledge and classifies the different ways in which knowledge is acquired.

THE METHODOLOGY

The logical method of ascertaining the Truth is through the application of the 16 categories of Logic, called Padārthas or topics, these are:–

1. Means of right knowledge -pramāna

2. Object of right knowledge -prameya

3. Doubt -Saṃśaya

4. Motive- prayojana

5. Illustrations- dṛṣṭānta

6. Demonstrated Truth -siddhānta

7. Factors of Reasoning — syllogism avayava

8. Reasoning and confutation tarka

9. Discernment nirṇaya

10. Discussion vāda

11. Disputation jalpa

12. Cavil or objection vitaṇḍā

13. Fallacious Reasoning hetvābhāsa

14. Casuistry (unfair reasoning) chala

15. Futile Rejoinder jāti

16. Clinchers nigraha-sthāna

The first two are the most important. The first nine deal more strictly with logic, while the last seven have the function of preventing and mitigating error.

The process of Nyāya consists of three stages:— Statement, definition. discussion

Clarification of the topic that is being discussed.

 Read or listen to the question and identify what the issue actually is.

 2. Ask for definitions of the key terms – to make sure that you are both talking about the same thing. Not everyone understands terms in the same way. A person may use a term incorrectly or out of place or means by it something else.

 3. Once the topic and terms have been defined and clarified one may then engage in the debate or argument.

The art of the argument and how to avoid losing the debate. I give here some guidelines

. • Before engaging in any debate or argument first study the opponent's position (pūrvapakṣa) looking for the weak points and anticipating the counter arguments they are likely to mount. It is a good idea never to argue a point or defend a subject that you have no knowledge about or only semi or popular knowledge.

• Plan your argument well and have all the facts at your fingertips – quote from the originals whenever possible.

• Make sure that you define all terms of the debate before you begin. Don't assume the meaning of anything.

 • Try to be objective as possible and always acknowledge your own failings and the good points of your opponent.

 • Present your proposition clearly and be careful not to adjust or change your position in response to attacks by the opposition. Just keep returning to and reiterating your position.

• Use clear logic and reasoning avoid sarcasm and abuse.

• Try to be innovative and witty, keep your sense of humour and avoid getting heated, disturbed and cranky.

• Always focus on the argument only and avoid all personal attacks against the opponent – remain respectful and gracious.

• Ask simple questions and respond to each point raised.

Yoga Sastra

The Four Yoga Sutras

Written in Sanskrit, where the word sutra means a thread, the four Yoga Sutras are not the oldest nor the only authoritative text on practicing yoga. Patanjali's sutras are, however, the most popular and widely recognized techniques for training one's body, evolving one's mind, and achieving fulfillment.

Patanajali's immense body of wisdom is a collection of 196 aphorisms for which some yogis say they unlock the true mystery of body and mind only when they are read in the original Sanskrit. But, even in English, sutras reveal elegance and brevity that inspire thought and spark philosophical discussion.

In them, the deep truth of ancient yoga remains hidden for centuries.

The four chapters are Samadhi, Sadhana, Vibhuti, and Kaivalya.

Every attempt to fathom their true meaning is a step closer to enlightenment.

1. Samadhi Pada

In Sanskrit, the word pada means a chapter. Samadhi Pada is, therefore, the first of four chapters in the Yoga Sutra, the one that sets you off on a path of enlightenment through the art of meditation.

Samadhi pada does so through 51 sutras that teach you the core postulates of yoga, the obstacles you need to overcome, the importance of constant practice or abhyasa, and the detachment from material experiences or vairagya. According to sage Patanjali, this is the process of becoming One.

2. Sadhana Pada

But before you can accomplish any of this, you must commit yourself to abhyasa – the constant and continual practice. That's why the second Pada introduces the Yamas and the Eight-Limbed system.

Sadhana Pada outlines the principles of Ashtanga yoga, Kriya yoga, and Karma. It also introduces the Eight Limbs of Yoga with a focus on the first six limbs – Yamas (ethical standards), Niyamas (self-discipline), Asana (yoga postures), Pranayama (breath control), Pratyahara (withdrawal), and Dharana (concentration).

3. Vibhuti Pada

Vibhuti Pada brings you another step closer to the promised unity and teaches you how to improve your results and harness the power achieved in the process. It's also about empowering your mind.

This third chapter focuses on the last two Limbs of Yoga, the first of which is Dhyana (mindful meditation or contemplation). The eighth, and last stage of Ashtanga, Samadhi (ecstasy), is here interpreted as a state of ecstasy where the Self is finally transcended, and the interconnectedness is fully achieved.

4. Kaivalya Pada

The last chapter of Yoga Sutra reflects back on what is achieved by one's mind, thus preparing you for the complete and utter liberation (moksha). It's the last stage of yoga and the grand finale of the sutras.

As a unique system of belief that promises mindfulness through meditation, practice, and liberation, the Yoga Sutras are rooted deep into the Ashtanga Yoga, or the Eight Limbs of Yoga, given to yogis by the sage Patanjali after his evolved soul had returned in human form to relieve us of our sorrows.

Practice them with an open mind and feel your inner light guiding the present moment. And if you're a teacher looking for a bit of extra information on how to create the safest environment while practicing these sutras, read about our yoga insurance offers today!

Moksha Sastra

The Centrality of the Bhagavad Gita in these Yajnas: To bring about this very subtle 'understanding' [I prefer this term to 'realization', as the latter is already loaded] called Jnana, the Sutras of the Bhagavad Gita will be extensively used, only because the Gita stands out as a Moksha Shastra par excellence, even though, traditionally, it has not been viewed in this particular light by many Hindu acharyas, past & present. Rather than our present reliance on the Bhagavad Gita, one could have also relied on one or more of the Upanishads, or on the Brahma Sutras, or on the traditional Advaitic texts, such as Vivekachudamani, Vedanta Panchadasi, Tripura Rahasya, Ashtavakra Gita, Ribhu Gita, Yoga Vasishtham, etc; but the Bhagavad Gita was what Sri Sri Bhagavan had initiated me into, rather early in my life and it was also the Shastra, that came to be internalized, after I crossed sixty, so it will eminently serve our present purpose, because it is indeed, also the condensed milk essence of all the Upanishads. 2. A New Modern Commentary on the Bhagavad Gita: In the traditional Bhashyas [commentaries] on the Bhagavad Gita [and there are a number of excellent Bhashyas each having their own characteristic merits], one rarely ever sees the light from the wonderfully potent teachings of such modern Advaitic Masters of the last century as Sri Ramana Maharshi, Sri Nisargadatta Maharaj and Sri J Krishnamurti - Being used for bringing home the truth of the Bhagavad Gita, in a more lustrous way [none of them is any more on the physical plane]. These Yajnas, not only open new doors for freshly rediscovering the ancient Advaita tradition of Atmavichara & Atmajnana, but will also do full justice, to the teachings of the beloved Advaitic Masters, J Krishnamurti & Nisargadatta Maharaj, as I do not see these priceless modern teachings standing alone, away from the Gita, in spite of such an uncompromising stand having been taken by the two beloved Masters themselves, in the course of their lifetimes. There are two aspects of the Bhagavad Gita, to which we must be particularly sensitive, by way of preparation for

these Yajnas. Firstly, the Page | 2 teachings of the Gita are sometimes used as a veritable Dharma Shastra, and very rarely as a veritable Moksha Shastra. A good scholar would know when the teaching is running on the Dharma plane and not on the other. When a Mumukshu takes up the Gita, he will be primarily interested in it as a Moksha Shastra. At this point we may note that Dharma Shastras are more widely read, whereas Moksha Shastras remain in the background, because of their esoteric nature-they appeal only to Mumukshus [seekers after liberation], who are generally a meagre minority. On account of the unwavering dedication of the Hindus[and even many non-Hindus, in fact] to the Gita, ever since Adi Sankaracharya, culled it from the Mahabharata; the Dharma aspect of these teachings has for the reasons mentioned above attracted wider attention than its esoteric Moksha aspect. We have to bear this fine distinction in mind, as we are presently coming home to this teaching, for what it has to offer, as a time honored Moksha Shastra. Secondly, whenever a seeker, whether Hindu or not, approaches the Gita, he necessarily sees 'Two Lights', a brilliant one, emanating from the illustrious Divine personality of Bhagavan Sri Krishna, and certainly, another distinct Light (if he is perceptive at all), but of lesser luminosityin the eyes of devotees-emanating from the Gita, the teachings of that Bhagavan. Mature devotees, who may be small in number compared to the vast majority, may however see only 'One Mass of Light', rather than two, standing more for the teachings or at least for the indivisible unity of Bhagavan Sri Krishna and his teaching, the Bhagavad Gita. The majority of devotees, contrariwise, through their excessive extroversion and consequent excessive devotion may not pay so much attention to the Gita per se, as to His lustrous Divine personality, in which they may get engrossed through their devotional approach. Let us remember that Krishna has himself said: 'Among all the seekers and devotees, the Jnanis [men of Understanding] are most beloved to Me'. In the present Yajnas, we are not really obsessed with the Divine personality, as much as we will be with the teachings of that Divine personality, and this clear preference for one aspect of the Gita, over the other must certainly be noted.

Alankar Sastra

Alaṅkāra-śāstra literally means 'science of figure of speech'.

The Sanskrit language and Sanskrit literature have become an inalienable part of religion and culture. Even the earliest recorded specimens of Sanskrit literature have manifested the art of graceful speech. Several hymns of the Rgveda are looked upon as genuine specimens of fine poetry. Various rhetorical devices which find an apt expression in natural ways are mentioned below :

- Upamā - simile

- Rupaka - metaphor

- Atiśayokti - hyperbole

The Rāmāyana and the Mahābhārata, apart from being monumental works of wisdom and imagination, are also works exhibiting rare poetical skill.

Alaṅkāraśāstra as a regular, independent, subject could not have existed in more ancient times. The first systematization started perhaps with the Nātya- śāstra of Bharata (200 B.C. - 400 A.D.). This work though primarily a work on drama, marks itself as the conception for the origins of systematization of the poems as a science. Poets who have enriched the literature on poems through their prolific writings of superb quality are :

- Bhāmaha and Daṇḍin (6th cent. A.D.)

- Vāmana and Udbhaṭa (8th cent. A. D.)

- Rudraṭa and Anandavardhana (9th cent. A. D.)

- Abhinavagupta, Kṣemendra and Mammata (11th cent. A.D.)

The subject of alaṅkāra was viewed from different angles by different authors. This gave rise to eight sampradāyas or schools :

1. Riti - Rīti is the way of writing. Though three rītis were originally recognized, they ultimately rose to six. The names given to them such as Vaidarbhī, Gauḍī or Māgadhi suggest that they were prevalent in particular regions. Daṇḍin and Vāmana were the forerunners of this school.

2. Guṇa - Guṇa or quality may concern either the śabda (word) or the artha (meaning). It is very similar to the Rīti school. Originally enumerated as three, it gradually rose to ten. However this school got merged into the Alaṅkāra school. Vāmana was the chief exponent of this Guṇa school.

3. Alaṅkāra - Alaṅkāra is literary embellishment. It may be of śabda (word or sound) or artha (sense). The alaṅkāras rose from 38 in the early period to 200 in later days. Daṇḍin and Bhāmaha were the main propagators of this school.

4. Vakrokti - Vakrokti is equivocation. It is a mode of expression such that the listener conceives a different meaning from what is intended by the speaker or writer. Bhāmaha and Kuntaka (11th cent. A. D.) were the chief advocates of this school.

5. Rasa - Rasa is mood or sentiment, a generalized resultant emotion in the spectator or reader. Nine rasas, often called 'navarasas,' have been advocated by the writers on prosody and dramatics. Bharata was the earliest exponent of the Rasa school followed by Udbhaṭa and others.

6. Dhvani - Dhvani is suggestion. The theory of dhvani was introduced by Ananda- vardhana.

7.   Anumāna - Anumāna refers to a sentiment that has to be inferred and experienced. Sarikula (9th cent A. D.) was the founder of this school.

8.   Aucitya - Aucitya means propriety. This school was propounded by Kṣemendra.

Some of the standard works of Alaṅkāra-śāstra are :

•   Bharata's Nātyaśāstra

•   Bhāmaha's Kāvyālañkāra

•   Daṇḍin's Kāvyādarśa

•   Udbhaṭa's Kāvyālañkāra-sañgraha

•   Rudraṭa's Kāvyālañkāra

•   Anandavardhana's Dhvanyāloka

•   Mammata's Kāvya-prakāśa

Purana (disambiguation).

Purana Manuscripts from 15th- to 18th-century

The word Purana (/pʊˈrɑːnə/; Sanskrit: □□□□, purāṇa) literally means "ancient, old",[1] and it is a vast genre of Indian literature about a wide range of topics, particularly legends and other traditional lore.[2] The Puranas are known for the intricate layers of symbolism depicted within their stories. Composed primarily in Sanskrit, but also in Tamil and other Indian languages,[3][4] several of these texts are named after major Hindu deities such as Vishnu, Shiva, Brahma and Shakti.[5][6] The Puranic genre of literature is found in both Hinduism and Jainism.[3]

The Puranic literature is encyclopedic,[1] and it includes diverse topics such as cosmogony, cosmology, genealogies of gods, goddesses, kings, heroes, sages, and demigods, folk tales, pilgrimages, temples, medicine, astronomy, grammar, mineralogy, humor, love stories, as well as theology and philosophy.[2][4][5] The content is highly inconsistent across the Puranas, and each Purana has survived in numerous manuscripts which are themselves inconsistent.[3] The Hindu Puranas are anonymous texts and likely the work of many authors over the centuries; in contrast, most Jaina Puranas can be dated and their authors assigned.[3]

There are 1 Maha Purana, 17 Mukhya Puranas (Major Puranas) and 18 Upa Puranas (Minor Puranas),[7] with over 400,000 verses.[2] The first version of various Puranas were likely to be composed between 3rd- and 10th-century CE.[8] The Puranas do not enjoy the authority of a scripture in Hinduism,[7] but are considered as Smritis.[9]

They have been influential in the Hindu culture, inspiring major national and regional annual festivals of Hinduism.[10] Their role and value as sectarian religious texts and historical texts has been controversial because all Puranas praise many gods and goddesses and "their sectarianism is far less clear cut" than assumed, states Ludo Rocher.[11] The religious practices included in them are considered Vaidika (congruent with Vedic literature), because they do not preach initiation into Tantra.[12] The Bhagavata Purana has been among the most celebrated and popular text in the Puranic genre, and is, in the opinion of some, of non-dualistic tenor.[13][14] But, the dualistic school of Shriman Madhvacharya has a rich and strong tradition of dualistic interpretation of the Bhagavata, starting from the Bhagavata Taatparya Nirnaya of the Acharya himself and later, commentaries on the commentary. The Chaitanya school also rejects outright any monistic interpretation of the purana. The Puranic literature wove with the Bhakti movement in India, and both Dvaita and Advaita scholars have commented on the underlying Vedantic themes in the Maha Puranas. Vyasa, the narrator of the Mahabharata, is hagiographically credited as the compiler of the Puranas. The ancient tradition suggests that originally there was but one Purana. Vishnu Purana (3.6.15) mentions that Vyasa entrusted his Puranasamhita to his disciple Lomaharshana, who in turn imparted it to his disciples,[note 1] three of whom compiled their own samhitas. These three, together with Lomaharshana's, comprise the Mulasamhita, from which the later eighteen Puranas were derived.[17][18]

The term Purana appears in the Vedic texts. For example, Atharva Veda mentions Purana (in the singular) in XI.7.24 and XV.6.10-11:[19]

"The rk and saman verses, the chandas, the Purana along with the Yajus formulae, all sprang from the remainder of the sacrificial food, (as also) the gods that resort to heaven. He changed his place and went over to great direction, and Itihasa and Purana, gathas, verses in praise of heroes followed in going over."

Similarly, the Shatapatha Brahmana (XI.5.6.8) mentions Itihasapuranam (as one compound word) and recommends that on the 9th day of Pariplava, the hotr priest should narrate some Purana because "the Purana is the Veda, this it is" (XIII.4.3.13). However, states P.V. Kane, it is not certain whether these texts suggested several works or single work with the term Purana.[21] The late Vedic text Taittiriya Aranyaka (II.10) uses the term in the plural. Therefore, states Kane, that in the later Vedic period at least, the Puranas referred to three or more texts, and that they were studied and recited[21] In numerous passages the Mahabharata mentions 'Purana' in both singular and plural forms. Moreover, it is not unlikely that, where the singular 'Puranam' was employed in the texts, a class of works was meant.[21] Further, despite the mention of the term Purana or Puranas in the Vedic texts, there is uncertainty about the contents of them until the composition of the oldest Dharmashastra Apastamba Dharmasutra and Gautama Dharmasutra, that mention Puranas resembling with the extant Puranas.[21]

Another early mention of the term 'Itihas-purana' is found in the Chandogya Upanishad (7.1.2), translated by Patrick Olivelle as "the corpus of histories and ancient tales as the fifth Veda".[22][23][note 2] The Brhadaranyaka Upanishad also refers to purana as the "fifth Veda".[25]

According to Thomas Coburn, Puranas and early extra-puranic texts attest to two traditions regarding their origin, one proclaiming a divine origin as the breath of the Great Being, the other as a human named Vyasa as the arranger of already existing material into eighteen Puranas. In the early references, states Coburn, the term Purana occurs in singular unlike the later era which refers to a plural form presumably because they had assumed their "multifarious form". While both these traditions disagree on the origins of the Puranas, they affirm that extant Puranas are not identical with the original Purana.

According to the Indologists J. A. B. van Buitenen and Cornelia Dimmitt, the Puranas that have survived into the modern era are ancient but represent "an amalgam of two somewhat different but never entirely different separate oral literatures: the Brahmin tradition stemming from the reciters of the Vedas, and the bardic poetry recited by Sutas that was handed down in Kshatriya circles".[26] The original Puranas comes from the priestly roots while the later genealogies have the warrior and epic roots. These texts were collected for the "second time between the fourth and sixth centuries CE under the rule of the Gupta kings", a period of Hindu renaissance.[27] However, the editing and expansion of the Puranas did not stop after the Gupta era, and the texts continued to "grow for another five hundred or a thousand years" and these were preserved by priests who maintained Hindu pilgrimage sites and temples.[27] The core of Itihasa-Puranas, states Klaus Klostermaier, may possibly go back to the seventh century BCE or even earlier.

It is not possible to set a specific date for any Purana as a whole, states Ludo Rocher. He points out that even for the better established and more coherent puranas such as Bhagavata and Vishnu, the dates proposed by scholars continue to vary widely and endlessly.[17] The date of the production of the written texts does not define the date of origin of the Puranas.[29] They existed in an oral form before being written down.[29] In the 19th century, F. E. Pargiter believed the "original Purana" may date to the time of the final redaction of the Vedas.[30] Wendy Doniger, based on her study of indologists, assigns approximate dates to the various Puranas. She dates Markandeya Purana to c. 250 CE (with one portion dated to c. 550 CE), Matsya Purana to c. 250–500 CE, Vayu Purana to c. 350 CE, Harivamsa and Vishnu Purana to c. 450 CE, Brahmanda Purana to c. 350–950 CE, Vamana Purana to c. 450–900 CE, Kurma Purana to c. 550–850 CE, and Linga Purana to c. 600–1000 CE.[8]

Mahapurana

Of the many texts designated 'Puranas' the most important are the Mahāpurāṇas or the major Puranas.[7] These are said to be eighteen in number, divided into three groups of six, though they are not always counted in the same way.In the Vishnu Puran Part 3 Section 6(21-24) the list of Mahapuranas is mentioned .The Bhagavat Puran mentions the number of verses in each puran in 12.13(4-9)

S.No.	Purana Name	Verses number	Comments
1	Brahma	10,000 verses	Sometimes also called Adi Purana, because many Mahapuranas lists put it first of 18.[31] The text has 245 chapters, shares many passages with Vishnu, Vayu, Markendeya Puranas, and with the Mahabharata. Includes mythology, theory of war, art work in temples, and other cultural topics. Describes holy places in Odisha, and weaves themes of Vishnu and

Shiva, but hardly any mention of deity Brahma despite the title.[31]

2   Padma

1.   55,000 verses   A large compilation of diverse topics, it escribes cosmology, the world and nature of life from the perspective of Vishnu. It also discusses festivals, numerous legends, geography of rivers and regions from northwest India to Bengal to the kingdom of Tripura, major sages of India, various Avatars of Vishnu and his cooperation with Shiva, a story of Rama-Sita that is different from the Hindu epic Ramayana.[32] The north Indian manuscripts of Padma Purana are very different from south Indian versions, and the various recensions in both groups in different languages (Devanagari and Bengali, for example) show major inconsistencies.[33] Like the Skanda Purana, it is a detailed treatise on travel and pilgrimage centers in India.[32][34]

3   Vishnu

2.   23,000 verses   One of the most studied and circulated Puranas, it also contains genealogical details of various dynasties.[35] Better preserved after the 17th century, but exists in inconsistent versions, more ancient pre-15th century versions are very different from modern versions, with some versions discussing Buddhism and Jainism. Some chapters likely composed in Kashmir and Punjab region of South Asia. A Vaishnavism text, focused on Vishnu.[36]

4   Shiva

24,000 verses   Discusses Shiva, and stories about him.

5   Bhagavata

18,000 verses   The most studied and popular of the Puranas,[13][37] telling of Vishnu's Avatars, and of Vaishnavism. It contains genealogical details of various dynasties.[35] Numerous inconsistent versions of this text and historical manuscripts exist, in many Indian languages.[38] Influential and elaborated during Bhakti movement.[39]

6   Devi Bhagavata Purana

18,000 verses   It is the major Purana of Shakta tradition.

7   Narada

25,000 verses   Also called Naradiya Purana. Discusses the four Vedas and the six Vedangas. Dedicates one chapter each, from Chapters 92 to 109, to summarize the other 17 Maha Puranas and itself. Lists major rivers of India and places of pilgrimage, and a short tour guide for each. Includes discussion of various philosophies, soteriology, planets, astronomy, myths and characteristics of major deities including Vishnu, Shiva, Devi, Krishna, Rama, Lakshmi and others.[40]

8   Markandeya

9,000 verses   Describes Vindhya Range and western India. Probably composed in the valleys of Narmada and Tapti rivers, in Maharashtra and Gujarat.[41] Named after sage Markandeya, a student of Brahma. Contains chapters on dharma and on Hindu epic Mahabharata.[42] The

Purana includes Devi Mahatmyam of Shaktism.

9	Agni

15,400 verses   Contains encyclopedic information. Includes geography of Mithila (Bihar and neighboring states), cultural history, politics, education system, iconography, taxation theories, organization of army, theories on proper causes for war, diplomacy, local laws, building public projects, water distribution methods, trees and plants, medicine, Vastu Shastra (architecture), gemology, grammar, metrics, poetry, food, rituals and numerous other topics.[43]

10	Bhavishya

14,500 verses   The Bhavishya Purana (Bhaviṣya Purāṇa, lit. "Future Purana") is one of the eighteen major works in the Purana genre of Hinduism, written in Sanskrit.The title Bhavishya means "future" and implies it is a work that contains prophecies regarding the future, however, the "prophecy" parts of the extant manuscripts are a modern era addition and hence not an integral part of the Bhavishya Purana.Those sections of the surviving manuscripts that are dated to be older, are partly borrowed from other Indian texts such as Brihat Samhita and Shamba Purana.

11	Brahmavaivarta

18,000 verses   It is related by Savarni to Narada, and centres around the greatness of Krishna and Radha. In this, the story of Brahma-varaha is repeatedly told.[44] Notable for asserting that Krishna is the supreme reality and the gods Vishnu, Shiva, Brahma are incarnations of him.[45] Mentions geography and rivers such as Ganga to Kaveri.

12	Linga

11,000 verses   Discusses Lingam, symbol of Shiva, and origin of the universe as per Shaivism. It also contains many stories of Lingam, one of which entails how Agni Lingam solved a dispute between Vishnu and Brahma.

13	Varaha

24,000 verses   Primarily Vishnu-related worship manual, with large Mahatmya sections or travel guide to Mathura and Nepal.[46] Presentation focuses on Varaha as incarnation of Narayana, but rarely uses the terms Krishna or Vasudeva.[46] Many illustrations also involve Shiva and Durga.[47]

14	Skanda

81,100 verses   Describes the birth of Skanda (or Karthikeya), son of Shiva. The longest Purana, it is an extraordinarily meticulous pilgrimage guide, containing geographical locations of pilgrimage centers in India, with related legends, parables, hymns and stories. Many untraced quotes are attributed to this text.[48]

15	Vamana

10,000 verses   Describes North India, particularly Himalayan foothills region.

16	Kurma

17,000 verses   Contains a combination of Vishnu and Shiva related legends, mythology, Tirtha (pilgrimage) and theology

17   Matsya

14,000 verses   An encyclopedia of diverse topics.[49] Narrates the story of Matsya, the first of ten major Avatars of Vishnu. Likely composed in west India, by people aware of geographical details of the Narmada river. Includes legends about Brahma and Saraswati.[50] It also contains a controversial genealogical details of various dynasties.[35]

18   Garuda

19,000 verses   An encyclopedia of diverse topics.[49] Primarily about Vishnu, but praises all gods. Describes how Vishnu, Shiva and Brahma collaborate. Many chapters are a dialogue between Vishnu and the bird-vehicle Garuda. Cosmology, Describes cosmology, relationship between gods. Discusses ethics, what are crimes, good versus evil, various schools of Hindu philosophies, the theory of Yoga, the theory of "heaven and hell" with "karma and rebirth", includes Upanishadic discussion of self-knowledge as a means of moksha.[51] Includes chapters on rivers, geography of Bharat (India) and other nations on earth, types of minerals and stones, testing methods for stones for their quality, various diseases and their symptoms, various medicines, aphrodisiacs, prophylactics, Hindu calendar and its basis, astronomy, moon, planets, astrology, architecture, building home, essential features of a temple, rites of passage, virtues such as compassion, charity and gift making, economy, thrift, duties of a king, politics, state officials and their roles and how to appointment them, genre of literature, rules of grammar, and other topics.[51] The final chapters discuss how to practice Yoga (Samkhya and Advaita types), personal development and the benefits of self-knowledge.

19   Brahmanda

12,000 verses   One of the earliest composed Puranas, it contains a controversial genealogical details of various dynasties.[35] Includes Lalita Sahasranamam, law codes, system of governance, administration, diplomacy, trade, ethics. Old manuscripts of Brahmanda Purana have been found in the Hindu literature collections of Bali, Indonesia.

The Mahapuranas have also been classified based on a specific deity, although the texts are mixed and revere all gods and goddesses:

Brāhma:

Brahma Purana, Padma Purana

Surya:

Brahma Vaivarta Purana

Agni:

Agni Purana

Śaiva:

Shiva Purana, Linga Purana, Skanda Purana, Varaha Purana,[note 5][note 6] Vāmana Purana,[note 5] Kūrma Purana,[note 5] Mārkandeya Purana,[note 7] , Brahmānda Purana

Vaiṣṇava:

Vishnu Purana, Bhagavata Purana, Nāradeya Purana, Garuda Purana, Vayu Purana, Varaha Purana[note 6]Matsya Purana, Bhavishya Purana

Śakta:

Devi-Bhagavata Purana, Markandeya Purana, Brahmanda Purana, Skanda Purana

All major Puranas contain sections on Devi (goddesses) and Tantra; the six most significant of these are: Markandeya Purana, Shiva Purana, Linga Purana, Brahma Vaivarta Purana, Agni Purana and Padma Purana.

Upapurana

The Goddess Durga Leading the Eight Matrikas in Battle Against the Demon Raktabija, Folio from Devi Mahatmyam, Markandeya Purana.

Main article: Upapurana

The difference between Upapuranas and Mahapuranas has been explained by Rajendra Hazra as, "a Mahapurana is well known, and that what is less well known becomes an Upapurana".[58] Rocher states that the distinction between Mahapurana and Upapurana is ahistorical, there is little corroborating evidence that either were more or less known, and that "the term Mahapurana occurs rarely in Purana literature, and is probably of late origin."

The Upapuranas are eighteen in number, with disagreement as to which canonical titles belong in that list of eighteen. They include among many: Sanat-kumara, Narasimha, Brihan-naradiya, Siva-rahasya, Durvasa, Kapila, Vamana, Bhargava, Varuna, Kalika, Samba, Nandi, Surya, Parasara, Vasishtha, Ganesha, Mudgala, and Hamsa, with only a few having been critically edited.

The Ganesha and Mudgala Puranas are devoted to Ganesha.

Sthala Puranas

This corpus of texts tells of the origins and traditions of particular Tamil Shiva temples or shrines. There are numerous Sthala Puranas, most written in vernaculars, some with Sanskrit versions as well. The 275 Shiva Sthalams of the continent have puranas for each, famously glorified in the Tamil literature Tevaram. Some appear in Sanskrit versions in the Mahapuranas or Upapuranas. Some Tamil Sthala Puranas have been researched by David Dean Shulman.

Skanda Purana

The Skanda Purana is the largest Purana with 81,000 verses,[65] named after deity Skanda, the son of Shiva and Uma, and brother of deity Ganesha.[66] The mythological part of the text weaves the stories of Shiva and Vishnu, along with Parvati, Rama, Krishna and other major gods in the Hindu pantheon.

Vishnu is nobody but Shiva, and he who is called Shiva is but identical with Vishnu.

The Skanda Purana has received renewed scholarly interest ever since the late 20th-century discovery of a Nepalese Skanda Purana manuscript dated to be from the early 9th century. This discovery established that Skanda Purana existed by the 9th century. However, a comparison shows that the 9th-century document is entirely different from versions of Skanda Purana that have been circulating in South Asia since the colonial era.

The Puranas include cosmos creation myths such as the Samudra Manthan (churning of the ocean). It is represented in the Angkor Wat temple complex of Cambodia, and at Bangkok airport, Thailand (above).

Several Puranas, such as the Matsya Purana,[70] list "five characteristics" or "five signs" of a Purana.These are called the Pancha Lakshana (pañcalakṣaṇa), and are topics covered by a Purana:

1. Sarga: cosmogony or the creation of the world
2. Pratisarga: cosmogony and cosmology[73]
3. Vamśa: genealogy of the gods, sages and kings[74]
4. Manvañtara: cosmic cycles,[75] history of the world during the time of one patriarch
5. Vamśānucaritam: Account of royal dynasties dynasty, including the Suryavamshi and Chandravamshi kings
   A few Puranas, such as the most popular Bhagavata Purana, add five more characteristics to expand this list to ten.
6. Utaya: karmic links between the deities, sages, kings and the various living beings
7. Ishanukatha: tales about a god
8. Nirodha: finale, cessation
9. Mukti: moksha, spiritual liberation
10. Ashraya: refuge

These five or ten sections weave in biographies, myths, geography, medicine, astronomy, Hindu temples, pilgrimage to distant real places, rites of passage, charity, ethics,[78] duties, rights, dharma, divine intervention in cosmic and human affairs, love stories,[79] festivals, theosophy and philosophy.[2][4][5] The Puranas link gods to men, both generally and in religious bhakti context.Here the Puranic literature follows a general pattern. It starts with introduction, a future devotee is described as ignorant about the god yet curious, the devotee learns about the god and this begins the spiritual realization, the text then describes instances of God's grace which begins to persuade and convert the devotee, the devotee then shows devotion which is rewarded by the god, the reward is appreciated by the devotee and in return performs actions to express further devotion.

The Puranas, states Flood, document the rise of the theistic traditions such as those based on Vishnu, Shiva and the goddess Devi and include respective mythology, pilgrimage to holy places, rituals and genealogies.[80] The bulk of these texts in Flood's view were established by 500 CE, in the Gupta era though amendments were made later. Along with inconsistencies, common ideas are found throughout the corpus but it is not possible to trace the lines of influence of one Purana upon another so the corpus is best viewed as a synchronous whole.[81] An example of similar stories woven across the Puranas, but in different versions, include the lingabhava – the "apparition of the linga". The story features Brahma, Vishnu, and Shiva, the three major deities of Hinduism, who get together, debate, and after various versions of the story, in the end the glory of Shiva is established by the apparition of linga. This story, state Bonnefoy, and Doniger, appears in Vayu Purana 1.55, Brahmanda Purana 1.26, Shiva Purana's Rudra Samhita Sristi Khanda 15, Skanda Purana's chapters 1.3, 1.16 and 3.1, and other Puranas.

The texts are in Sanskrit as well as regional languages,[3][4] and almost entirely in narrative metric couplets.

Symbolism and layers of meaning

The texts use ideas, concepts and even names that are symbolic.[82] The words can interpreted literally, and at an axiological level.[83] The Vishnu Purana, for example, recites a myth where the names of the characters are loaded with symbolism and axiological significance. The myth is as follows,

The progeny of Dharma by the daughters of Daksha were as follows: by Sraddhá (devotion) he had Kama (desire); by Lakshmí (wealth, prosperity), was born Darpa (pride); by Dhriti (courage), the progeny was Niyama (precept); by Tushḟi (inner comfort), Santosha (contentment); by Pushḟi (opulence), the progeny was Lobha (cupidity, greed); by Medhá (wisdom, experience), Sruta (sacred tradition); by Kriyá (hard work, labour), the progeny were Dańḋa, Naya, and Vinaya (justice, politics, and education); by Buddhi (intellect), Bodha (understanding); by Lajjá (shame, humility), Vinaya (good behaviour); by Vapu (body, strength), Vyavasaya (perseverance). Shanti (peace) gave birth to Kshama (forgiveness); Siddhi (excellence) to Sukha (enjoyment); and Kírtti (glorious speech) gave birth to Yasha (reputation). These were the sons of Dharma; one of whom, Kama (love, emotional fulfillment) had baby Hersha (joy) by his wife Nandi (delight).

The wife of Adharma (vice, wrong, evil) was Hinsá (violence), on whom he begot a son Anrita (falsehood), and a daughter Nikriti (immorality): they intermarried, and had two sons, Bhaya (fear) and

Naraka (hell); and twins to them, two daughters, Máyá (deceit) and Vedaná (torture), who became their wives. The son of Bhaya (fear) and Máyá (deceit) was the destroyer of living creatures, or Mrityu (death); and Dukha (pain) was the offspring of Naraka (hell) and Vedaná (torture). The children of Mrityu were Vyádhi (disease), Jará (decay), Soka (sorrow), Trishńa (greediness), and Krodha (wrath). These are all called the inflictors of misery, and are characterised as the progeny of Vice (Adharma). They are all without wives, without posterity, without the faculty to procreate; they perpetually operate as causes of the destruction of this world. On the contrary, Daksha and the other Rishis, the elders of mankind, tend perpetually to influence its renovation: whilst the Manus and their sons, the heroes endowed with mighty power, and treading in the path of truth, as constantly contribute to its preservation.

Puranas as a complement to the Vedas

The mythology in the Puranas has inspired many reliefs and sculptures found in Hindu temples. The legend behind the Krishna and Gopis relief above is described in the Bhagavata Purana.

The relation of the Puranas with Vedas has been debated by scholars, some holding that there's no relationship, others contending that they are identical.[87] The Puranic literature, stated Max Muller, is independent, has changed often over its history, and has little relation to the Vedic age or the Vedic literature.[88] In contrast, Purana literature is evidently intended to serve as a complement to the Vedas, states Vans Kennedy.

Some scholars such as Govinda Das suggest that the Puranas claim a link to the Vedas but in name only, not in substance. The link is purely a mechanical one.[88] Scholars such as Viman Chandra Bhattacharya and PV Kane state that the Puranas are a continuation and development of the Vedas.[89] Sudhakar Malaviya and VG Rahurkar state the connection is closer in that the Puranas are companion texts to help understand and interpret the Vedas.[89][90] K.S. Ramaswami Sastri and Manilal N. Dvivedi reflect the third view which states that Puranas enable us to know the "true import of the ethos, philosophy, and religion of the Vedas".

Barbara Holdrege questions the fifth Veda status of Itihasas (the Hindu epics) and Puranas.[92][note 8] The Puranas, states V.S. Agrawala, intend to "explicate, interpret, adapt" the metaphysical truths in the Vedas.[18] In the general opinion, states Rocher, "the Puranas cannot be divorced from the Vedas" though scholars provide different interpretations of the link between the two.[89] Scholars have given the Bhagavata Purana as an example of the links and continuity of the Vedic content such as providing an interpretation of the Gayatri mantra.

Puranas as encyclopedias

The Puranas, states Kees Bolle, are best seen as "vast, often encyclopedic" works from ancient and medieval India.[94] Some of them, such as the Agni Purana and Matsya Purana, cover all sorts of subjects, dealing with – states Rocher – "anything and everything", from fiction to facts, from practical recipes to abstract philosophy, from geographic Mahatmyas (travel guides)[95] to cosmetics, from

festivals to astronomy.[4][96] Like encyclopedias, they were updated to remain current with their times, by a process called Upabrimhana.[97] However, some of the 36 major and minor Puranas are more focused handbooks, such as the Skanda Purana, Padma Purana and Bhavishya Purana which deal primarily with Tirtha Mahatmyas (pilgrimage travel guides),while Vayu Purana and Brahmanda Purana focus more on history, mythology and legends.

Puranas as religious texts

The colonial era scholars of Puranas studied them primarily as religious texts, with Vans Kennedy declaring in 1837, that any other use of these documents would be disappointing.[99] John Zephaniah Holwell, who from 1732 onwards spent 30 years in India and was elected Fellow of the Royal Society in 1767, described the Puranas as "18 books of divine words".British officials and researchers such as Holwell, states Urs App, were orientalist scholars who introduced a distorted picture of Indian literature and Puranas as "sacred scriptures of India" in 1767. Holwell, states Urs App, "presented it as the opinion of knowledgeable Indians; But it is abundantly clear that no knowledgeable Indian would ever have said anything remotely similar"

Modern scholarship doubts this 19th-century premise. Ludo Rocher, for example, states,

I want to stress the fact that it would be irresponsible and highly misleading to speak of or pretend to describe the religion of the Puranas.

The study of Puranas as a religious text remains a controversial subject. Some Indologists, in colonial tradition of scholarship, treat the Puranic texts as scriptures or useful source of religious contents.[103] Other scholars, such as Ronald Inden, consider this approach "essentialist and antihistorical" because the Purana texts changed often over time and over distance, and the underlying presumption of they being religious texts is that those changes are "Hinduism expressed by a religious leader or philosopher", or "expressiveness of Hindu mind", or "society at large", when the texts and passages are literary works and "individual geniuses of their authors".

Jainism

The Jaina Puranas are like Hindu Puranas encyclopedic epics in style, and are considered as anuyogas (expositions), but they are not considered Jain Agamas and do not have scripture or quasi-canonical status in Jainism tradition.They are best described, states John Cort, as post-scripture literary corpus based upon themes found in Jain scriptures.

Sectarian, pluralistic or monotheistic theme

Scholars have debated whether the Puranas should be categorized as sectarian, or non-partisan, or monotheistic religious texts. Different Puranas describe a number of stories where Brahma, Vishnu, and Shiva compete for supremacy In some Puranas, such as Devi Bhagavata, the Goddess Devi joins the competition and ascends for the position of being Supreme. Further, most Puranas emphasize legends around one who is either Shiva, or Vishnu, or Devi. The texts thus appear to be sectarian. However, states Edwin Bryant, while these legends sometimes appear to be partisan, they are merely

acknowledging the obvious question of whether one or the other is more important, more powerful. In the final analysis, all Puranas weave their legends to celebrate pluralism, and accept the other two and all gods in Hindu pantheon as personalized form but equivalent essence of the Ultimate Reality called Brahman.The Puranas are not spiritually partisan, states Bryant, but "accept and indeed extol the transcendent and absolute nature of the other, and of the Goddess Devi too".

[The Puranic text] merely affirm that the other deity is to be considered a derivative manifestation of their respective deity, or in the case of Devi, the Shakti, or power of the male divinity. The term monotheism, if applied to the Puranic tradition, needs to be understood in the context of a supreme being, whether understood as Vishnu, Shiva or Devi, who can manifest himself or herself as other supreme beings.

Ludo Rocher, in his review of Puranas as sectarian texts, states, "even though the Puranas contain sectarian materials, their sectarianism should not be interpreted as exclusivism in favor of one god to the detriment of all others".

Puranas as historical texts

Despite the diversity and wealth of manuscripts from ancient and medieval India that have survived into the modern times, there is a paucity of historical data in them. Neither the author name nor the year of their composition were recorded or preserved, over the centuries, as the documents were copied from one generation to another. This paucity tempted 19th-century scholars to use the Puranas as a source of chronological and historical information about India or Hinduism. This effort was, after some effort, either summarily rejected by some scholars, or become controversial, because the Puranas include fables and fiction, and the information within and across the Puranas was found to be inconsistent.

In early 20th-century, some regional records were found to be more consistent, such as for the Hindu dynasties in Telangana, Andhra Pradesh. Basham, as well as Kosambi, have questioned whether lack of inconsistency is sufficient proof of reliability and historicity.[35] More recent scholarship has attempted to, with limited success, states Ludo Rocher, use the Puranas for historical information in combination with independent corroborating evidence, such as "epigraphy, archaeology, Buddhist literature, Jaina literature, non-Puranic literature, Islamic records, and records preserved outside India by travelers to or from India in medieval times such as in China, Myanmar and Indonesia".

Manuscript

An 11th-century Nepalese palm-leaf manuscript in Sanskrit of Devimahatmya (Markandeya Purana).

The study of Puranas manuscripts has been challenging because they are highly inconsistent. This is true for all Mahapuranas and Upapuranas. Most editions of Puranas, in use particularly by Western scholars, are "based on one manuscript or on a few manuscripts selected at random", even though divergent manuscripts with the same title exist. Scholars have long acknowledged the existence of Purana manuscripts that "seem to differ much from printed edition", and it is unclear which one is accurate, and whether conclusions drawn from the randomly or cherrypicked printed version were universal over geography or time.This problem is most severe with Purana manuscripts of the same title, but in regional languages such as Tamil, Telugu, Bengali and others which have largely been ignored.

Modern scholarship noticed all these facts. It recognized that the extent of the genuine Agni Purana was not the same at all times and in all places, and that it varied with the difference in time and locality. This shows that the text of the Devi Purana was not the same everywhere but differed considerably in different provinces. Yet, one failed to draw the logical conclusion: besides the version or versions of Puranas that appear in our [surviving] manuscripts, and fewer still in our [printed] editions, there have been numerous other versions, under the same titles, but which either have remained unnoticed or have been irreparably lost.

Chronology

Newly discovered Puranas manuscripts from the medieval centuries has attracted scholarly attention and the conclusion that the Puranic literature has gone through slow redaction and text corruption over time, as well as sudden deletion of numerous chapters and its replacement with new content to an extent that the currently circulating Puranas are entirely different from those that existed before 11th century, or 16th century.

For example, a newly discovered palm-leaf manuscript of Skanda Purana in Nepal has been dated to be from 810 CE, but is entirely different from versions of Skanda Purana that have been circulating in South Asia since the colonial era.Further discoveries of four more manuscripts, each different, suggest that document has gone through major redactions twice, first likely before the 12th century, and the second very large change sometime in the 15th-16th century for unknown reasons.The different versions of manuscripts of Skanda Purana suggest that "minor" redactions, interpolations and corruption of the ideas in the text over time.

Rocher states that the date of the composition of each Purana remains a contested issue.Dimmitt and van Buitenen state that each of the Puranas manuscripts is encyclopedic in style, and it is difficult to ascertain when, where, why and by whom these were written:

As they exist today, the Puranas are a stratified literature. Each titled work consists of material that has grown by numerous accretions in successive historical eras. Thus no Purana has a single date of composition. It is as if they were libraries to which new volumes have been continuously added, not necessarily at the end of the shelf, but randomly.

Forgeries

Many of the extant manuscripts were written on palm leaf or copied during the British India colonial era, some in the 19th century The scholarship on various Puranas, has suffered from frequent forgeries, states Ludo Rocher, where liberties in the transmission of Puranas were normal and those who copied older manuscripts replaced words or added new content to fit the theory that the colonial scholars were keen on publishing.

The Puranas have had a large cultural impact on Hindus, from festivals to diverse arts. Bharata natyam (above) is inspired in part by Bhagavata Purana.

The most significant influence of the Puranas genre of Indian literature have been state scholars and particularly Indian scholars,in "culture synthesis", in weaving and integrating the diverse beliefs from ritualistic rites of passage to Vedantic philosophy, from fictional legends to factual history, from individual introspective yoga to social celebratory festivals, from temples to pilgrimage, from one god to another, from goddesses to tantra, from the old to the new. These have been dynamic open texts, composed socially, over time. This, states Greg Bailey, may have allowed the Hindu culture to "preserve the old while constantly coming to terms with the new", and "if they are anything, they are records of cultural adaptation and transformation" over the last 2,000 years.

The Puranic literature, suggests Khanna, influenced "acculturation and accommodation" of a diversity of people, with different languages and from different economic classes, across different kingdoms and traditions, catalyzing the syncretic "cultural mosaic of Hinduism". They helped influence cultural pluralism in India, and are a literary record thereof.

Om Prakash states the Puranas served as efficient medium for cultural exchange and popular education in ancient and medieval India. These texts adopted, explained and integrated regional deities such as Pashupata in Vayu Purana, Sattva in Vishnu Purana, Dattatreya in Markendeya Purana, Bhojakas in Bhavishya Purana. Further, states Prakash, they dedicated chapters to "secular subjects such as poetics, dramaturgy, grammar, lexicography, astronomy, war, politics, architecture, geography and medicine as in Agni Purana, perfumery and lapidary arts in Garuda Purana, painting, sculpture and other arts in Vishnudharmottara Purana.

Dhanur Veda,

Dhanur Veda, according to Agni Purana is very significant as it imparts knowledge in the field of military science. Efficient dealing of weapons in battles if also taught in Dhanur Veda.

 Dhanur Veda or the science of archery has been elucidated by Lord Agni in the Agni Purana. He has said that Dhanur Veda has been divided into four chapters which includes within its scope the training of the five classes of warriors such as, the car-warriors, the elephant men, the cavalry, the infantry and the wrestlers. In Agni Purana, Dhanur Veda constitutes chapters 248-251 and is classified into two classes, thrown and unthrown. It offers a detailed explanation on how to enhance the warrior's dexterity during assaults, whether the warriors proceeded to the battlefield on foot, horses, elephants or chariots.

History of Dhanur Veda

The science of Dhanur Veda was taught by Dronacharya, the 'guru' of 'Pandavas' and 'Kauravas' in the epic tale of Mahabharata. The secrets of utilizing the weapons, particularly the tricks of releasing the weapons and controlling them during warfare was tutored by him. Warriors and kings had to master the subtle art of aiming and throwing his weapons by the power of Vedic hymns and sometimes accompanied by the science of the sound sourced from their target. In Ramayana, it is said that the father of Lord Rama, Maharaja Dasaratha was capable of piercing his target successfully, just by listening to the sound of his target attentively, without even viewing the object. Guru Dronacharya had instilled in Arjuna all these crafts of handling weapons, as is described in the Mahabharata.

Types of War Weapons in Dhanur Veda

Battles are generally fought with five types of weapons such as, those thrown or projected with a machine ('Yantramukta'), or those thrown by hands, or those cast by hands and retained in them after use ('Pani'), or those which are permanently retained in the hand, and the hands themselves such as in wrestling. Bows and launchers are some of the Yantramukta weapons utilized in wars, which find a mention in the Dhanur Veda. Pani weapons are stones and spears among several other weapons.

It has been mentioned in the Indian Puranas that the weapons themselves are again divided into two classes according to .their straight or curved shape. The weapons that are usually projected by a machine are arrows and missiles, while slings and 'Tomaras' fall within the sphere of the second class ('Panimukta'). The weapons such as 'Pasas' (nooses) are included within the third or the 'Mukta Sandharita' class, while swords form the class of weapons which are retained by the hand in a fight, wrestling being the only sort of fight which is possible between two combatants divested of all arms and weapons.

Methods of Combat in Dhanur Veda

Foot methods, which comprise armed and unarmed fight are also explained in Dhanur Veda. Clubs, axes, iron darts, noose, armour, swords, spears and trident are the armed forms of combat in the foot method. Kicking, knee strikes and punching are the other types of foot methods.

A king or a general, who has accustomed himself to all sorts of hardship, should arrange fighting matches among men of equal strength and prowess. A battle fought with bows and arrows should be deemed as the most honourable sort of fight, the one fought with nooses is the second best, the one

fought with swords, is the worst,, while that in which the combatants engage one another in wrestling, should be considered as only an apology for a fight.

Agni Purana states that a 'Brahmana' or a 'Kshatriya' tutor should be engaged to teach and drill soldiers in the art and tactics of the Dhanur Veda (science of war), which is considered as the birth right of the first two orders, of society viz, the Brahmanas and the Kshatriyas. A member of the Sudra community is allowed to act as a soldier only in times of peril. The Purana advises that people of the mixed elites should help the sovereign of their country, by acting as soldiers in his army in times of war.

Fire God has said that a disciple should make obeisance to his military preceptor. The bow should be wielded with the left hand and the arrow with the right, and the disciple, loving his bow with a personal love, should string it, standing in either of the postures of 'Vaishakha', etc., and by placing one of its horns as well as the barbed end of the shaft on the ground and then the bow should be raised in the same way.

Procedure of Using a Sword in Dhanur Veda

The sword or 'Asi' must be kept hanging on the left side of the waist of a warrior. While taking it out, he should grasp the scabbard in his left hand and he must hold the sword in his right hand. Dhanur Veda has asserted thirty two ways of clutching a sword and a shield.

Procedure of Using Bow and Arrow in Dhanur Veda

The bow should be wielded with the left hand and the arrow with the right, and the disciple, loving his bow with a personal love, should string it, standing in either of the postures of 'Vaishakha', etc., and by placing one of its horns as well as the barbed end of the shaft on the ground and then the bow should be raised in the same way.

In the next step the feathered end of the arrow should be then put on the string, leaving a space of twelve fingers between the rod and the string. The string should be made neither too large nor too short. Then first having held the bow parallel to his navel and slung the quiver a warrior should raise the bow with his left hand, so as to hold it in the same line with the ends of his eyes and the cavities of his ears. The shaft should be then taken with the right fist to the tip of the right breast, and quickly put on the string and then drawn to its full capacity. The string should not be stretched so fully as to bring the shaft within the rod of the bow, or to leave the greater part of it beyond, so that the shaft may not quiver or deviate the least from its straight course, or might not touch the rod. Then having covered the

object aimed at with the gripe, the archer, with his neck held firm and steady and his head poised erect as that of a peacock, and with his chest bulged out and shoulders drooping down, and his whole frame bent in the shape of a triangle, should discharge his arrow, his temple, nose, face and shoulders being made like those of a horse.

In shooting an arrow of the first class, a space of three fingers should be maintained between one' chin and shoulder-blade, two finger-widths should be the space left between them in the case of a bow of the second class and the chin and the shoulder should be held a finger apart while drawing a bow of the third class. The feathered end of arrow should be taken hold of with the thumb, the index, the ring finger and the middle, fingers of the right hand, and should be aimed as full as possible. In this way an archer should discharge his arrow, and an object lying in the horizontal line of his vision and gripe, is sure to be pierced through a shaft.

The information which has been provided in the Agni Purana says that a bow of the first class measures four cubits in length, one of the middling sort measures three cubits and a half, while a third class bow usually used by an infantry soldier measures three cubits in length and may be used either by a cavalry or an elephant-soldier and by a car-warrior as well.

The science of martial arts is referred to as Dhanur Veda and also as 'Sastravidya', which are both Sanskrit terms. The word 'sastra' implies weapons and 'vidya' means knowledge, which when pronounced together means 'knowledge of weapons'. 'Dhanushya' or bow and 'veda' or knowledge has given birth to the term Dhanur Veda.

sword

In Dhanurveda sword is attributed to Kṣatriyas.

According to the Agnipurāṇa, sword is born from the yāgāgni (sacred fire) of Lord Brahma.

Divisions of swords Ancient scholars divided sword by its shape, length, weight, colour, smell and the like. Gargācārya, Parāśara, and Kaśyapa had classified sword by its length1 . Auśanasa Dhanurveda classified sword into four by its shape. He says:

From the above statement of Auśanasa Dhanurveda one can understand that sword is classified into four by its shape. i.e. Agrapṛthu, Mūlapṛthu, Samkṣiptamadhya, Samakāya.

The Agrapṛthu type is big shaped sword,

mūlapṛthu's width is less than that of its edge. In other words its sharpened edge is very thin and narrow.

Samkṣiptamadhya has a narrow middle portion than its edge.

Samakāya has same width in its all parts.

Besides this classification, there are many other types of swords, they are śūlāgra, samāgra, mandalāgra, gojihvāgra, paraśvāgra, kutilāgra and the like. The edge of some sword is in round or śūla shape, which is considered as the best type. The shape of the sword blade must be the shape of cow's tongue or the bamboo leaf.

Auśanasa Dhanurveda also classified sword into three by its length. They are laghu khadga, madhyama khadga and uttama khadga.

Again these three types are divided into five varieties. The classification is based on the size of the sword. Kriya, maraka, māra, mārgasṭha and citratālita are the divisions of laghu type swords.

Sukhasancāra, sukhasannāhya, madhyama, atimadhyama and uttama are the divisions of the madhyama type swords.

Durdharṣa, vijaya, sunanda, nandana and sreṣṭha are the divisions of the uttama type of swords.

This verse narrates the acceptance of good sword. According to the length, sword is also classified into three. If the sword has a length of angulas; it is very precious and famous. This sword is considered as uttama (best). If the length of the sword is about 25 angulas, it is not good and it must be avoided.

The length in between 25 to 50 angulas is considered as the madhyama or second category.1 According to Gargācārya, the sword which has a length of 50 angulas is the best one and that of the length in between 25 to 50 angulas is the madhyama or secondary type.

The sword which has a length below 25 angulas is adhama or the bad one. 2 According to Parāś ara muni, if the length is 40 angulas, that type is the best sword and if length is 30 angula, it is madhyama (secondary) type. If the length is 25 angulas, it is adhama type of sword.from the above references it can be concluded that the sword must have at least a length of above 25 angula.

In the above verse, Kaśyapa says that for adjusting the length, the sword should not be cut. It is not proper. If it is needed to adjust the length, use the whetstone of the Blacksmith. In Bṛhatsamhita there is a discussion about the sword's length. If the owner of the sword cut the sharpened end of the sword, it may cause the death of his mother. And if he cut the back end of the sword, it causes his own death. The Agnipurāṇa, Bṛhatsamhita. Parāśara samhita also warn that never use sword for a mirror and never took the sword from the cover without any purpose2

. According to the smell, the swords are again classified. If the sword has the smell of ghee, jasmine flower, or rutting juice, it is considered as the Uttama (best) type of sword.

The sword with the smell of the fat in flesh muscle or cow's urine is the adhama (worst) type. Such type of sword must be avoided. The sword having the smell of blood, salt etc. is also not good. For empowering the performance of the weapon some special   1 Kalāvidyāvivaraṇam p 231 2 Ibid p 231 93 methods are used while manufacturing time. This is called pāyana kriya. Some methods are mentioned here The above verse of Bṛhatsamhita narrates the pāyana of sword. The ashes of plantain are mixed with butter milk and preserve it for one day and night. Then the ignited sword from the furnace should dip into the butter milk and plantain ashes mixed liquid. Such sword is highly hard and is considered as good.

Considering the mark on them, swords are again classified as best and bad. The sword having the length of viṣamangala and the mark of flower of kūvalam in Malayalam, saravam, ātapatram, kundalam, lotus flower is very auspicious. According to Varāhamihira the marking in the sword like the eagle, kite etc. is not good.

The above verse of Yuktikalpataru deals with the eight guṇas of sword. They are anga; rūpa jāti, netra, ariṣta, bhūmi, dhvani and māna.

The above verse of Yuktikalpataru narrates the anga quality of sword. The anga is the marking or symbol which spread all parts of the sword. Lohārṇava mentions that about hundred types of angas. Çāndī, savarṇa, hāthi, eraṇṭa, damana, sthūla , anga, kṛṣṇa, aruṇa, śveta, kamala, gadā, tila, agni, pippalī, granṭhi, sṭhira, titara, māla, jīraka, bhramara, ūrdhva, mirca, sarpa, khota, mora, kajjala, madhu, kṣudraka, makhī, tuṣa, jau, cāvla, alasī, saraso, simha, tanṭula, gau, śirā, śvalinga, nakha, magaramaccha, akṣi, keśa, upala, droṇī, kāka, kapāla, pankha, tuvarī, bimbī, phala, puṣpa, nīla, rakta, baca, lahasuna, sumāna, jimgī, śamī, rohita, prosṭhī, māriṣa, markava, khura, bijalī, meṣa, adri, gujjā, marjārika, ketakī, mūrva, vajra, kalāya, campaka, bālā, vaṭa, bāmsa, śālavṛkṣa, jyeṣṭī, jālā, pipīlikā, bala, raja, kuṣmāṇṭa, roma, spṛhi, karkandhu, bakula, rasāla, mahiṣa, svacchāmga, ṛtu and cakra are the angas1 . Rūpa (colour) Rūpa is the colour of the sword. It s divided into four, i.e. nīlam , kṛṣṇa, piṣangam, and dhūmram. Mixing of two colours is known as sankaram. The mix of three colours is known as triparam and that of four colours is known as caturam. Jāti (class)

The above verse of Dhanurveda narrates the different jāti of sword.

The sword is divided into four jāti (cast) - Brāhmaṇa jāti. The Brahmins used the sword which have the good voice, colour, jāti, rūpam etc. this type of sword is called Brāhmaṇa khadga (sword). Brāhmaṇa

khadga reflects sun light and which may cause the fire in grass. But the user will have no effect on the heat. This type of sword is the best.

 The sword which has more strength and is in smoke colour and hard voice is known as Kṣatriya jāti.

Vaiśya jāti is the sword with blue or black colour and this is very common in earth. Actually this type of sword is used in day to day purposes.

 The colour of Śūdra jāti sword is like the black cloud. The wound by this sword causes not much pain. Actually this sword is not in used in war. From the above gradation of the sword it can be assumed that weapons for the lower communities were not much useful. Actually the first two types of swords, Brāhmaṇa and Kṣatriya jāti were useful for fight. The other two types are for daily purpose. Ancestor's attitude towards cast is revealed here. Ancestors have a tendency to achieve good weapons and equipments for their own purpose and that of with less quality were given to the lower communities.

The above verses of Dhanurveda narrate netra quality of sword. Netra is another important marking in the sword. The netra type is not spread all part of the sword, which is seen only in one place on the sword. According to Dhanurveda there are thirty types of netra in the sword they are cakra, padma, gada, śankha, damaru, dhanus, aṃkuśa, chatra, patāka, vīṇa and the like

. Ariṣṭa (marking) Ariṣṭa is a type of marking in the sword. Ariṣṭa also have thirty classifications. They are chidram, kākapadam, rekhā, bhinnam, bhekam, mūṣika, viṭāla, śrkara, nīli, maśaka, bhṛnga, sūcaka, trivindava, kālika, dārī, kapota, kāka, kharpara, śakalī, krotī, kuśa, putraka, jālika, karāla, kanka,

khajura, sṛnga, puccha, khanitraka, hala, śūrpa, batarī and the like1 .The presence of Ariṣṭa in a sword is good. But two types of ariṣṭa in a sword is better. According to the scholars seven types of ariṣṭas are possible in a sword. 2 Bhūmi Bhūmi is another important quality of the sword. There are two major divisions in bhūmi. i.e. divya and bhauma. The divya types have prasastānga and good netra and also have good voice. The bhauma type is very thick. Bhauma again classified into two vridhaharita kalam and sudham. This is mentioned in Vṛdhahārīta samhita.

The above verses deal with the origin of sword in a mythical way. There is a belief that, while lord Ś iva drunk the kālakūdam poison, some drops of the poison fell on some places in the earth and they in turn became hard iron ore. At the time of churning the milky ocean some drops of amṛta fell on some places and that is the best type of iron, which has the colour of camphor.

From the above verse one can understand that the ancient people had a clear and sufficient geological availability of core of iron. They know very well about the mining and ore of metal. The above referred verse mentions the places where iron ore are available in India, Srilanka and Nepal. From it, it can be known that Vārāṇasi, Magadha, Simhala (Srilanka), Nepal, Angadēś a, Saurāṣtra are the places of good iron ore. By using the iron ore from Vārāṇasi for making sword, it should be more hard and easy to use. Iron from Magadha is also very hard and using iron from Nepal for making the sword helps to maintain good shape. Swords from Kalinga are of much weight and size. There are four type swords made in Srilanka. First type is very nice shape, other one is heavy. Third type sword is very hard and the last one

is easy to handle. 1 Dhvani (echo) The dhvani (echo) is one of the classification criteria (guṇa) of the sword. Here echo means the voice of the sword. Nāgārjuna muni mentions eight types of dhvani. They are-

Hasta, kākāsya, megha, dakka, kāka tāntric (string of veena), garddabha (donkey), aśman (stone) are the main divisions of dhvani. The voice of the sword is similar to above noted voices. If the sword has the voice of the first four, i.e. hamsa, kāmsya, megha, and dakka type of sword is good.

 The sword which has the voice of kaka, tāntric, garddabha and aśman (stone) are not good.1 Māna The next classification criteria of khadga are māna. The word māna mentions weight of the sword. By the weight, the sword has two major divisions-uttama and adhama . A large sword having less weight is considered as good and a small sword having much weight is considered bad. The quality of a sword is measured in Kalpataru, less weight, length, width and strength and the like are the qualities of a good sword. Shortness and high weight and so on are the bad qualities. Usage of sword Some of the ancient Dhanurveda texts narrate the sword demonstrations. Nītiprakāśikā, Mahābhārata, Mānasollāsa, Bharatabhāvadīpatīkā and the like have given instructions about the usage .

The above quoted verses provide a clear picture about the usage of the sword. Using the sword in an orbital shape is known as bhrānta. Using the sword in bhrānta type in the upward direction is known as udbhrānta. Using the sword in bhrānta type in all direction is known as āviddham. The above mentioned types of usage are for blocking enemies sword beat. According to Nītiprakāśikā, there are thirty two types of usage of sword. They are bhrāntam, udbhrāntam, āviddham, āplutam, viplutam, sritam, samyātam, samudīrṇam, nigraham, pragraham, pādāvakarṣam, sandhānam, śirobhramaṇam, bhujabhramaṇam, pāśam, pādam, vibandham, bhūmi, udbhramaṇam, gatam, pratyāgatam, ākṣēpam, utdhānakam, plutam, lākhavam, sauṣtam, śobha, sthiratvam, driṭamuṣtitvam, tiryak pracaraṇam, and urdhvapracaraṇam.1 Attacking techniques are generally known as apḷutam. Touching the body of the enemy by using the edge of the sword is known as prasrta. Gaḍitam is that of beating the enemy by using deceitial method. Using the both sides of two enemies is known as parivartam and that of the usage of the enemies back part is known as nirvāṇa. Sampātam is the another type of usage of sword. Here the soldiers beat towards by using sword in equal speed and strength. In sampāta one person may get more strength or victory which is known as samuderṇṇa. Bhrānta is the usage of sword in to the enemy's body part. Kauśika is the usage of irregular paths. CHURIKA (LONG SWORD) The Churika is the Sanskrit name of urumi (Malayalam) and it is a long sword made of flexible steel; sharp enough to cut into flesh, but flexible enough to be rolled into a tight coil. Originated in Kerala, it was popular in the North Malabar cost of Kerala state, India, and is often mentioned in the ballads of The Churika is still used in Indian martial arts, particularly in Kalaripayat. It was practised as a final device in the training because of the dangerous nature. The weapon is called urumi in northern Kalaripayat and cuttu vāl in the southern style. The word cuttu vāl is derived from the Malayalam words cuttu (coil/spin) and vāḷ (sword) and thus means coiled sword. The sword is a flexible band of steel three-quarters to one inch in width, and long enough to reach from the fingertip of one hand to the finger tip of the other hand when the hands are held outstretched (usually about four to five and a half feet). It has a small handle with a cover. Often there are multiple belts on a single handle, which makes it more dangerous to the opponents and wielders alike. In modern times it is often made from used bandsaw blades. Ability and

skill are much needed to master this weapon rather than strength or aggressive power. Twirling and controlling the Churika is a difficult and dangerous task, and is therefore taught only to the best pupils of the kaḷari. Incorrect use of this flexible sword can result in the wounding of its wielder, and great concentration is required during use, even by experts.

Churika battle

The Churika is most useful against multiple opponents. When not in use, the Churika is worn around the waist like a belt. Since women often wore it in belts. It is a convenient weapon for them to carry. Uṇṇiārca, one of the heroines of the ballads of the Northern Malabar cost was said to have been an expert at wielding the Churika. It was also a good weapon for duels since thrusting with the point of the sword was not permitted in duels in South India. In ancient India 106 Churika was not used in battle. The books Nītiprakāśika, Mānasollāsa, Aparājitapricha, and the like have narrated the weapon Churika.

The above verse of Aparājitapriccha narrates quality of Churika into seven. They are kumāri, Lakṣmi, śanghinī, tundakā, pāpinī, śubhagā, and lakṣa. The sword has a length of six angula which is considered as kumāri and that of seven angulā Lakṣmi. The sword having a length of eight angula is śanghinī and that of nine angulā, tundaka. Swords, a length of ten angulā, pāpinī, eleven angula, śubhaga, twelve angulā, lakṣa. 3 According to Mānasollāsa, māntrika is the best type of Churikā. 4 The total length or measurement of the Churikā is calculated and it is named as āyu, Lakṣmi and mṛtyu. Āyu and Lakṣ mi type Churikā are considered as useable and the third one mṛtyu should be avoided.1 From the above information it may be safely concluded that ancestors were well aware about Churikā battle and its manufacturing. The classification of Churika is different from each region of India. But there is no clear evidence of the usage of Churika in battle. Churika was used as a personal weapon against a group of enemies.

KUNTA – The weapon of Vaiś ya The kunta (spear) is attributed to Vaiśya in Sanskrit archery From the already quoted verse in Dhanurvēda, it can be realized that kunta was particularly for the Vaiśya community. The weapon includes a long stick and sharpened blade. The blade fixed on the one end of a long stick is called Kunta. Ancient archery texts also narrate kunta and its divisions.

According to Auśanasa Dhanurveda, bamboo and sandal are good for making kunta's staff. If the length of the staff is seven hasta, it is considered as the best one and if the length is 6 hasta it is the madhyama type and if it is 5 hasta, the adhama category. Two types of metals are used to make the blade of Kunta. Metal from Puṣkalāvarta and Vinoṭhi are used for making the blade. Metal from Vinothi is very hard and that of Puṣkalāvarta is soft.1 Soft metal is used to make the knife and hard metal is used for making the edge. Ancestors identified soft and hard metals from the sound. Soft metal produces high frequency of sound.

According to Śukranīti, Kunta should have a length of ten hasta and the blade should be made of iron.3 According to Śukrācārya the length of the long must be seven hasta. Sandal, bamboo etc. are good for making the stick. If the length of the stick of Kunta is seven hasta, it is good and if six, it is called madhyama type. If the length is about 5 hasta, it is called adhama type. The blade which is fixed at the end of the stick is made up of iron. And iron from China is considered good for making the blade. The

iron from China is said to be very hard. The shape of the blade should be like the leaves of bamboo and such other leaves.

The knife is classified under its measurement of 16 angula length, 2 angula width and thickness must be of two yava. This type of blade is the Uttama. The madhyama (second) type is that of 14 angula of length 1.5 angula of width and one yava of thickness. The adhama (third) type is that of 12 angula of length one angula of width and 0.5 yava of thickness. Good voice, softness, pleasant smell, good colour and the like are the qualities of the blade or tip of a good Kunta.

- There is a belief that if the voice of the Kunta is similar to the voice of a golden vessel, that weapon is good.
- The colour of this weapon should be similar to the colour of the moon, which is considered beneficial in war.   1

 According to the variation of measurement, Kunta is classified to three, Uttama, Madhyama and Adhama. The weight of a Kunta is about 60 pala, which is considered as the Uttama (best) type and if the weight is about 50 pala, it is considered as madhyama (second) type. If the weight is about 40 pala, it is considered as adhama (bad) type. According to Nītiprakāśika, kunta is made up completely of metal. Kunta of a length of five hasta is considered as good.1 According to Rājavijaya, Kunta should be 11 hasta of length, 9 hasta long śʹarbala, 7 hasta long bhala and 5 hasta long Kṣēpiṇi. 2 According to Kautilya's Arthaśāstra, the face of Kunta, śakti, prāsa, hataka, bhintipāla, śūla, tomāra, varāhakarnaknaya, and karpana must be very sharp. Kunta should be made up by hard metal. The tip of kunta must be like the leaves of bamboo or similar trees. It must be a length of 4 hasta and praśa must be a length of 19 angula.

 According to Kautilya, Kunta having a length of 7 hasta is good and that of 6 hasta is madhyama. The Kunta having a length of 5 hasta is considered as adhama type. According to Mānasollāsa, Kunta is of three different types. The cavalry used Kunta having a length of 7hasta.

 Kunta having a length of 6 hasta is used by soldiers on horse. Kunta, with a length of nine hasta was used the soldiers on elephant.

 PRĀSA

Prāsa is a weapon similar to kunta. This weapon is shorter than kunta in size. Generally a Prāsa is of a length of seven hastas. The staff is covered with metal. One end of the staff is sharpened. So both ends of Prāsa can be used to attack or to throw.

ŚŪLA

Śūla is a weapon similar to kunta. The word śūla denotes Trisula3 . Rāmāyaṇa4 and Mahābhārata5 have narrations about Triśūla. The śūla of Kumbhakarṇa is said to be made-up of iron and has a weight of

more than thousand palas. In Nītiprakāśika, Triśūla is named as Pināka. Its sharpened edge is made-up of metal,

SAKTI

Śakti is a weapon similar to spear used in ancient times. According to the Auśanasa Dhanurveda, bamboo, devataru, metal or ivory are used to make the long stick of śakti. By the length of the stick, śakti is classified into three- uttama, madhyama and adhama. If the length of the stick is five hasta, it is good and that of four hasta, it is considered as madhyama type. If the length of the stick is about 3.5 hasta it is considered as adhama type.1

GADĀ –

The weapon of S᾽ ūdra ʾIn ancient India Gadā type of weapon is attributed to the Ś ūdra community. The Gadā is seen used from a very ancient time. Ancient epics narrate gadāyuddḥa. Rāmāyaṇa and Mahābhārata provide a clear picture

In Rāmāyaṇa, Hanuman is said to have used gadā in battle. Mahābhārata also narrates Gadāyuddḥa between Bhīma and Duryodhana. Almost all of our ancient books have narrations about gadā. Agnipurāṇa, Ś ukranīti, Nītiprakāśika, Auśanasa Dhanurveda and the like deal gadā. In Agnipurāṇa 20th mandala deals with gadāyuddḥa. 1 Mānasollāsa also narrates gadāyuddḥa.2 According to Auśanasa Dhanurvēda gadā classified in to three- uttama, madhyama and adhama. The weapon having a length of 50 angulas is uttama and that of 40 is madhyama type. The gadā having a length of 30 or less is adhama.3 Auśanasa Dhanurveda has again classified gadā by its weight. The gadā having a weight of 1000 pala is uttama and that of 800 pala is madhyama. The gadā having a weight of 600 pala is considered as adhama .

According to Śukrācārya this weapon had eight angles. The gadā is the weapon of lord Viṣṇu. The gadā made up of both wood and iron. Soldiers used gada made up of iron and wood as per their health to bear the weapon. Mandalāghātam, Pratyāgātam is some methods of gadāyuddḥa. In gadāyuddḥa the soldier who revolving to his opponent or enemy is called Mandala. The soldier fought his enemies in a way of face to face is called gatam. The soldier changing his position from face to face in attack is called Pratyāghātam. Besides these three, there are a number of tricks in gadāyudḥa. They are astra yantra; paridhāvana, abhdrava, ākṣēpa, avasthāna, savigraha, parivartana, samvartana, avapḷuta, upapḷuta, upanyasta, apnyastha, samthyāga, avadamśa, varāhodhutha, urolalātāghāta etc.

The above verses of Mānasollāsa narrate gadā and a variety of its application and manufacturing. According to Mānasollāsa gadā is made by wood or metal. Some times gadā is ornamented by diamond or such other precious stones. One side of it is big and the other side is sharp ended like a sword. Middle portion of the gadā is used to handle it. One can hold gadā either by one or both hands. A high physical power is needed to use the gadā.

Mahābhārata narrate the different types of gadāyudḥa. Mandala, Gātha, pretyāgātha, astra yantra, paridhāvana, abhidravana, ākṣēpa, avasthāna, avigreha, parivarthana, samvartana, avapḷuta, upapḷuta, upanyasta, and kauśikan are the main types of gadāyudḥa.

DAṆDA (stick) The Daṇda (stick) is a weapon, which is very similar to gadā. Soldiers of a low rank in the army used Daṇda (stick). Daṇda, parikha or mudār etc. are used by soldiers in battle. Gadā and daṇda are similar in shape. The only difference is that gada's one end is in sphere shape. Atharva Veda, Rāmāyaṇa and Mahābhārata have references about the usage of Daṇda in battle. In Rāmāyaṇa, soldiers of Sugrīva used Daṇda against demons. Ś āntiparava.

Mahabharata lord Śiva gave Daṇda to lord Viṣṇu. Then Viṣṇu gave Daṇda to Angiras and Angiras gave it lord Indra. Marīca got this weapon from Indra and he gave it to Bhṛgu. Bhṛgu gave Daṇda to Ṛṣi and Ṛṣi gave it to Lokapāla. He gave it to Kṣupa and finally it reached Manu.

Ākāśabhairava, Aparājitapṛcchā and Nītiprakāśikā narrate Daṇda with equal importance of other weapons .

Nītiprakāśika deals with Daṇda's shape. According to this book, one end of Daṇda is a little bigger than the other end. And one end is covered with a metal ring. Nītiprakāśikā further narrates four type of usage of daṇda in battle3 . According to mythology Daṇda is considered as the weapon of lord Yama4 . War strategy In all our ancient Sanskrit texts there are descriptions of various kinds of military formations known as vyūha. From Aṭharvavēda we got first the technique of vyūha racana. Aṭharvavēda discussed about sarpa vyūha racana. 5 Kautilya's Arthaśāstra, Agnipurāṇa, Viṣṇudarmottarapurāṇa, Vīramitrodaya, Ś ukranīti, Dhanurvēda of Vasiṣṭha had detailed.

vyūhas

The major vyūhas are in the shape of padma, cakra, ratha, sarpa, garuda, simha and so on. This was the duty of the captain of the army to arrange the soldiers in various troupes for the victory. Mahābhārata has discussed such vyūhas in full detail.

Garudavyūha, Sarpavyūha, Śakatavyūha, Padmavyūha, Cakrayūha, Simhavyūha and Agnivyūha are some important military formation in the war field.

In Rāmāyaṇa Rāma arranged his armies in the form of Garudavyūha to defeat Rāvaṇa. Different Army Formations The greatest virtue of the Kṣatriyas is to fight in the battle and die. The most disgraceful for him is the death through disease and physical ailment. Various kinds of army formations are discussed in the texts of Dhanurveda. Some of them may be discussed in the next sections.

Military Array Each soldier, placed in the middle and having names which starts with yuvasvara would come forward and fight. The king should keep two groups of armies on each side of him and one group at his back. One group of army should remain far and move here and there (mainly of vigilance).

According to svarodaya śāstras, certain alphabets in association with vowels turn into yuvāsvara. Person whose name begins with yuvasvara plays a significant role in winning the battle.

Staff Array In daṇda array, or staff like array, the commander-in chief remains in front, army –chief stays at the back. The king stands in the middle and has elephants on his both sides. Horses stand on each side of the elephants and lastly the infantry onside of the horse. If the enemy is all around then daṇḍavyūha should be created.

Śakata (Car) array

In śakata or carriage array, a small part of the army stay at the front and large part at back. So as the car array give in a shape of vehicle. If there is apprehension of danger at the back then śakata or car shaped army formation can be arranged.

Varāha array

In Varāha or boar shaped array, a small group of army stays at the front and at the back, but remains a bigger number in the middle. If the danger is on the side ways, then Varāha or garuda shaped array is prescribed. Garuda array Garuda array or bird array has almost similar arrangements as Varaha. The only difference is that it has greater number of armies in the middle. If the danger is both from right and left sides, then Varaha or garuda array should be arranged.

Ant array

A few armies should be take part in the battle and the major part should move everywhere for vigilance. The cavalry should fight on the plain. For fighting in the water one may ride the elephant, boat or tumbi. The infantry can fight with the help of gun or bow and arrow after hiding himself behind the tree or climbing on the tree. On the land, the army can also fight with the help of shields, swords and spear. The warriors who are skilled in war strategy should be kept at the forefront and the rest should be kept behind.

Pipīlikā Vyūha or ant array should be arranged if the attack is on the front side.

Padmavyūha The padma vyūha or cakra Vyūha refers to a military formation narrated in Hindu epic Mahābhārata. The Cakravyūha or Padmavyūha is a multi-tier defensive lotus-like formation, used by Droṇā, commander-in- chief of the Kaurava army after the injury of Bhīṣma. The formation is similar to a blooming lotus, since when viewed from the top the warriors at each interleaving position would be in an increasingly tough position to fight.1 The Cakravyūha or Padmavyūha was a special formation and only a few exclusive Pandava warriors, namely, Abhimanyu, Arjuna, Kṛṣṇa, Aniruddha and Pradyumna, knew how to lead an offensive attack against it. However to the Pāṇdavas disappointment, Aniruddha and Pradyumna did not participate in the Mahābhārata war. Additionally, Arjuna's son Abhimanyu knew how to penetrate the Padmavyūha but was not aware how to exit the formation. Abhimanyu was unaware how to escape from the Padmavyūha. He was thus killed in Kurukṣetra war trying to break free from the Padmavyūha. Mahābhārata also has references wherein the rules of war were broken by Kauravas to kill Abhimanyu. After Abhimanyu penetrated the sixth tier of spiral formation, all the

Kaurava warriors attacked him in unison, though the main killer was Jayadratha. It was against the rules of Dharmayuḍdhạ that multiple warriors should not attack a single warrior

According to Droṇā, if this array of army formation constructed during the absence of Arjuna and Kṛṣṇa, then the war would come to an end as Droṇācārya could easily defeat the Pandavas. Further, Drōṇā was aware that only Kṛṣṇa and Arjuna could break a Padmavyūha formation and he was not aware of Abhimanyu's ability to break this formation. Arjuna was called away by the Samśaptakas, a group of warriors under the King Suś arma of Trigarta, who had sworn to kill Arjuna or lose their lives to the last man. Hence, Droṇācārya was astonished to see Abhimanyu advancing in Padmavyūha successfully.

Animals in War In ancient warfare.

Animals in War In ancient warfare, animals had a great role to achieve the victory. Basically man used the animals and birds, for passing messages and transporting weapon from one place to another. Horses and elephants are used generally in the warfare. The birds have an exclusive role in battle. They are passing the secret message in the warfare. To all battle groups, there is a collection of 124 birds for sending the message. The birds are doing the spy works in ancient warfare. They got special training for this. The high speed of horse and strength and big figure of elephant are the causes for using them in war. They got better training to face the war situation. Training of the horses In many texts on artillery, the training of horses is presented.

Arthaśāstra of Kautilya provides with a detailed account of the various movements employed for the various training of horses.

The above verse describes the training of horses. They are movements circular, squire crescent shaped, cow's urine shaped and snakes or sizing shaped, and then it will not be difficult to tackle it in battle field. The horse should also be trained to pull the chariots on the plane.3   1 Vasiṣṭha's Dhanurveda samhita p 73 2 Kautilya's Arthaśāstra book 2 chapter30 3 Vasiṣṭha's Dhanurveda samhita p 73 125 Training of elephant The large size and strength are the main reasons that man used elephants in war. The utilities of elephants are narrated as follows.

Arthaśāstra of Kautilya deals with the training of elephants in detail.2 The military training of the elephants consists of mountaineering, moving through water, running, jumping rising sitting etc. The elephants should be made fearless by putting up fire circles. From the information provided in this chapter, it can be safely conclude that ancestors gave very keen attention in weapon manufacturing, its training and practice. From the very beginning man used weapons for self protection. Stone, long stick, horn and the like were his weapons. Later on, however, man used weapon for his domination among

The various groups of the society. For that he developed new weapons of mass destructive power. Bow and arrow, sword, kunta, gadā and the like are his major weapons. Invention of fire and archery were the milestones of his development. Dual fighting was changed into group fighting. Here the concept of army arises. Gradually fighting techniques and rules were also formed. Then they began to use mass

destructive weapons. For the sake of victory, they began to apply certain tricks in making of weapons. Poisoned arrows and such other tricks were applied by the warriors. The greediness of the power hungry men led them to engage in frequent battles. They popularized the message of patriotism through their sermons, in order to achieve the full fledged participation of the warriors in battle. The concept of vīramṛtyu and mythological beliefs haunt the warriors to engage in battle. The weapon manufacturing is a continuing process. Always they tried to develop more and more powerful weapons. There is a gradual change in the weapons from the beginning to the modern age. Some of the ancient weapons are mythical weapons like sudarśana cakra, pāśupatāstra and the like. They called these as divine weapons. Actually these weapons are the product of ancestor's imagination.

Sthapatya Veda

Sthapatya Veda is architecture and planning that is fundamentally in harmony with all the laws of nature governing our lives and the life of the whole cosmos. The Sanskrit word sthapan means to establish, and Veda means knowledge, so \Sthapatya Veda is the knowledge of how to establish life in full accord with Natural Law. The purpose of Sthapatya Veda (Vastu Vidya) is to maintain individual life in harmony with Cosmic Life, individual intelligence in tune with cosmic intelligence. This is accomplished by using principles of architecture whereby the structuring dynamics of the building favorably influence the behavioral dynamics of the occupants.

Sthapatya Veda Architecture is a complete system of architecture and planning according to the solar, lunar, and planetary influences on the earth with reference to North and South Poles and the equator. The strongest influence of Natural Law on earth comes from the sun. On its path from east to west, the sun radiates different qualities of energy. These energies, as they reach different parts of a home or building during different times of the day, should support the specific c activities performed within those rooms, so that the influence of Natural Law from the sun is always supportive to every aspect of our daily activity. For instance the kitchen should be in the southeast where the Agni or fire element is greatest;

The master bedroom in the southwest, the commanding point of the house; the living room in the west and guest rooms in the northwest. The meditation room should always be in the northeast, the place of silence. Bedrooms for the children, the home offi ce, the swimming pool, etc., are all specifi cally placed such that each and every room and the activity performed there is maximally supportive to the occupant. So Vastu is that particular design and structure of a building that gives proper orientation to the house and distribution of rooms within it to take advantage of the movement of the sun as expressed above. The Effects of not following Vastu. Today, people do not know that many misfortunes and even diseases arise from lack of proper orientation of their houses and offices. Only a properly orientated home according to Maharishi Sthapatya Veda can save the individual from being affected by the disharmonious infl uences of the surroundings. The location of the entrance to the house is a very important part of its Maharishi Sthapatya Veda design. For example, the main

entrance of the building should always be facing due East, or secondarily, the North. Other entrances produce unfavorable influences for the occupants. Wrongly placed entrances may contribute to:• Destruction of the family, accidents, restlessness• Aggressions, constant fear, quarreling, poverty, ill health • Lack of vitality, lack of creativity and no success• Chronic diseases, problems in private and professional life. Anyone can verify the truth of the principle of auspicious Vastu by taking the map of any city and looking at the direction of the roads. Wherever the entrance of any building is in the East, the residents enjoy better health, increasing prosperity, and harmonious relations with others; but wherever houses are facing south or west the opposite is the result.

Scientific c Principles Confirming the Need for Proper Orientation of Buildings Recent research in modern science has now confirmed the ancient understanding that our brain is sensitive to orientation, position, and direction in space. This research has shown that the fi ring patterns of neurons in the thalamus of the brain are altered by the direction one is facing. When one is facing East, the brain physiology functions differently than facing North, South, or West. The conclusion is that the power of thoughts and the quality of thoughts is influenced by the direction one is facing. One's sense of direction gets confused in daily life when one lives in a building with wrong orientation, resulting in potential physiological, psychological and behavioral imbalances and strain. The Effect of Maharishi Sthapatya Veda on Government and Society The influence of Maharishi Sthapatya Veda is not limited to the individual. The general trend of governmental problems and inefficiencies is in part due to activities conducted from wrongly oriented administrative buildings. The same is true for national economic imbalances and deficiencies. Most of today's government buildings were built long ago when this knowledge of proper orientation was not widely known in the world. Immediate improvements in national administration could be realized if the government ruled from proper Vastu. Immediate and signifi cant decreases in inefficient performance, economic instability, ill health, negativity, confl icts, cruelty, and crime in the life of individuals and society will all come about when the life of the nation is administered from buildings with correct orientation. Ideal Vedic Community and City Planning: Construction of Peace Colonies with Fortune-Creating Homes The positive effects of a Maharishi Sthapatya Veda home or office are greatly enhanced when the entire community or city is properly planned in accord with Natural Law. In an ideal community, with Vedic planning, all roads are lined up North-South, East-West around a central square, or Brahmas than, which is a center point of silence. Such a layout automatically creates order, coherence and support of Natural Law to every citizen and to the community as a whole. Modern architecture and city planning does not have this knowledge of orientation. Buildings are facing any direction. From eight possible directions, only two directions—East and North—produce auspicious results. This means that in a modern city, as Figure 3:The effect of orientation on Brain Functioning22

illustrated by this drawing of London below, about 75% of all buildings have inauspicious orientation contributing to the sick-building syndrome. This could further be aggravated by negative effects from inauspicious qualities of the site, inauspicious slope and shape, inauspicious placement of water bodies as well as many other factors. This causes a cloud of social stress and tension hovering over the city, which will eventually reach the breaking point and result in crime, terrorism and even natural disasters. Therefore a great deal of all problems in society can be alleviated

by planning and constructing in harmony with Natural Law. The orderliness and coherence of Maharishi Sthapatya Veda city planning provides a natural protection from disruptive outside influences for everyone in the city. This principle is called the Maharishi Vastu Effect, which has its direct correspondence in the principle from quantum physics known as the Meissen Effect. As illustrated in the adjacent fi gure, any city or community properly designed in accordance with Vastu will be protected from outside negative influences and enjoy a positive influence of invincibility for the whole city. This knowledge of Vedic Architecture is the knowledge that is being applied to build Maharishi Peace Colonies and Maharishi Figure 4:Ideal Vedic Community and City Planning .

Universities and Schools in every major city of the world. Those who would like to prevent problems in their daily life are welcome to order their fortune-creating home in one of these Peace Colonies and educate their children in a Maharishi school. We want to create a new quality of life, and for that a new building style based on Natural Law is necessary—a system which is always evolutionary and nourishing for everyone. Because the individual is fundamentally cosmic, everything about individual life should be in full harmony with cosmic life. Maharishi Sthapatya Veda gives dimensions, formulas, and orientation to buildings that will provide cosmic harmony and support to the individual for his peace, prosperity, and good health in our daily life.

Vaastu Shastra

Vaastu Shastra is the ancient Vedic science of architecture and home arrangement. Popular in the Orient as Feng Shui, this concept has gained immense popularity all over the world. Vaastu basically deals with the flow of energy within residential and office spaces. In order to achieve optimum results, this science advises people to design spaces, facing the right direction.

Vaastu For You and Your Family

Vaastu is all about creating an Inner Space or a chidaakaasha, where the Divine Energy can work to create the maximum possible peace and harmony within that particular environment. Once that energy and vibration has been stabilized and remains positive, the people dwelling or working in that space can achieve the highest levels of peace, joy, health and productivity.

Introducing Vedic Culture in Schools

Schools in India and abroad have now begun to realize the great benefits of introducing Vedic culture and teachings within their syllabus. Given the present pressures faced by school students, many schools have started hiring experts and scholars to conduct Veda, Sloka (hymn) and Gita classes. This not only helps the students get back to their traditional roots, but also calms these young minds and reduces instances of aggressive behavior among them.

Several families, especially those hailing from South India, enroll their children in Veda, Gita, dance and music classes at a very young age. This helps them channel their energies and inculcates the value of discipline within them, right from a tender age; thus shaping their personality for the better.

Several schools conduct Indian classical dance and music classes as well. The inclusion of Vedic mathematics has further helped children with their level of concentration and focus during class hours. While this teaches children discipline and focus, it also helps bring them together as a family, chanting and praying together, thus encouraging a spirit of camaraderie among them.

Recently, the Nalanda University at Patna officially stated that it plans to introduce Vedic studies within its curriculum. The famed educational establishment may also include special courses on Mindfulness and Yoga in the near future.

Nalanda University Ruins, Bihar

Yoga

How does yoga work?

Yoga is a mind and body practice with a 5,000-year history in ancient Indian philosophy. Various styles of yoga combine physical postures, breathing techniques, and meditation or relaxation.

In more recent years, it has become popular as a form of physical exercise based upon poses that promote improved control of the mind and body and enhance well-being.

There are several different types of yoga and many disciplines within the practice. This article explores the history, philosophy, and various branches of yoga.

What is yoga?

In the modern world, the South Asian art of yoga has expanded to all corners of the globe. While it is now a popular form of exercise and meditation, this has not always been the case.

History

Share on interest Yoga has a long history of helping people achieve mental and physical balance.

There is no written record of the inventor of yoga.

Male yoga practitioners are known as yogis, and female yoga practitioners are called yoginis. Both practiced and taught yoga long before any written account of yoga came into existence.

Over the next five millennia, yogis passed the discipline down to their students, and many different schools of yoga developed as the practice expanded its global reach and popularity.

The "Yoga Sutra," a 2,000-year-old treatise on yogic philosophy by the Indian sage Patanjali, is a guidebook on how to master the mind, control the emotions, and grow spiritually. The Yoga Sutra is the earliest written record of yoga and one of the oldest texts in existence and provides the framework for all modern yoga.

Yoga is well known for its postures and poses, but they were not a key part of original yoga traditions in India. Fitness was not a primary goal. Practitioners and followers of yogic tradition focused instead on other practices, such as expanding spiritual energy using breathing methods and mental focus.

The tradition began to gain popularity in the West at the end of the 19th century. An explosion of interest in postural yoga occurred in the 1920s and 1930s, first in India and later in the West.

Philosophy

To convey its spiritual message and guide sessions, yoga often uses the imagery of a tree with roots, a trunk, branches, blossoms, and fruits. Each "branch" of yoga represents a different focus and set of characteristics.

The six branches are:

•   Hatha yoga: This is the physical and mental branch designed to prime the body and mind.

•   Raja yoga: This branch involves meditation and strict adherence to a series of disciplinary steps known as the "eight limbs" of yoga.

• Karma yoga: This is a path of service that aims to create a future free from negativity and selfishness.

• Bhakti yoga: This aims to establish the path of devotion, a positive way to channel emotions and cultivate acceptance and tolerance.

• Jnana yoga: This branch of yoga is about wisdom, the path of the scholar, and developing the intellect through study.

• Tantra yoga: This is the pathway of ritual, ceremony, or consummation of a relationship.

Approaching yoga with a specific goal in mind can help a person decide which branch to follow.

Chakras

The word "chakra" literally means spinning wheel.

Yoga maintains that chakras are center points of energy, thoughts, feelings, and the physical body. According to yogic teachers, chakras determine the way people experience reality through emotional reactions, desires or aversions, levels of confidence or fear, and even physical symptoms and effects.

When energy becomes blocked in a chakra, it is said to trigger physical, mental, or emotional imbalances that manifest in symptoms, such as anxiety, lethargy, or poor digestion.

Asanas are the many physical positions in Hatha yoga. People who practice yoga use asanas to free energy and stimulate an imbalanced chakra.

There are seven major chakras, each with their own focus:

• Sahasrara: The "thousand-petaled" or "crown" chakra represents the state of pure consciousness. This chakra is located at the crown of the head, and the color white or violet represents it. Sahasrara involves matters of inner wisdom and physical death.

• Ajna: The "command" or "third-eye chakra" is a meeting point between two important energetic streams in the body. Ajna corresponds to the colors violet, indigo, or deep blue, though traditional yoga practitioners describe it as white. The ajna chakra relates to the pituitary gland, which drives growth and development.

• Vishuddha: The color red or blue represents the "especially pure" or "throat" chakra. Practitioners consider this chakra to be the home of speech, hearing, and metabolism.

•   Anahata: The "unstruck" or "heart" chakra relates to the colors green and pink. Key issues involving anahata include complex emotions, compassion, tenderness, unconditional love, equilibrium, rejection, and wellbeing.

•   Manipura: Yellow represents the "jewel city" or "navel" chakra. Practitioners connect this chakra with the digestive system, as well as personal power, fear, anxiety, developing opinions, and tendencies towards an introverted personality.

•   Svadhishthana: Practitioners claim that the "one's own base" or "pelvic" chakra is the home of the reproductive organs, the genitourinary system, and the adrenal gland.

•   Muladhara: The "root support" or "root chakra" is at the base of the spine in the coccygeal region. It is said to contain our natural urges relating to food, sleep, sex, and survival, as well as the source of avoidance and fear.

Types

 Share on Pinteres

Modern yoga has a range of styles to suit everyone, whatever the desired outcome.

Modern yoga has evolved with a focus on exercise, strength, flexibility, and breathing. It can help boost physical and mental well-being.

There are many styles of yoga, and no style is more authentic or superior to another. The key is to choose a class appropriate for your fitness level.

Types and styles of yoga may include:

Ashtanga yoga: This type of yoga uses ancient yoga teachings. However, it became popular during the 1970s. Ashtanga applies six established sequences of postures that rapidly link every movement to breath.

Bikram yoga: Also known as "hot" yoga, Bikram occurs in artificially heated rooms at temperatures of nearly 105 degrees and 40 percent humidity. It consists of 26 poses and a sequence of two breathing exercises.

Hatha yoga: This is a generic term for any type of yoga that teaches physical postures. "Hatha" classes usually serve as a gentle introduction to the basic yoga postures.

Iyengar yoga: This type focuses on finding the correct alignment in each pose using a range of props, such as blocks, blankets, straps, chairs, and bolsters.

Jivamukti yoga: Jivamukti means "liberation while living." This type emerged in 1984 and incorporates spiritual teachings and practices that focus on the fast-paced flow between poses rather than the poses themselves.

This focus is called vinyasa. Each class has a theme, which is explored through yoga scripture, chanting, meditation, asana, pranayama, and music. Jivamukti yoga can be physically intense.

Kripalu yoga: This type teaches practitioners to know, accept, and learn from the body. A student of Kripalu learns to find their own level of practice by looking inward. The classes usually begin with breathing exercises and gentle stretches, followed by a series of individual poses and final relaxation.

Kundalini yoga: Kundalini means "coiled, like a snake." Kundalini yoga is a system of meditation that aims to release pent-up energy.

A class typically begins with chanting and ends with singing. In between, it features asana, pranayama, and meditation customized to create a specific outcome.

Power yoga: In the late 1980s, practitioners developed this active and athletic type of yoga, based on the traditional ashtanga system.

Sivananda: This is a system based on a five-point philosophy. This philosophy maintains that proper breathing, relaxation, diet, exercise, and positive thinking work together to form a healthy yogic lifestyle. Typically uses the same 12 basic asanas, bookended by sun salutations and savasana poses.

Viniyoga: Viniyoga can adapt to any person, regardless of physical ability. Viniyoga teachers require in-depth training and tend to be experts on anatomy and yoga therapy.

Yin: This is a quiet, meditative yoga practice, also called taoist yoga. Yin yoga allows the release of tension in key joints, including:

•   the ankles

•   knees

•   • hips

•   the whole back

•   neck

•   shoulders

Yin poses are passive, meaning that gravity shoulders most of the force and effort.

Prenatal yoga: Prenatal yoga uses postures that practitioners have designed for people who are pregnant. It can support people in getting back into shape after pregnancy as well as supporting health iduring pregnancy.

Restorative yoga: This is a relaxing method of yoga. A person spends a restorative yoga class in four or five simple poses, using props like blankets and bolsters to sink into deep relaxation without exerting any effort in holding the pose.

Risks and side effects

Yoga is low-impact and safe for people when a well-trained instructor is guiding the practice.

Injury due to yoga is an infrequent barrier to continued practice, and severe injury due to yoga is rare. However, consider a few factors Trusted Source before starting.

Anyone who is pregnant or who has an on-going medical condition, such as high blood pressure, glaucoma, or sciatica, should talk to their healthcare practitioner before practicing yoga. They may need to alter or avoid some yoga poses.

Beginners should avoid extreme poses and difficult techniques, such as headstand, lotus position, and forceful breathing.

When using yoga to manage a condition, do not replace conventional medical care with yoga or postpone seeing a healthcare provider about pain or any other medical problem.

What is the safest way to start yoga if I have never done it before?

Yoga is a five-millennia-old practice that has changed over time. Modern yoga focuses on stretches and poses designed to stimulate inner peace and physical energy.

Ancient yoga was less about fitness and more about mental focus and expanding spiritual energy. The Yoga Sutra, now considered to be the definitive guidebook to practicing yoga, came into the practice 2000 years ago.

There are many different types of yoga depending on what people want from it and a person's current level of physical fitness. However, some people choose to replace conventional treatment for conditions with yoga and this can prevent a person from receiving the necessary care.

People with certain conditions, such as sciatica, should approach yoga slowly and with caution.

Yoga can help support a balanced, active lifestyle.

Discuss with your healthcare provider and your yoga instructor the best way to start practicing yoga. In most cases, a "Yoga for Beginners" class will offer a series of low-intensity positions that will allow you to assess your flexibility and endurance.

How well you tolerate this introductory class can guide what other yoga practices you can investigate. Remember, the goal of modern yoga is to focus on your health, so do what feels most appropriate for your fitness level.

Yoga Asanas & Their Health Benefits

Yoga plays a vital role in human life. Yoga asanas help in bringing the mind, body, and soul into a meditative state which in turn offer overall harmony and contentment to a person. Yoga alleviates a number of health-related problems.

Nowadays, living in the hustle and bustle of a city, it is a necessity for a person to realise the significance of yoga in human life. So, let's get down to the nitty-gritty of practising yoga asanas. Know about some important asanas and also the delightful experience that these yoga asanas offer.

1. Katichakrasana

Katichakrasana is good for relieving constipation as this yoga strengthens and improves the flexibility of the spine and waist. Good for arm and leg muscles and also opens up the neck, shoulders thereby strengthens the abdominal muscles.

2. Bhujangasana

This asana improves menstrual irregularities, elevates mood firms and tones the buttocks. Stimulates the heart and organs in the abdomen, like the kidneys. This yoga also relieves stress and fatigue thus, helps in opening the chest to clear the passages of the heart and lungs.

3. Kurmasana

It stretches legs, back, shoulders and chest and lengthens the back muscles. Kurmasana improves the functions of the respiratory and digestive systems.

4. Setu Bandha Sarvangasana

Setu Bandha Sarvangasana stretches the chest, neck, spine, and hips. This asana strengthens the back, buttocks, and hamstrings which in turn helps in improves circulation of blood. This yoga is beneficial for preventing arterial blockages or cardiac arrest.

5. Matsyasana

It relieves respiratory problems as it encourages the right kind of breathing. Matsyasana also tones the pituitary, parathyroid, and pineal glands. It also makes the muscles in the back of neck stronger.

6. Adho Mukha Svanasana

Adho Mukha Svanasana strengthens and tones the arms and legs, because of the weight-bearing nature of the posture. The asana lengthens and straightens the spine and is beneficial for relieving the pain in the upper, middle and lower back.

7. Pada Rajakapotasana

It relieves back problems, especially sciatica. Pada Rajakapotasana strengthens the back. The deep stretch relieves stress and anxiety.

8. Balasana

Balasana stretches and strengthens the muscle of hips, thighs and ankles. The asana helps in alleviating stress and fatigue by increasing blood circulation.

9. Gomukhasana

Gomukhasana stimulates the kidneys and is helpful in relieving ailments like diabetes, high blood pressure, and sexual malfunction.

10. Tadasana

This posture strengthens thighs, knees, and ankles. With the increased strength, power, and mobility in the feet, legs, and hips, it will make you feel refreshed and rejuvenated.

11. Pavanamuktasana

Pavanamuktasana strengthens the abdominal muscles and massages the intestines and internal organs of the digestive system, therefore releasing trapped gases and improving digestion.

12. Ustrasana

This asana reduces fat on thighs and strengthens the shoulders and back. Ustrasana expands the abdominal region, improving digestion and relieves lower back pain.

13. Vayu Nishkasana

The spinal stretch, as well as the stretch in your arms and legs, are significant. A pressure between vertebrae and joints becomes balanced by stretching your spine. Above all, the nerves and muscles (especially thighs, knees, shoulders, neck and arms) will be benefited from practising this asana.

14. Trikonasana

Trikonasana cures indigestion and gives flexibility to groins, hamstrings, and hips. It stimulates the function of the kidney and is also important for removing fat from the waist and thighs. This asana improves the balance and increases concentration.

15. Virabhadrasana I

This asana improves focus, balance and stability. Encourages good circulation and respiration as a result of which it energizes the entire body.

16. Virabhadrasana II

Virabhadrasana II stimulates abdominal organs and helps relieve backaches, especially through the 2nd trimester. It develops balance and stability by improving circulation and respiration.

17. Sarvangasana

This asana prevents thyroid problems and also ensures smooth blood flow to the heart without any strain by force of gravity. Thus Sarvangasana is good for the proper functioning of the heart and also prevents palpitations.

18. Sukhasana

This is the most basic yoga asana which broadens the collarbones and chest. It calms the mind, enhances the condition of peacefulness and serenity. Thus it kicks out anxiety, stress, and mental tiredness.

19. Utthita Hasta Padangusthasana

Utthita Hasta Padangusthasana strengthens the legs and ankles. It also stretches the back of the legs and improves balance.

20. Uttanpadasana

Uttanpadasana improves the functioning of the digestive organs. It improves digestion and removes constipation. It is also good for the pancreases and those who suffer from diabetes.

21. Sasakasana

Known for abdomen toning, Sasakasana helps in stretching and strengthening of the arms, shoulders and upper back. Many spinal issues can be alleviated with the regular practice of this asana.

22. Shalabhasana

Shalabhasana is one the best yoga asanas for strengthening the back muscles. Those with severe back problems should take up this asana slowly.

23. Uttanasana

It improves digestion and helps relieve the symptoms of menopause. This yoga also reduces fatigue and anxiety by providing relief from insomnia, asthma, high blood pressure, infertility, osteoporosis, and sinusitis.

24. Chaturanga Dandasana

The asana strengthens arm, shoulder, and leg muscles. It develops core stability and prepares the body for inversions and arm balances. It gives strength and energy to the body.

25. Utkatasana

The literal meaning of Utkatasana is intense posture or powerful posture. It exercises the spine, hips and chest muscles and helps to strengthen the lower back and torso.

26. Ardha Pincha Mayurasana

It helps to stimulate the reproductive organs, relieve menstrual discomfort, and reduce the symptoms of menopause. It stimulates the digestive organs and also improves digestion. Ardha Pincha Mayurasana is very important for females.

27. Vrksasana

Vrksasana improves balance and stability in the legs. It helps in achieving a balance in other aspects of life.

28. Navasana

This yoga strengthens the abdomen, hip flexors, and spine. It stimulates the kidneys, thyroid and prostate glands, and intestines thus, relieves stress.

29. Makarasana

Makarasana can cure asthma, knee pain, and any lung related issues. It helps in curing slip disc, spondylitis, and sciatica. It relaxes the body completely and keeps you rejuvenated.

30. Dhanurasana

Dhanurasana gives maximum stretch on the abdomen and abdominal sides. Regular practice of this asana helps to shed and burn fat of regions of the body. It also provides overall toned shaped to the entire body.

31. Paschimottanasana

This asana calms the mind and also relieves mild depression and stress. Menopause and menstrual discomfort can be combatted with this asana. The kidneys, liver, uterus, and ovaries are activated by practising this asana regularly.

32. Padmasana

Padmasana stretches the ankles and knees and also calms the brain. It keeps the spine straight and helps develop a good posture. It also eases menstrual discomfort and sciatica.

33. Bakasana

It increases endurance capacity. Practicing this posture on a daily routine helps you in strengthening your forearms, wrists, and shoulders.

34. Vajrasana

Vajrasana helps in nerve issues and indigestion. Siting in Vajrasana will ensure obstruct blood flow to the lower part of your body – thighs, and legs. This increases blood flow to your pelvic area and stomach due to which bowel movement and digestion becomes better.

35. Baddha Konasana

The asana helps in intestine and bowel movement. It removes fatigue from long hours of standing and walking. Offers relief from menstrual discomfort and menopause symptoms. Also beneficial for smooth delivery if practised regularly until late pregnancy.

36. Pincha Mayurasana

Pincha Mayurasana makes the back, shoulders, and arms strong. It gives the neck, shoulders, chest, and belly a good stretch. It improves balance and concentration.

37. Halasana

Halasana helps in relieving gas and upper/lower back pain or discomfort. It promotes good digestion.

38. Supta Pawanmuktasana

Supta Pawanmuktasana is ideal yoga asana for people trying to lose weight. It also cures acidity and constipation. It gives a flat stomach. It is very beneficial for reproductive organ and menstruation disorder.

39. Jyestikasana

It reduces stiffness in the neck and upper back, thereby relaxing the entire spine. Good for people suffering from cervical spondylosis.

40. Natarajasana

Practicing this asana gives strength to your chest, ankles, hips, and legs. Natarajasana increases your metabolism and helps in weight loss and digestion.

41. Sirsasana

The brain is the controlling centre of the body that helps to function the physical and mental aspects of the body efficiently and effectively. The headstand yoga pose allows revitalizing the entire brain with the supply of blood to the brain cells. As a result of which the billions of cells receive more nourishment.

42. Savasana

With this asana, the body relaxes and goes into a deep meditative state, which in turn helps repair the cells and tissues and releases stress. As the body relaxes and calms down, the blood pressure also drops, and this provides relaxation to the heart.

43. Ardha Halasana

It improves digestion and appetite by improving blood circulation. The yoga is helpful for reducing abdomen fat and lose weight.

44. Chakrasana

Chakrasana strengthens arms, shoulders, hands, wrists, legs, buttocks, abdomen, and spine. It stimulates the thyroid and pituitary glands.

45. Garudasana

It enhances the sense of balance of the body. It also strengthens the muscles of the legs. The asana alleviates sciatica and rheumatism in the leg joints.

46. Anand Balasana

This happy baby yoga pose works towards releasing all the tension trapped in the lower back. It also helps open up the shoulders and the chest. This yoga deeply compresses the stomach and massages the organs in the digestive system.

47. Ardha Matsyendrasana

Ardha Matsyendrasana tones and strengthens abs and obliques and also stretches and energizes the spine. The yoga opens the shoulders, neck, and hips, thus increases flexibility.

48. Utthan Pristhasana

Lizard Pose makes the inner thigh muscles and quadriceps stronger. This simple asana is good for the neck as it gently massages the internal organs.

49. Mandukasana

It controls weight. Thus effective for those who are longing for weight loss. Mandukasana is beneficial in case of constipation and indigestion.

50. Parighasana

Parighasana stretches adductor muscle, calves, and hamstrings, therefore, lightens and energizes the whole body. Gate pose is beneficial for lungs and abdomen organs and also helpful in problems like allergies, cold, flu.

Pranayam

What does Pranayama Mean?

The word Pranayama is a combination of two Sanskrit words:

'Prana' meaning life force

'Ayama' meaning to restrain or to draw out

The combined form – Pranayama – is roughly translated as breath control.

It is a practice in yoga that involves the regulation of your breathing through specific techniques and exercise. The purpose is to relax the mind and body through a combination of inhaling, exhaling, and retaining of breath.

What are the Benefits of Pranayama?

Practicing Pranayama is beneficial for a number of reasons:

1. Focusing on your breathing helps in managing stress.
2. Improves blood circulation
3. Helps with a number of medical ailments such as anxiety, depression, hypertension, headaches, and gastric problems.
4. Some research suggests that it can help with improved cardiovascular function.
5. Provides deep relaxation for the mind and body.
6. Increases respiratory function

Things to keep in mind before practicing Pranayama

Though most forms of yoga are safe to practice across the board, it is advised that people who want to practice different Pranayamas should at least have some prior experience in doing yoga. And it is best if Pranayama is practiced under the supervision of a guru.

Certain breathing exercises are not advised for the following people;

1. Those who suffer from hypertension or low blood pressure
2. Those recovering from a recent heart attack
3. Those with chronic heart conditions
4. Pregnant women
5. Women who are menstruating
6. Those with bronchitis or severe breathing issues

How do you practice Pranayama?

Experts advise that the best time to practice Pranayama is early in the morning, especially on an empty stomach. It is ideal to perform it outdoors so that you have plenty of fresh air.

There are three stages to practicing Pranayama:

- Purak (inhaling)
- Kumbhak (restraining your breath)
- Rechak (exhaling)

There are a number of different types of Pranayama. Some people debate about how many are authentic, however that number varies from person to person. Here are twelve of the most popular types of Pranayamas.

Types of Pranayama

1. **Nadi Sodhana**

You begin in a seated cross legged position, your spine stretched and back straight. With your thumb, pressed down on your right nostril, use your left nostril to breathe in deeply.Hold your breath for a beat and then switch your thumb so that you are now pressing down on your left nostril, and then exhale from your right nostril.Repeat this process, alternating between your nostrils by breathing in through one and exhaling through the other. You can repeat this 10-15 times.

2. **Shitali Pranayama**

This particular Pranayama is effective for cooling down the body. You begin in the same seated position and prepare your body for the Pranayama by taking five to six deep breaths. Then make an 'o' shape with your mouth and begin to inhale deeply. Always exhale through your nose. This can be repeated 5-10 times.

3. **Ujjayi Pranayama**

This Pranayama is about mimicking the sounds of the ocean waves. It may sound a bit awkward to perform but it will help relaxation immensely.

`You being in a seated, cross-legged position and begin to breathe through your mouth. While you inhale and exhale, try and constrict your throat in a way that resembles someone choking you. The result will be a sound that is similar to ocean waves.

In the second phase of the Pranayama, you close your mouth and breathe through your nose. However, you must continue to use the same constriction on your throat. You can repeat this 10-15 times in total.

4. **Kapalabhati Pranayama**
   This Pranayama begins in a seated position, with you breathing normally 2-3 times. After this, you must inhale deeply and exhale with force, sucking your belly in as you expel all the air. When you inhale again, your belly should go back to the same position.You should repeat this 20-30 times.
5. **Dirga Pranayama**
   This is a Pranayama that is performed lying down instead of in a seated position. You begin by inhaling a lot of air, filling your belly, so that it rises up. You remain in this position for a few seconds and then exhale, drawing your belly inwards until you've exhaled completely.

   In the second half of the Pranayama, you inhale even more deeply, so you're filling your rib cage with air too. Exhale. The third time you inhale, you have to breathe even deeper. Imagine filling up your belly, rib cage, and heart center. Exhale slowly.You can repeat this process 5-6 times.

6. **Viloma Pranayama**
   This Pranayama can be divided into two parts;
      a. Paused inhalation

You begin by lying down in a comfortable position and breathe normally. Once you are relaxed, you inhale for 2-3 seconds and pause. Hold your breath for two seconds and then begin inhaling again. Pause inhaling for 2 seconds and then slowly begin again. Continue to inhale in intervals until your lungs are full of air. Exhale slowly and gently until you have expelled all the air.

    b. Paused exhalation

This is the exact opposite of what you do with paused inhaling. You inhale deeply and in one go but then remember to pause periodically while you're exhaling.

7. **Anuloma Pranayama**

This is similar to Viloma Pranayama since it also encourages alternate nostril breathing. Inhaling and exhaling is done with one nostril but the other nostril is partially open as opposed to completely blocked.

8. **Bhramri Pranayama**

In this Pranayama, your eyes and ears will be closed. You close your ears with your thumb and close your eyes with the help of your fingers. Take a deep breath and exhale with a chant of OM. Repeat 10-15 times.

9. **Bhastrika Pranayama**

This is beneficial for the winter months when you need to retain warmth in the body. You begin in a seated, cross-legged position and begin inhaling and exhaling at a very fast rate continuously. It may be difficult to keep your breathing going continuously but try your best to stay consistent. After a few rounds, hold your breath in the end and exhale slowly to finish.

10. **Sheetli Pranayama**

You begin by inhaling through your mouth. However, you have to keep your tongue rolled. Tilt your chin forward and hold your breath for a while. Then exhale through your nostrils. This is a great Pranayama for the hotter months as it keeps your body cool.

11. **Moorchha Pranayama.**

This is a difficult Pranayama that involves continuous exhaling without any inhaling. This increases the concentration of carbon dioxide in your body and renders you unconscious after a point. You slowly regain consciousness when your body automatically begins inhaling in your sleep.

12. **Palawani Pranayama**

Woman in blue swimsuit sitting underwater.This is done in water and is only advised for more experienced yogis. It involves working with your breath in a manner that allows you to stay afloat in the water.

Most important types of exercise

Strengthening, stretching, balance, and aerobic exercises will keep you active, mobile, and feeling great.

Exercise is key to good health. But we tend to limit ourselves to one or two types of activity. "People do what they enjoy, or what feels the most effective, so some aspects of exercise and fitness are ignored,"

says Rachel Wilson, a physical therapist at Harvard-affiliated Brigham and Women's Hospital. In reality, we should all be doing aerobics, stretching, strengthening, and balance exercises. Here, we list what you need to know about each exercise type and offer examples to try, with a doctor's okay.

1. Aerobic exercise

Aerobic exercise, which speeds up your heart rate and breathing, is important for many body functions. It gives your heart and lungs a workout and increases endurance. "If you're too winded to walk up a flight of stairs, that's a good indicator that you need more aerobic exercise to help condition your heart and lungs, and get enough blood to your muscles to help them work efficiently," says Wilson.

Aerobic exercise also helps relax blood vessel walls, lower blood pressure, burn body fat, lower blood sugar levels, reduce inflammation, boost mood, and raise "good" HDL cholesterol. Combined with weight loss, it can lower "bad" LDL cholesterol levels, too. Over the long term, aerobic exercise reduces your risk of heart disease, stroke, type 2 diabetes, breast and colon cancer, depression, and falls.

Aim for 150 minutes per week of moderate-intensity activity. Try brisk walking, swimming, jogging, cycling, dancing, or classes like step aerobics.

Marching in place

Starting position: Stand tall with your feet together and arms at your sides.

Movement: Bend your elbows and swing your arms as you lift your knees.

March in a variety of styles:

- March in place.
- March four steps forward and then four steps back.
- March in place with feet wide apart.
- Alternate marching feet wide and together (out, out, in, in).
- Tips and techniques:
- Look straight ahead, and keep your abs tight.
- Breathe comfortably, and don't clench your fists.

Make it easier: March slower and don't lift your knees as high.

Make it harder: Lift your knees higher, march faster, and really pump your arms.

2. Strength training

As we age, we lose muscle mass. Strength training builds it back. "Regular strength training will help you feel more confident and capable of daily tasks like carrying groceries, gardening, and lifting heavier objects around the house. Strength training will also help you stand up from a chair, get up off the floor, and go up stairs," says Wilson.

Strengthening your muscles not only makes you stronger, but also stimulates bone growth, lowers blood sugar, assists with weight control, improves balance and posture, and reduces stress and pain in the lower back and joints.

A physical therapist can design a strength training program that you can do two to three times a week at a gym, at home, or at work. It will likely include body weight exercises like squats, push-ups, and lunges, and exercises involving resistance from a weight, a band, or a weight machine.

"Remember, it's important to feel some muscle fatigue at the end of the exercise to make sure you are working or training the muscle group effectively," Wilson says.

Starting position: Stand with your feet shoulder-width apart, arms at your sides.

Movement: Slowly bend your hips and knees, lowering your buttocks about eight inches, as if you're sitting back into a chair. Let your arms swing forward to help you balance. Keep your back straight. Slowly return to the starting position. Repeat 8-12 times.

Tips and techniques:

- Shift your weight into your heels.

- Squeeze your buttocks as you stand to help you balance.

Make it easier: Sit on the edge of a chair with your feet hip-width apart and arms crossed over your chest. Tighten your abdominal muscles and stand up. Slowly sit down with control.

Make it harder: Lower farther, but not past your thighs being parallel to the floor.

3. Stretching

Stretching helps maintain flexibility. We often overlook that in youth, when our muscles are healthier. But aging leads to a loss of flexibility in the muscles and tendons. Muscles shorten and don't function properly. That increases the risk for muscle cramps and pain, muscle damage, strains, joint pain, and falling, and it also makes it tough to get through daily activities, such as bending down to tie your shoes.

Likewise, stretching the muscles routinely makes them longer and more flexible, which increases your range of motion and reduces pain and the risk for injury.

Aim for a program of stretching every day or at least three or four times per week.

Warm up your muscles first, with a few minutes of dynamic stretches—repetitive motion such as marching in place or arm circles. That gets blood and oxygen to muscles, and makes them amenable to change.

Then perform static stretches (holding a stretch position for up to 60 seconds) for the calves, the hamstrings, hip flexors, quadriceps, and the muscles of the shoulders, neck, and lower back.

"However, don't push a stretch into the painful range. That tightens the muscle and is counterproductive," says Wilson.

Single knee rotation

Starting position: Lie on your back with your legs extended on the floor.

Movement: Relax your shoulders against the floor. Bend your left knee and place your left foot on your right thigh just above the knee. Tighten your abdominal muscles, then grasp your left knee with your right hand and gently pull it across your body toward your right side..Hold 10 to 30 seconds.

Return to the starting position and repeat on the other side.

Tips and techniques:

- Stretch to the point of mild tension, not pain.
- Try to keep both shoulders flat on the floor.
- To increase the stretch, look in the direction opposite to your knee.

4. Balance exercises

Improving your balance makes you feel steadier on your feet and helps prevent falls. It's especially important as we get older, when the systems that help us maintain balance—our vision, our inner ear, and our leg muscles and joints—tend to break down. "The good news is that training your balance can help prevent and reverse these losses," says Wilson.

Many senior centers and gyms offer balance-focused exercise classes, such as tai chi or yoga. It's never too early to start this type of exercise, even if you feel you don't have balance problems.

You can also go to a physical therapist, who can determine your current balance abilities and prescribe specific exercises to target your areas of weakness. "That's especially important if you've had a fall or a near-fall, or if you have a fear of falling," explains Wilson.

Typical balance exercises include standing on one foot or walking heel to toe, with your eyes open or closed. The physical therapist may also have you focus on joint flexibility, walking on uneven surfaces, and strengthening leg muscles with exercises such as squats and leg lifts. Get the proper training before attempting any of these exercises at home.

Standing knee lift

 Starting position: Stand up straight with your feet together and your hands on your hips.

Movement: Lift your left knee toward the ceiling as high as is comfortable or until your thigh is parallel to the floor. Hold, and then slowly lower your knee to the starting position.

Repeat the exercise 3-5 times.

Then perform the exercise 3-5 times with your right leg.

Tips and techniques:

- Keep your chest lifted and your shoulders down and back.
- Lift your arms out to your sides to help you balance, if needed.
- Tighten your abdominal muscles throughout.
- Tighten the buttock of your standing leg for stability.
- Breathe comfortably.

Make it easier: Hold on to the back of a chair or counter with one hand.

Make it harder: Lower your leg all the way to the floor without touching it. Just as it is about to touch, lift your leg up again.

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How to explore the benefits of muscular endurance

Muscular endurance refers to how long muscles can sustain exercise. Improving muscular endurance can help enhance overall health and fitness. The best training routines to enhance benefits, and how the people can adapt these techniques into his common exercise.

We will also look at tips to prevent injury during training and how to design an exercise program that could lead to long-term performance and health benefits.

What is muscular endurance?

Muscular endurance is the ability to continue contracting a muscle, or group of muscles, against resistance, such as weights or body weight, over a period of time.

Increasing the performance of these muscles means they can continue to contract and work against these forces.

Greater muscular endurance allows a person to complete more repetitions of an exercise, for example, pushups or squats.

Benefits of muscular endurance training

According to the American Council on Exercise (ACE), the benefits of muscle endurance include:

- helping maintain good posture and stability for longer periods
- improving the aerobic capacity of muscles

- improving the ability to carry out daily functional activities, such as lifting heavy items
- increasing athletic performance in endurance-based sports

How to measure muscular endurance

Muscular endurance tests measure how many repetitions of a movement people can do before the muscles reach a state of fatigue and cannot continue the exercise.

Many tests focus on measuring upper and lower body muscle endurance by measuring how many pushups, squats, or situps people can achieve.

A person can work with fitness instructors to measure muscular endurance or record how many repetitions of a particular exercise they can perform before reaching the fatigue state.

How to improve endurance

- To increase muscular endurance, ACE recommend a combination of lower and upper body exercises, with strengthening exercises to target the whole body.
- Moderate resistance training, with short intervals in between for rest, creates short bursts of tension to build strength.
- Circuit or high-intensity interval training (HIIT) can be a suitable way to combine cardio and strength training into one workout.
- Unless a person's fitness goals involve training for a particular endurance-based sport, training for muscular endurance alone may not be the most appropriate strategy.

The best exercise programs mix strength and muscular endurance training.

Some evidence also suggests that exercise programs that people find enjoyable may be more likely to generate long-term benefits, as they may be more likely to stick with them.

Training for muscular endurance

When training to improve muscular endurance, what matters most is not the type of exercise, but how people design their workout.

People should take into consideration the following when tailoring a workout to boost muscular endurance:

- the number of reps
- the weight or resistant force on the muscles
- the number of sets
- length or rest periods

According to the National Strength and Conditioning Association, individuals training for muscular endurance should aim to complete three or more sets of 15 or more exercise reps with a load that is 50% or less of their one rep max (RM).

A person's one rep max is the maximum load with which a person can complete one repetition of an exercise.

For example, a person may wish to use the leg press machine at the gym to build endurance in the legs.

If they have an RM of 300 pounds (lbs), they should aim to perform 2–4 sets of 15 or more reps with a load of 150lbs or less, with brief rest periods between sets.

As their muscular endurance for this exercise increases, they may wish to make the exercise more challenging by reducing rest times between sets, or increasing the reps per set, rather than increasing the load weight.

A person can apply the same principle of high rep and set volume, low–moderate load, and short rest periods to any exercise, such as bench presses, dumbbell curls, pushups, or squats.

People can choose exercises that suit their preferences and are challenging yet enjoyable enough to sustain training.

Example exercises

As we have already mentioned, there are no specific exercises that are better for training muscular endurance than others. The design of a training program makes it suitable for endurance training.

However, ACE recommends the following exercises for building muscle endurance, which a person can perform at home without equipment:

Pushup

A pushup works the triceps, chest, and shoulder muscles.

1. Start in a pushup position by lifting the body off the ground with the hands and toes, with the body in a straight line, horizontal to the floor.
2. Keep the hands flat on the floor shoulder-width apart and at roughly chest level.
3. Start with the arms straight, then bend the arms while keeping the body straight and engaging the core and glutes, to lower the body until the chest is close to the ground.
4. Straighten the arms to return to the starting position.
5. Repeat for 5–15 times, depending on difficulty, to perform one set

A person can also work the triceps muscles more by placing their hands close together and turn them inward, so the fingers and thumbs form a diamond shape.

To make the exercise easier, a person can place their hands on a bench or other stable, raised surface.

People can also modify a push up by placing the knees on the floor to make it easier, or lift one leg off the floor to make it more difficult.

Squat

A squat works the gluts, calves, quads, and core muscles.

1. Stand with the feet just over shoulder-width apart with the toes pointing slightly outwards.
2. With the head facing forwards in a neutral position and back straight, extends the arms in front, so they are parallel with the ground.
3. Squat down by bending the knees, keeping the body weight centered over the arches of the feet and the thighs parallel to the floor.
4. Keep the back straight with the shoulders back and chest forwards.
5. Use the feet, legs, and hips to push back up to the starting position.
6. Beginners should aim for 5–10 reps, and they may perform the squat against a wall or end the movement in a seated position on a low surface to make it easier.

Abdominal crunch

An abdominal crunch works the abdominal muscles:

- Lie on the back with knees bent and feet flat on the floor.
- Place the hands lightly on the back of the head and chin tucked.
- Slowly curl the upper body towards the knees, keeping the lower back on the mat.
- Slowly lower back down to the starting position.
- Perform 10–15 repetitions for one beginner set.

Pike crunch

Another example of an abdominal crunch is the pike crunch:

1. Lie with the back flat on the floor, with legs outstretched and arms above the head.
2. Lift the torso and legs off the floor to form a pike position.
3. Place the legs at right angles straight up in the air and reach with the arms toward the feet.
4. Slowly lower the legs and torso back to the floor.
5. Perform for 10–15 repetitions for one beginner set.

A person can also hold a stability ball between their ankles during this exercise.

Lunge

A lunge works the abs, buttocks, hips, and thighs:

1. Stand up straight with the feet together.
2. Bend one knee, lift the opposite leg, step forwards on to it, place the foot flat on the floor, and bend the supporting leg, so the knee reaches the bottom.
3. Use the front leg to push back up to the start position and repeat for the opposite leg.
4. Perform for 10–15 repetitions on each leg for one beginner set
   Plank.

A plank works the core and back muscles.

1. Start by lifting the body off the ground with the hands and toes, with the body in a straight line, horizontal to the floor
2. Keep the hands flat on the floor, with straight arms and wrists and the elbows directly underneath the shoulders.
3. Keep the chin tucked in, with the abs and thighs tight.
4. If the person is a beginner, hold for 30 seconds, rest for around 1 minute in between.
5. Repeat the plank at least three times.

A person can modify this exercise by resting on the forearms instead of the palms if they find it challenging to hold the plank position with straight arms.

Preventing injury

Tips to prevent injury during a workout include:

- warming up with dynamic stretches before exercising, for at least 5 minutes
- making sure to maintain proper posture and technique, and consulting with a fitness professional if unsure of these
- exhaling during movements requiring more effort and inhaling on easier parts of the exercise
- resting certain muscle groups at least 24 hours after working them out
- cooling down and stretching after exercise
- stopping physical activity if ill or injured