# SOFT SKILLS FOR CAREER SUCCESS SOFT SKILLS

DR. V. BASTIN JEROME MS. ALAGRA ANTONY



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# SOFT SKILLS FOR CAREER SUCCESS

This book provides a clearly structured and comprehensive overview of the soft skills essential for effective functioning at work. Each title of the book concentrates on specific soft skills to help you design a successful career. Whether you are a new job seeker, a person re-entering the business world, a recent college graduate, or a long time employee, this book will be helpful to begin with Stepping Stones to your career success. This book is essential reading for anyone who wants to polish their soft skills and really get ahead at work.



Dr.V.Bastin Jerome, is working as an Assistant Professor of Commerce, St. Joseph's College, Trichy since 2003. He is guiding PhD Scholars of Bharathidasan University, Trichy. He also trains aspirants for UGC-NET/SET and other Competitive exams. He is a National Expert for MBA institutes. He serves as the Member of Board of Studies and Examiners for evaluating Ph.D.

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## INTELLIGENCE FOR BUDDING MANAGERS



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NSS is a part of my life and I can change the world with it - Prof. Ramesh K. N (NSS Dist. Coordinator, Thrissur Dist.)

I have did something to the society and built the lives of my Volunteers. - Prof. K. J. Joseph (NSS P.O of Christ College, Irinjalakuda for 10 Years)

When we serve others, God is very happy. NSS made me to serve. - Prof. V.P Anto (NSS P.O of Christ College, Irinjalakuda for 10 Years)

NSS have shown me what it takes to influence volunteers and impact lives. Dr. Robinson P. P (Best NSS P.O Awardee, Christ College, Irinjalakuda)

NSS keeps me on the edge of the seat always, because I always wanted to help the students - Dr. Soni T L (Best NSS P.O – National Award, Sri. C. Achutha Menon Govt. college, Tcr)

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NSS has educated, enlightened and taught me some valuable lessons. Dr. Beena (NSS P.O. St. Josephs College, Irinjalakuda)

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#### A STUDY ON THE FAST FOOD STREET VENDORS

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#### Introduction

Street vendors are the integral components of urban economics around the world, by offering easy access to a wide range of goods and services in public spaces. Street vending as an occupation has existed for hundreds of years and is considered a cornerstone of many cities. In all civilization, ancient and medieval, one read accounts of travelling merchants who not only sold their wares in the town by going from house to house but they also traded in other countries. Perhaps ancient and medieval civilizations were tolerant to these wandering traders and that is why they flourished. In modern times we find that street vendors are rarely treated with the same measure of dignity and tolerance. They are targeted by municipalities and police in the urban areas as illegal traders, the urban middle class complains constantly on how these vendors make urban life a living hell as they block pavement, create traffic problems and also engage in anti-social activities (though more often than not, the

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same representatives of middle class prefer to buy from street vendors as the goods they sell are cheaper though the quality is as good as those in the overpriced departmental stores and shopping malls).

A street vendor is broadly defined as the persons who offer goods for sale to the public at large without having a permanent built up structure from which to sell.

Street vendors in Irinjalakuda are among the weaker sections of the selfemployed workers. The working life of vendors is explained in terms of their financial conditions and the extent of indebtedness the amount of bribes they have to pay in order to sustain themselves in the marketer their working hour the issue of public space utilization and the legal aspect of their activity. It has been seen from the study that their entire existence and nature of activities are extremely informal and trust based. They enjoy neither safety nor security at the work place as they face constant harassment from the local authorities.





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Editor-in-Chief Dr. S. Gokula Krishnan



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ehru School of Management Journal (NSMJ)



# A Study on the Role of Humour in Classroom

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#### 1. INTRODUCTION

UMAN Resource is one of the five important factors of production. They are the building block of every organisation. Without humans, no work can be initiated as a team. Thus, the importance of human in this world is immense and inevitable. The behaviour of every single being is unique in nature. It is said that "there is no map to human behaviour". Therefore, many of them working together may lead to arising of minute conflicts in the organisation. Here comes the need for managing human resources. Unlike other resources management of humans is very complex and difficult activity. To bring everyone together under a single roof, the management must give its employees the best environment and try to retain their valuable skills in the organisation. This will be the most tedious task that a firm will ever face, and this problem can only be dealt with appropriate human resource management techniques.

Organisational culture and behaviour are important factors that influence the behaviour of its employees. According to Ravasi and Schultz (2006) organizational culture is a set of shared assumptions that guide what organizations by defining appropriate happens in situations. various A "healthy" for behaviour organisational culture implies increase productivity, growth, efficiency and reduce unfavourable behaviour from the side of the employees and their turnover. A new emergence in the field of improving organisational culture and behaviour is Humour management. Involving humour element in every segment of work done in the organisation has proved to improve the overall development of employees and the efficiency of the firm.

Humour could be incorporated in any organisation. As it is an emotional phase, success of use of humour will be different in each context. Its success depends on the situation where humour is applied. Sharing humour gives relief from boredom, builds relationships, improve companionship among colleagues and creating a positive effect in the organisation. In accordance with the psychological researches, it is evident that only a happy person can perform with his full potential. Thus, to increase human productivity insulcationd of Whamour in workplace is very important Assistant Professor-

In-charge of Principal Christ College (Autonomous) Irinjalakuda

#### STATEMENT OF PROBLEM 11.

Teaching is considered as the noblest profession and the other professions. Teachers play a very importanta in developing a student, institution, community and country. To find passionate teachers is one of the diffe tasks faced by every institution. Controlling a class is art. Teachers need special skill and dedication to keept class lively and interesting. A student faces around 5 to teachers per day in college life. The efficiency of a teacher is a vital point in a class room. He should competent, updated and enthusiastic. It is the duty of t teachers to be more creative and optimistic to see that h class is enjoyed by every student. For that he has to built in lots of techniques into the class. Humour plays a important role in attracting the concentration of t students from being bored, dull, sleepy or bunk the clis So, the researcher aims to study the role of Humour managing the students.

#### **OBJECTIVES OF THE STUDY** III.

- To know the concept of Humour Management
- To find out whether the use of humour can me
- To determine which type of humour is comme
- To bring out the positive and negative effects
- To identify the role of humour in building apo teacher - student relationship.

#### SIGNIFICANCE OF THE STUDY IV.

Humour is an emotion and the perceptions about it w unique for each person. The workplace human proved to improve the overall communication Here relationship between superiors and students. Here examine the role of humour in making the class state lively. Humour is an allowed and the class state lively. Humour is an element which is effectively make and implemented in huge organisation. What make work different is the examination and presence of here in an institution file in an institution like college where no one teachesed the professors to use humour but in comparate



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#### ANT-LIONS AND OWL-FLIES OF KERALA

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#### ABSTRACT

The present work highlights the status of ant-lions (Myrmeleontidae) and owl-flies (Ascalaphidae) of Kerala based on the published information. A total of 5 species belonging to 4 genera were reported. Distribution map of ant-lions and owl-flies in Kerala is also provided.

Keywords: Neuroptera, Myrmeleontidae, Ascalaphidae, ant-lions, owl-flies, Kerala

#### INTRODUCTION

Neuroptera is the one of the smaller orders of holometabolous insects with 6530 species known globally while 312 species are known from India(Oswald 2017;Chandra & Sharma, 2009). Neuroptera commonly known as 'lacewings' possess two pairs of similar, delicate, transparent and membranous wings that are held in a roof like manner over the body when at rest. The wings have a dense network of veins, often branching just before they reach the wing margin (Ghosh1998). The adult of many lacewings like Myrmeleontidae and Ascalaphidae are nocturnal and are usually attracted to lights. Most neuropterans have a weak, floppy flight, but some like owl-flies resembling dragonflies are fast and agile fliers.

#### MATERIALS AND METHODS

This paper is prepared on the basis of the literature review of the Neuropteran families, Myrmeleontidae and Ascalaphidae.Only one species of Myrmeleontidae and a total of four species' of Ascalaphidae are reported so far from Kerala.

#### **RESULTS AND DISCUSSION**

A total of 5 species belonging to 4 genera were reported so far from the state. When we compare the species of Myrmeleontidae and Ascalaphidae families, more species are reported from Ascalaphidae (4 species) while only one species are reported from Myrmeleontidae (Figure 1).



Figure 1: Representation of number of species of two families of Neuroptera

### STATUS OF BEE (INSECTA: HYMENOPTERA) DIVERSITY OF KERALA

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#### ABSTRACT

In the present study, a total of 87 species of bees were reported from Kerala belonging to 19 genera under 3 families, according to the available literature. The family Apidae is dominated in Kerala with more genera followed by Halictidae. Species diversity is more in the genus *Lipotriches* Gerstaecker with 15 species followed by genus *Nomia* Latreille with 12 species.

Keywords: Bees, Apoidea, Apidae, Halictidae, Megachilidae, Kerala

#### INTRODUCTION

Bees are the insects mainly known for their pollination services. The importance of bees as pollinators of a great range of crops is undeniable. According to some estimates, onethird of the food we eat is dependent on insect pollination and bees are the most efficient pollinators. Bees display a range of lifestyles from solitary to eusocial, with some being able to shift between social and solitary modes according to environmental condition (Benton, 2017). Among the seven families under superfamily apoidea, members of the families Andrenidae, Colletidae, Halictidae, Megachilidae, Melittidae and Stenotritidae are mostly solitary bees. Family Apidae also has members following solitary mode of lifestyle.

There are 20,473 described species of bees in the world (Ascher and Pickering, 2020). In India, preliminary works on the taxonomy of bees were done by Bingham (1897) followed by Gupta in 2004 who catalogued 633 species of bees under 60 genera from India. Arati and Belavadi (2017) published a distributional checklist of subfamily Nomiinae of South India and recorded 48 species under 13 genera. Jobiraj (2002) conducted studies on the systematics of Apidae of Kerala. Recently,

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Manjusha and Jobiraj (2018) published a checklist of Nomiinae subfamily of Kerala which contains 25 species under 12 genera. The bee fauna of Kerala is yet to be explored completely and it surely requires plenty of work. This work aims to present the status of bee fauna of Kerala based on the published information and according to it, 87 species of bees were reported from Kerala under 19 genera. Further studies are recommended in this field to discover the rich diversity of bees from Kerala.

#### Methodology

Status of bee diversity in Kerala was analysed by collecting information from published literature, books and checklists. Specimens are not examined for this purpose.

#### **Results and Discussion**

According to the literature, bees of the families Apidae, Halictidae, Megachilidae are reported from Kerala. The genera reported from each family along with some taxonomic characters of each genus are given and the graph below represents the same. The two genera in which species identity not determined are not represented in the graph.



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### First Record of the Subfamily Figitinae (Hymenoptera: Cynipoidea: Figitidae) from India

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Abstract. The Subfamily Figitinae under the family Figitidae (Hymenoptera: Cynipoidea) is recorded from India for the first time through two African species, *Figites aciculatus* (Benoit, 1956) and *Xyalophora provancheri* Jimenez and Pujade-villar 2008.

**Key Words:** *Figites aciculatus, Xyalophora provancheri,* Figitinae, Cynipoidea, India, Kerala.

#### Introduction

The family Figitidae (Hymenoptera: Cynipoidea) is a cosmopolitan group, comprising of 1400 species in 132 genera, classified under 12 subfamilies (Paretas-Martinez *et al.* 2011). The subfamilies, Eucoilinae, Charipinae, Figitinae, Aspicerinae and Anacharitinae have worldwide distribution. Figitinae comprising of 170 species under 14 genera (Pujade-Villar & Mandl 2011) stands third in species diversity (Vardal 2004), is a heterogenous and paraphyletic group (Ronguist 1999) and are primary parasitoids of the Schizophoranoflies (Buffington *et al.* 2007). They In-charge of Principal \*e-mail: bejoyaaryan@pmail.com Zool. Surv. India Fauna of Malabar Wildlife Sanctuary, Kozhikode, Kerala, Consevation Area Series, 62: 143-146, 2019

#### **INSECTA : HYMENOPTERA : CERAPHRONIDAE**

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#### INTRODUCTION

Superfamily Ceraphronoidea is a little known group of very small (body size of 1-2 mm) parasitic hymenoptera, that are commonly found in all major biogeographical realms (Johnson and Musetti, 2004). The superfamily consists of two extant families, Ceraphronidae and Megaspilidae. Most Ceraphronoids are primary endoparasitoids of entomophagous insects with an exceptionally large host range which spans to at least eight insect orders including Hemiptera, Thysanoptera, Diptera, Hymenoptera, Coleoptera, Mecoptera, Trichoptera and Neuroptera (Miko *et al.*, 2011). The superfamily is also known to have highly diverse ecological roles from primary to quaternary parasitism (Haviland, 1920).

Earlier, the group was under Proctotrupoidea, until Masner and Dessart (1967) formally removed them and characterized a separate super family. At present, Ceraphronoidea comprises of two families, Ceraphronidae and Megaspilidae. The available literature indicates that the attempts to assess the diversity of Ceraphronoids in India were much scarce. Some data on Indian Ceraphronoids are available in Mani (1939) and Sharma (1983). Later, Mani and Sharma (1982) made a brief compilation of the available information of Ceraphronoidea in India. Since then, a total of 11 species under 4 genera in 2 families are reported from India (Bijoy and Rajmohana, 2014; Bijoy *et al.*, 2014). *Aphanogmus manilae* (Ashmead) is the only species of the superfamily so far reported from Kerala (Ghosh and Abdurahiman, 1985).

#### MATERIALS AND METHODS

Ceraphronid specimens for this study were collected from Malabar Wildlife Sanctuary (MWLS), using sweep nets and yellow pan. They were studied and digital imaging was carried out under high resolution stereozoom microscope-Leica MZ 205A with Leica DFC 500 digital camera. Morphological terminology follows Miko and Deans (2009).

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Temperature Dependence of Complex Permittivity of Flame Retardant Circuit Boards

Sreedevi P. Chakyar · Sherin Thomas · Sikha K. Simon · Nees Paul · Joe Kizhakooden · Anju Sebastian · Jolly Andrews · Joseph V. P.

Abstract The temperature dependence of complex permittivity of flame retardant (FR) printed circuit board (PCB) samples is carried out using a resonance property of metamaterial split ring resonator structure. Different PCB laminates used for the study are placed in close contact with (SRR) test probe and is arranged inside a temperature controllable wooden chamber. The variation in the resonant frequency of the SRR with temperature in presence of the sample is measured by arranging it in between the transmitting and receiving probes of a vector network analyzer (VNA). Using theoretically developed equations the real and imaginary parts of permittivity at different temperature is calculated from the shift in resonance frequency and Q-factor. Results are verified by simulating the resonant frequencies from the calculated values of temperature dependent permittivity.

Keywords Metamaterial · Split Ring Resonator · Flame Retardent boards · Temperature dependent permittivity

Flame retardent (FR) Printed circuit boards (PCBs) are dielectric materials whose electrical properties strongly depend on their composites and fabrication procedure. One desirable condition for the faithful functioning of electromagnetic gadgets is to have thermal stability of the dielectric constant and loss tangent of the PCB laminates. In different electronic circuits the heat produced during operation can affect the performance of the FR board sub-

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strate which in turn adversely affect the operation of the circuit as a whole. Hence, the study of dependence of temperature on the electrical properties of the laminates is an important area in designing electronic circuits and antennas. Only a few attempts are found in literature in this regard [1],[2]. But, extensive sample preparation, bulky experimental setup and rigorous calculation methods make them less desirable. In this work we use the dependence of complex permittivity on resonant frequency and Q factor of metamaterial resonating structure SRR to measure the temperature dependent complex permittivity of FR board samples using the equations given in [3].

Five different types of FR boards samples are used for the study. SRR of resonant frequency 3.6 GHz is used as the test probe and is placed between two monopole antennas connected to transmitting and receiving probes of a vector network analyzer (VNA). For uniform heating of the sample, SRR test setup is placed inside a thermally insulated box, which is having an arrangement to increase the temperature using an infrared lamp and having provisions for accurate measurement of temperature.

Figures 1(a) and 1(b) show the variation of the real part of permittivity and loss tangent calculated using equations from the resonant frequencies and Q-factors obtained from the experiments for different temperature. Significant changes in real and imaginary parts are observed even for an experimental band of temperature difference 50 °C. From the experimentally obtained values of permittivity, the resonant frequencies for different temperatures are simulated and are found to be in agreement with experiment. In various fields employing circuit boards especially in microwave systems, this study may help in the detection and removal of undesirable noise effects which may be more prominent during sudden temperature changes in the environment due to various reasons.

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### High Sensitive Mechanical Vibration Sensor using Triangular BCSRR

Sikha K. Simon · C. Bindu · Anju Sebastian · Sreedevi P. Chakyar · Jovia Jose · Nees Paul · Jolly Andrews · V. P. Joseph

Abstract This paper introduces a novel Triangular Broadside Coupled Split Ring Resonator (TBCSRR) metamaterial structure with high Quality factor for the sensitive detection of very weak mechanical vibrations. Instead of fabricating TBCSRR in a conventional manner, we have fixed metallic triangular strips of the resonator on two separate identical low loss thin sheets coaxially, which are capable of changing the spacing between them. Vibration sensor operates on the possible resonance frequency variations of the TBCSRR in relation to the changes in the spacing between rings caused due to amplitude of mechanical vibrations. If the operating frequency of the TBCSRR is selected on the rising or falling slope of the resonance curve, the output amplitude fluctuates in accordance with mechanical vibrations. The resonant absorption curve having very small bandwidth, not reported for earlier structures, makes the proposed TBCSRR a suitable choice for high sensitive vibration measurements. The high Q resonance curve of TBCSRR is experimentally obtained and the result is confirmed using simulation. Using TBCSRR as a sensor probe the amplitude variations caused due to some typical vibrations are presented. The proposed TBCSRR sensor probe may find applications in detecting even very weak vibrations caused due to various man-made and natural sources.

Keywords Metamaterials · Vibration Sensor · BCSRR

Metamaterial TBCSRR structure of different dimensions are fabricated and resonance properties are studied. Fig 1a shows the schematic representation of TBCSRR and Fig 1b shows the experimental and simulated resonance curves

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Sikha K. Simon et al



Fig. 1 a) Design of Triangular BCSRR b) Transmission spectra of Triangular BCSRR.



Fig. 2 a) Output vibration pattern due to freely falling standard weight of 2-gm from aheight of 10 cm at a distance of 10 cm from the sensor probe. b) Output vibration pattern due to freely falling standard weight of 50 gm and 100 gm from a height of 25 cm at a distance of 2 m from the sensor probe.

of TBCRR having dimensions of length of one side 12 mm, width 2 mm, silt width 0.5 mm, thickness 0.05 mm and spacing 0.5mm. The experimental set up consists of the newly designed TBCSRR unit with one of its triangular portion fixed on a rigid support whereas the other one is mounted coaxially on a cantilever capable of sensing mechanical vibrations, placed between transmitting and receiving probes of Vector Network Analyser[1,2].

Operating point for the vibration sensor is chosen on the falling edge of the absorption curve at a frequency of 1.31 GHz. In order to verify the sensitivity of the proposed vibration sensor, we have measured vibrations caused due to freely falling standard weights. Typical vibration patterns are shown in Fig 2a and 2b. This proposed high sensitive TBCSRR based vibration sensor can be a suitable choice for the precise detection of very weak vibrations like seismic tremors, vibrations due to hectic transportations, quarrying, pilling etc.

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Resonance properties of split ring resonators made of polyaniline based conducting polymer

Nees Paul · Sreedevi P Chakyar · Sikha Simon K · Anju Sebastian · Joe Kishakooden · Umadevi K. S · Jolly Andrews · V P Joseph

Abstract We present the observance of magnetic resonance for the first time in split ring resonators (SRR's) made of polyaniline based conducting polymer and verify our experimental result through simulation. The magnetic resonance behaviour of closed ring resonator (CRR) and SRR of polyaniline polytetrafluoroethylene (Pani - PTFE) are studied for square and circular shaped rings. This humidity sensitive conducting Pani - PTFE ring, the main characteristics of our novel resonance structure, behaves like lossy conducting ring with wide band resonance behavior whereas the CRR doesnot show any resonant response as is expected for a metallic ring. The results are compared using simulation studies of copper rings of similar dimensions. Resonance absorption of the Pani - PTFE ring resonators are analyzed using the transimission spectra (S21) obtained by arranging the proposed resonator between monopole antennas connected to the transmitting and receiving probes of a Vector Network Analyzer (VNA). The humidity dependence and flexibility of this Pani - PTFE ring can be used for the designing of frequency tunable 3 dimensional resonator and sensors at microwave regime.

Keywords Polyaniline · conducting polymer · split ring resonator · magnetic resonance

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Fig. 1 (a) Magnetic resonances present in a Copper and Pani-PTFE circular ring of outer diameter = 10 mm, inner diameter = 8 mm, slit = 1.057 mm and thickness t = 2 mm .(b) Magnetic resonances present in a Copper and Pani-PTFE square ring of outer length louter = 10 mm, inner length  $l_{inner} = 3.8$  mm, split s = 3 mm and thickness t = 1.5 mm.

Protonated chlorine doped polyanilie (Pani) is formed from aniline and ammonium peroxysulphate (APS) using chemical oxidation method. The powdered polyaniline is then turned into sheet form using polytetrafluoroethylene (PTFE) so as to form polyaniline - polytetrafluoroethylene (Pani-PTFE) hybrid sheet.[1,2]The prepared sheets possessing greater conductivity in highly humid conditions are then cut into square and circular rings of specific dimensions.

Figure 1(a) shows the experimental magnetic resonance curves obtained for SRR and CRR of circular geometry made of Pani - PTFE along with the simulation results. Simulated result of circular copper ring with same dimension is also shown in the figure for comparison. The wide band resonance behavior of the Pani - PTFE ring in comparison with its metallic counter part is due to the lower conductivity of the material. The absence of magnetic resonance for CRR is also noticed.[3,4] Figure 1(b) shows the experimental magnetic resonance spectra of a square SRR along with the simulation results where the simulated curve of square metallic ring is also shown. The noticeable shift in the resonance frequency between Pani - PTFE and copper ring may be explained in terms of the higher contribution of displacement current due to the nonignorable dielectric behavior of Pani - PTFE material. The magnetic response of this polymer with tunable conductivity makes it a new candidate for the realisation of left handed materials with attractive features.

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# Interface biology of stem cell—driven tissue engineering: concepts, concerns, and approaches



Soumya K. Chandrasekhar<sup>1,2</sup>, Finosh G. Thankam<sup>3</sup>, Devendra K. Agrawal<sup>3</sup>, Joshi C. Ouseph<sup>2</sup>

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# 2.1 Introduction

End-stage organ failure resulting from disease and/or trauma relies on various therapeutic approaches to activate repair response, replacement, and/or regeneration (O'Brien, 2011). Major strategy adopted for most of the end-stage clinical conditions is the transplantation of organ or tissue from healthy donors. However, the shortage of organ donors and lack of proper techniques for organ storage hurdle the life expectancy of the millions of sufferers across the globe. According to a recent report by World Health Organization, more than 90% of the global organ transplantation rempine unaddressed. In United States alone, roughly a million deaths occur because of end-stage organ failure; however, approximately 5% of them are being added to

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# FAUNAL DIVERSITY AND RECENT TRENDS in ANIMAL TAXONOMY

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Chapter 4

#### DIVERSITY OF KLEPTOPARASITES IN THE GROUP LIVING ERESID SPIDER STEGODYPHUS SARASINORUM

#### Drisya Mohan O.M.\* and Sudhikumar A.V.

Centre for Animal Taxonomy and Ecology, Department of Zoology, Christ College, Irinjalakuda, Kerala-680125 \*drisyamohan2@gmail.com

#### ABSTRACT

Kleptoparasitism is the form of feeding in which one animal steals the food or prey captured by another animal. Among spiders, web building spiders are the most frequent target of the kleptoparasites. Social spiders can build large sized web and nest cooperatively. Web and nest of social spiders harbour many species of spiders as kleptoparasites. So we observed the diversity of kleptoparasites in the social spider *Stegodyphus sarasinorum* Karsch 1891, in the Christ College campus Irinjalakuda, Kerala. The observations were made during the period of July 2016 -March 2017. We collected four species of spiders and two species of ants from the web and nest of *S. sarasinorum*. Male and females of *Argyrodes kumadai* Chida and Tanikawa 1999 were collected from the webs of *S. sarasinorum*. They usually consume the small preys entangled in the webs of *S. sarasinorum*. Spiders *Hyllus semicupreus*, *Oxyopes javanus*, *Phintella vittata* and ants *Oecophylla smaragdina* and *Monomorium pharaonis* were commonly found inside the nest of *S. sarasinorum*. They are probably attracted by the presence of small preys of the host and prey remains found inside the nest.

Key words: Diversity, kleptoparasites, social spider, Stegodyphus sarasinorum

#### INTRODUCTION

Kleptoparasitism is a form of stealing, can be defined as every reciprocal interaction in which one organism takes advantage from the foraging investments of another (Brockmann & Barnard 1979; Morand-Ferron et al. 2007; Iyengar 2008). This behaviour is reported in various taxa, including cnidarians, annelids, arthropods, molluscs, echinoderms, fishes, reptiles, birds and mammals (Iyengar 2008). Among arthropods, web building spiders are the frequent targets of kleptoparasites because they are easily attracted by the prey captured by a forager (Vollrath 1987). Social spiders can build large sized capture webs (Shear 1970) and they cooperate in foraging and feeding. Vulnerability to kleptoparasitism is affected by various characteristics of the organism's foraging and food-handling behaviours (Brockmann & Barnard 1979; Giraldeau & Caraco 2000). Kleptoparasites are chiefly attracted by high-quality food items and/or ones that require difficult or lengthy handling (Giraldeau & Caraco 2000). Stegodyphus sarasinorum Karsch 1891 is an Indian social cooperative spider mainly found in the arid areas. Nowadays this spider is widely distributed in Kerala too. They are found in rocky areas and in open fields, where flying insects are most abundant (Bradoo 1972). All these characters of this spider were found to be interesting, so kleptoparasites can easily invade this social spider. Earliest studies (Bradoo 1967; Bradoo & Joseph 1970; Bradoo 1971) reported that remains of the prey and exuviae of S.

ISBN 97881930507607609 Fr. DI. Stant Professor-In-charge of Principal Christ College (Autonomous) Irinialakuda UNUEGE (AUTO)

and also small preys. Ants are also effective kleptoparasites of this social spider. *O. smaragdina* steal the prey remains and preys from the nest of the spider. Leborgne et al. (2011) also reported that ants stole the prey of sub social spider *S. lineatus*. Ant raids are most common in the discarded nests.

#### ACKNOWLEDGEMENT

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# FAUNAL DIVERSITY AND RECENT TRENDS in ANIMAL TAXONOMY



Chapter 10

#### PRELIMINARY STUDY ON SPIDER FAUNA OF RIPARIAN HABITAT NEAR JOJARI RIVER, RAJASTHAN, INDIA

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#### ABSTRACT

A preliminary study was conducted to document spiders of Jojari river, a tributary of Luni river, the only river that flows through western part of Rajasthan state. Total 10 species belonging to 9 genera and 6 families were documented from this area. Salticidae and Lycosidae were found to be the most species rich family. Guild structure analysis yielded 4 feeding guilds namely Stalkers, Ambushers, Space-web builders and Ground runners.

Key words: Spiders, riparian ecosystem, pollution, bioindicator

#### INTRODUCTION

Spiders have been extensively used as ecological indicators in nature conservation and management. They are the dominant predators and stabilizers of the prey-predator balance in natural ecosystem (Schmitz et al., 2010). Besides having undoubtedly great value to the environment spiders are comparatively neglected organisms in biodiversity research. While considering the escalating level of anthropogenic threats to biodiversity, an inventory and proper documentation of biodiversity, especially on the neglected groups like arachnids is needed urgently. Accelerating rate of species extinction due to anthropogenic activities increase urgent need to conserve biodiversity. Most important step in conserving biodiversity is identifying its critical components. However till date only a small fraction of millions of species thought to exist have been identified and catalogued. Spiders of riparian habitat is very less documented in the World. Some of the first studies on riparian spiders were done by Schenkel (1932), Knülle (1953) and Casemir (1962). Some other works were reported by Beyer 1995; Beyer & Grube 1997; Framenau 1995; Hugenschütt 1996; Ruzicka & Hajer 1996; Steinberger 1996. Spider fauna of riparian habitat near Jojari river, Rajasthan was analysed in this study.

#### METHODOLOGY

Jojari is a tributary of Luni river, the only river that flows through western part of Rajasthan state. Spiders were collected from December 2016 to December 2017. The following methods were adopted for the collection of spiders.

#### 1. Hand picking method

This method involves ground hand collection or "looking down" method and aerial hand collection method or "looking up" method. In ground hand collection method all the spiders visible on the ground i.e.

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also like to acknowledge all the lab members of CATE for valuable comments and suggestions.

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Chapter 12

#### MICROBIAL ANALYSIS OF LARVAL GUT OF AEDES AEGYPTI

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#### ABSTRACT

Mosquito larval gut remains as an ecosystem that accommodates a wide array of microbes. These microbes play a significant role in nutrition, growth, reproduction and vector competence of mosquitoes. The host feeding and prevailing environmental conditions are important parameters that shape gut biome. The gut microbial community is mainly dominated by bacterial species. It also harbors viral and fungal population. The presence of gram positive and gram negative bacterial inmates has a potential role on disease transmission. Aedes aegypti, flavi virus vector of many diseases like Dengue virus, Zika virus, Yellow fever virus and Chikungunya virus draw special attention in this regard. Lack of vaccination in man and insecticide resistance among mosquitoes leads to rise of mosquito borne diseases. Several control strategies were being employed to control these vector borne diseases. A better understanding of gut microbial community and its relationship with host can be explored as effective measure to check these vector mosquitoes. This approach can reduce adverse effect of many insecticides on non target species including humans, environment as well as the development of mosquito resistance against insecticides.

Key words: Diversity, microbes, gut analysis, mosquito

#### INTRODUCTION

Mosquitoes are holometabolus insects having four different stages from egg to adult through two intermediates, larval and pupal stages respectively. Among them larval stage is the active form in its life cycle. During the larval stage the feeding depends on the environmental conditions prevailing in its habitat. Recent studies by Mang et al., 2017 indicate that the gut microbiota of larva has an impact on transmission of diseases. Microbial content of Aedes aegypti draw special attentation in this regard as it remain as the vector of many dreaded arboviral diseases like Dengue, Yellow Fever, Zika and Chikungunya virus. This vector is prevalent in Indian urban areas. The presence non degradable tyres, long lasting plastics, inappropriate waste water management create ideal breeding place for these mosquitoes. The population of Aedes aegypti varies with rainfall and humidity. The life cycle can be categorized into two phases, an aquatic phase (egg, larvae, and pupae) and a terrestrial phase having an aerial adult form. Under the optimal conditions the life cycle of aquatic stage of the Aedes aegypti (hatching to adult emergence) ean be as short as seven days. At low temperatures, it may take several weeks for adult emergence. During Fr. Dr. Jolly Andrews

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adult mosquitoes appears promising under laboratory and in simulated field conditions.

#### CONCLUSION

The mosquito gut is inhabited by a large number of microbes. Understanding the symbiotic relationship between the gut microbiome and the host mosquito will perhaps facilitate novel intervention strategies for mosquito vector control, as a preventive measure of disease transmission. New approaches like paratransgenesis technique and use of entomopathogenic fungi are now being employed in this regard.

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#### Chapter 14

#### EFFECT OF FRINGE VEGETATION ON THE DIVERSITY AND **COMMUNITY STRUCTURE OF PADDY FIELD SPIDERS** (ARACHNIDA: ARANEAE) OF MURIYAD KOL WETLANDS, **KERALA**

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#### ABSTRACT

Spiders are among the most common predators in the agricultural landscapes of rice paddy fields. High degrees of heterogeneity in the surrounding landscape have been demonstrated to have a positive effect on spider abundance and species richness on arable land. The present study was designed to evaluate the effects of fringe/surrounding vegetation on the diversity and community structure of spiders in the paddy field ecosystem. For this purpose, five plots of paddy fields, having varying degree of vegetation structure surrounding the plots, were selected in the Muriyad Kol wetlands, Thrissur. The mean abundance, richness and diversity of spiders among the plots were compared. The results suggested a significant difference in the mean abundance, richness and estimated Shannon diversity among the sites close to the edge and >25 m away from the edge of the paddy field. However, the community structure did not differ significantly among fields.

#### Key words: Arachnology, ecology, Ramsar site

#### INTRODUCTION

Spiders play a very important role in terrestrial ecosystems, both as a major predator and prey for a wide range of organisms. They are nature's master spinners of silken webs and highly proficient predators for, in their absence, the insect pest world would run amock, creating havoc in the entire balance of their ecosystems posing serious threat to human health and food resources. Spiders are extremely predatory arthropods and they have significant role in its habitat in controlling the insect populations. The agricultural landscape of irrigated rice fields and its surrounding environments have inherent high arthropod biodiversity prominently shown on arthropod food webs, of which, spiders are among the most common predators (Barrion & Litsinger, 1984 & 1995, Okuma et al. 1993). The importance of spiders in regulating rice insect pests has long been recognized and studied in India. The community and structure of vegetation also influence the community composition and diversity of the arthropod assemblages (Ysnel et al. 1996). The growth of weeds in the rice field proper and surrounding bunds adds another dimension to this ecosystem that is dominated by the monocrop (Edirisinghe & Bambaradeniya, 2006). The present study investigates the effect of fringe or surrounding vegetation on the abundance, diversity and community structure of spiders in the paddy

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#### DISCUSSION

The study indicates the positive effects of fringe or surrounding vegetation on the abundance and diversity of paddy field spiders. The paddy fields close to tree cover recorded the highest estimated species Richness. since it had many rare species which are characteristic of the surrounding vegetation. The surrounding vegetation marked by grass and small shrubs also had significantly higher species richness estimates as compared to the areas away from the surrounding vegetation. The grass lands mostly harbour similar spider community as seen in the paddy fields and acts as a buffer or retreat for spiders that cannot tolerate exposure during periods of pesticide applications. Similar trend in abundance also prove the positive effects of maintaining vegetation in the fringes or bunds in paddy ecosystems. However, the type of vegetation surrounding the fields had no significant effect on the diversity and abundance of spiders in the paddy field. The presence of arthropod natural enemies can be enhanced by manipulation of weed communities through partial slashing of weed cover on the bunds. The non-rice habitats in the vicinity and periphery of rice fields sustain a reservoir of natural enemies during successive cultivation therefore command special attention (Edirisinghe 84 and cycles Bambaradeniva, 2006).

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# FAUNAL DIVERSITY AND RECENT TRENDS in ANIMAL TAXONOMY



Chapter 17

#### DIVERSITY OF SPIDERS IN CHULANNUR PEAFOWL SANCTUARY, KERALA

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#### ABSTRACT

The distribution and diversity of spiders has been drawn attention of naturalist in different parts of the world since the eighteenth century. Spiders are abundant and ubiquitous, employ a remarkable diversity of predation strategies, occupy a wide array of spatial and niches, are characterized to high within - habitat taxonomic diversity, exhibits taxon guild - specific responses to environmental change, and are relatively easy to sample and identify. The Chulannur Peafowl Sanctuary is located in the Thrissur and Palakkad districts in the state of Kerala. The sampling methods such as ground hand picking, aerial hand picking, and vegetation beating were used to collect specimens. A total of 63 species of spiders belonging to 42 genera coming under 14 families were collected from Chulannur Peafowl Sanctuary. Forest area contained 35 species of spiders belonging to 28 genera under 10 families. The Bamboo area contained 33 species coming under 22 genera under 10 families. Shrubs contained 27 species of spider coming under 19 genera belongings to 10 families. Butterfly garden reported 4 species of spiders coming under 4 genera and single family, Araneidae. The medicinal garden consisted of 13 species of spiders coming under 11 genera under 7 families. Out of the 14 families collected during the study, the family Araneidae was dominant family with 17 species belonging to 10 genera. A total of 6 feeding guilds were identified by the analysis of feeding behaviour of collected spiders. Species richness was high in the forest area. Highest species diversity found in Bamboo area and the lowest in butterfly garden.

Key words: Spider, diversity, Chulannur Peafowl Sanctuary, guild structure

#### INTRODUCTION

Spiders form one of the most ubiquitous groups of predacious organism in the animal world (Riechert & Lockley, 1984). They are the largest order of arachnids and rank seventh in total species diversity among all other orders of organisms. As of November 2017, at least 45,700 spider species coming under 114 families have been recorded by taxonomists (World Spider Catalogue, 2017). Spider webs vary widely in size, shape and the amount of sticky thread used. A herbivorous species, *Bagheera kiplingi*, was described in 2008, but all other known species are predators, mostly preying on insects and on other spiders, although a few species also take birds and lizards.

The distribution and diversity of spiders has been drawn attention of naturalist in different parts of the world since the eighteenth century. Spiders as a group may even provide useful conservation tools as ecological indicators or in rapid/biodiversity measurement. Jocque (1981) showed that size in spiders is dependent on the quality of the habitat. Spiders are clearly an integral part rion biodiversity, since they play an important role in christ College (Autonomous diversity, since they play an important role in

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# FAUNAL DIVERSITY AND RECENT TRENDS



Chapter 23

#### A PRELIMINARY CHECKLIST OF SPIDERS (ARANEAE) FROM WAYANAD WILDLIFE SANCTUARY, KERALA, INDIA

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#### ABSTRACT

The present study provides a basic inventory of spiders from Wayanad Wildlife Sanctuary, Kerala based on preliminary survey conducted from November 2014 to December 2015. The study resulted in the documentation of 174 species of spiders belonging to 97 genera and 24 families. The most dominant family was Salticidae which constitutes 21% of the total spider species collected. Guild structure analysis revealed seven feeding guilds, namely Stalkers, Orb web builders, Ambushers, Foliage runners, Space web builders, Ground runners and Wandering sheet weavers. Stalkers and Orb weavers were the dominant feeding guilds. As of yet, no work has been carried out on the spiders of Wayanad Wildlife Sanctuary. This study is relevant owing to the fact that this is the pioneering report on the diversity of spider fauna of this protected area.

Key words: Araneae, ecology, guild, Western Ghats, biodiversity hot spot

#### INTRODUCTION

Spiders are among the most abundant and diverse terrestrial predators on earth (Coddington & Levi, 1991). They rank seventh in total species diversity among all other groups of organisms. They belong to the order Araneae of class Arachnida of phylum Arthropoda. About 46,428 species of spiders belonging to 4,029 genera and 113 families are known to science (World Spider Catalog, 2017). Out of these a total of 1685 species of spiders belonging to 438 genera and 60 families have been listed from Indian region (Keswani et al., 2012). Spiders are clearly integral parts of the global biodiversity, since they play an important role in ecosystems as predators and source of food for other creatures. They primarily attack insects, but also eat other arthropods, including other Araneae. They are biological indicators of ecosystem changes and habitat suitable modifications due to their small body size, short generation time, high sensitivity to temperature and moisture changes (Kremen et al., 1993).

Spiders are the largest order of arachnids and are found worldwide on every continent except for Antarctica. Their study remains insufficiently investigated or undiscovered entirely even in forest areas. Protected areas, they offer a diverse set of habitats for plants, animals and micro-organisms. Consequently they hold the majority of the world's terrestrial species and as much half of the entire spider faunas. The present study was conducted in Wayanad Wildlife Sanctuary which is the part of the Western Ghats and also the second largest Wildlife Sanctuary in Kerala. This wildlife area holds Fr. Dr. Jolly his study was to compile the first checklist of spiders of the Wayanad In-charge of Principal RINJALAN

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structure of the vegetation is therefore expected to influence the diversity of spiders found in the habitat. Spiders have close relationship with their surrounding because they need attachment sites for their webs and their sensory organs can recognize the tactile vibrations of the substrate (Rovner & Barth, 1981). They have higher host finding ability and capacity to consume greater number of prey than other field inhabiting predators (Kamal et al, 1990). Oxyopids, Thomisids, Ulobrids and Salticids are some of the expert's silent predators. They can feed on aquatic larvae as well as the adult flying mosquitoes or insects. They maintain ecological equilibrium by suppressing insect population (Saini et al., 2012). Spiders are also utilized by ecologists in the form of conservation tools as ecological indicators of overall biodiversity in many terrestrial communities. They are extremely sensitive to small changes in the habitat structure, which make them ideal candidate for land conservation studies. The aim of the present study is to provide baseline information of spiders inhabiting in this area. Though the study of spiders from Wayanad Wildlife Sanctuary is still far from complete, the present study forms a foundation for further investigation on this group.

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# FAUNAL DIVERSITY AND RECENT TRENDS in ANIMAL TAXONOMY



Chapter 24

#### A PRELIMINARY INVESTIGATION ON SPIDER FAUNA FROM TWO SELECTED HABITATS OF THRISSUR DISTRICT, KERALA

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#### ABSTRACT

The distribution and diversity of spiders has been drawn attention of naturalist in different parts of the world since the eighteenth century and they exhibits taxon guild - specific responses to environmental change, and are relatively easy to sample and identify. The study sites are located in the Thrissur district in the state of Kerala. The study intends to carry out sampling of two different habitats such as sacred grove and scrub jungle. Standard sampling methods were used to collect specimens. The aim of study is to reveal the diversity, species richness and spider assemblage of selected habitats. The diversity, richness and evenness were calculated using SPSS Program. A total of 50 species of spiders belonging to 40 genera coming under 14 families were collected from sacred grove and scrub jungle. Sacred grove contained 27 species of spiders belonging to 22 genera under 14 families. The scrub jungle consisted of 29 species of spiders coming under 24 genera under 10 families. Out of the 14 families collected during the study, the family Salticidae was dominant family with 11species belonging to 11 genera. A total of 7 feeding guilds were identified by the analysis of feeding behaviour of collected spiders. Species richness was high in the scrub jungle. Highest species diversity found in Kalari-Pambum Kavu.

Key words: Spider, diversity, scrub jungle, sacred grove, guild structure

#### INTRODUCTION

Spiders are ancient animals, emerged in carboniferous era, date back over 380 million years. They are found worldwide on every continent except for Antarctica, and have become established in nearly every habitat with the exceptions of air and sea colonization. Among animals spiders represent 18% of diversity. Spiders as a group may even provide useful conservation tools as ecological indicators or in rapid biodiversity measurement. Jocque (1981) showed that size in spiders is dependent on the quality of the habitat. Spiders are clearly an integral part of biodiversity, since they play an important role in ecosystem as exclusive predators on other organisms and maintaining the prey predator balance. Spider is used as a model organism for research in biology, behaviour and communication.

A sacred grove or sacred woods are any grove of trees that are of special religious importance to a particular culture. Sacred groves feature in various cultures throughout the world. The societies of Greece, Roman, Asia and Africa had long preserved sections of the natural environment as sacred groves to Gods and Goddesses (Khiewtam & Ramakrishnan, 1989). In spite of a general very high land to man ratio, sacred groves which are the relics  $\mathbf{Fr}$ . Dr.

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#### FAUNAL DIVERSITY AND RECENT TRENDS IN ANIMAL TAXONOMY

	13. THOMISIDAE Sundevall, 1833	
40	Amyciaea forticeps O.P. Cambridge, 1873	
41	Camaricus sp.	
42	Heriaeus sp.	
43	Thomisus projectus Tikader, 1960	
44	Thomisus sp.	
45	Xysticus minutes Tikader 1960	
	14. ULOBORIDAE Thorell, 1869	
46	Miagrammopes sp.	
47	Uloborus glomosus Walckenaer, 1841	
48	Uloborus krishnae Tikader, 1970	
49	Uloborus sp.	
50	Zosis geniculatus Latreille, 1806	

#### ACKNOWLEDGEMENT

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ആടക്കഥാസാഹിത്യത്തിലെ ഭാവുകത്വ.... – ആർദ്ര എസ്.വി 15 ആത്രകഥാസാഹിത്യത്തിലെ ചരിത്ര..... – ഡോ. അജിത ചേമ്പൻ 23 സാമൂഹികജീവിതപ്രതിഫലനം - ഉണ്ണിയച്ചീ... - അപർണ്ണ ടി. 33 ലേയാള സാഹിത്യ വിമർശനത്തിൽ...- ആര്യ സുരേന്ദ്രൻ ആർ. 38 പാരമ്പര്യത്തിന്റെ പരിചരണം മലയാള..... – ബവേഷ് പി. കെ. 47 അങ്ങാടിവേല–ഒരു സംസ്കാരപഠനം - ബിന്ദു നരവത്ത് 54 സഞ്ജയൻ: രാഷ്ട്രീയപരിഹാസങ്ങളുടെ... - ദിൽഷ പി.കെ. 63 അന്നാകരെനീന: നോവലും റേഡിയോനാടകവും – ദിവ്യ എം.ആർ. 72 അപകേന്ദ്രീകരണത്തിന്റെ സർഗ്ഗധാര..... – ദിവ്യ ഒ.ഡി. 81 Burnout-A major .... Dr. Vasumathi T. & Ms. Reshma P. M. 94 Problems and Challenges .... - Fathima zuhra Panchali & 104 Dr. P. K. Aruna 112 Social mobility, subaltern ..... - Jayaprakash Mallay Reflections of gulf migration on Kerala ..... Ms. Jincy S.R. 117 കേരളീയ കായികസംസ്കാരം: ചരിത്രവും..... ജിനീഷ വി.കെ. 124 'ജീവിതമെഴുത്ത്' ചരിത്രാ...... ജിഷി കോട്ടക്കുന്നിന്മേൽ 136 നളകഥയുടെ വർത്തമാനകാല പരിപ്രേക്ഷ്യം.... – ഇ. പി. ജ്യോതി 143 എഴുത്തുകർതൃത്വവും സ്ത്രീ പ്രതി.... – ബബിത കെ. പി. 148 152 നെല്ലിനെ സംബന്ധിച്ച.... -ലിൻസി വാപ്പുറത്ത് 162 സമീപക്കാഴ്ചയുടെ ചരിത്രപാഠങ്ങൾ - ലിൻസി സി. പാഠവിമർശനചരിത്രം ഒരു വിവരണാത്മക.... – മഞ്ജു എം.പി. 169 178 ദർശനവും ചരിത്രവും: ബുദ്ധനും.... – നീതു ഗോപി കെ. 189 കോഴിക്കോടൻ നാടകവേദിയിലെ സ്ത്രീ.... – നീതു കെ.ആർ. മലയാള മാന്ത്രികനോവൽ .... - പ്രവീൺകുമാർ പി. പി. മലയാളസിനിമയിലെടപ്പുതുന്നമീപനം ..... - പ്രീത. കെ. മതമൈത്രിയുടെ പ്രതികം (പ്രദേതാലയത്തിൽ - റിന്ദ്ര സി. 195 201 206 Dark and Light In Performances: .... - Renjitha V.R. 212
# Reflections Of Gulf Migration On Kerala Society And Cinema

### Ms. Jincy S. R.

Migration means movement of population, labour or capital between Migration in Migration in regions.' In recent years, migration from Kerala to other countries of heged to countries abroad has become so rampant that its states of filter in every aspect of life in the state.<sup>2</sup> This is relatively a new development for Kerala and has been taking place after 1940s and was development in the economic and social life of Kerala predominant in the economic and social life of Kerala.

The basic motivation for migration is predominantly economic considerations. People move out of the state in search of better employment opportunities, higher income and economic security, with the hope of raising resources for improving the standard of living of their and their families. The demographic factors like high population growth rates and high population density considered as one of the major cause for unemployment as well as migration. Thus the migration is a reaction whe increasing population pressure in the state.

During the last decades of the 20th century, gulf migration has been the dynamic force that shaped the economy of Kerala. The rapid growth of oil price and the rising demand for labour in the related industries opened up opportunities (as a pull factor) which attracted skilled youth of Kerala in the early 1970s and, accelerated the migration to the Middle East countries. Among the migrants from India, a sizeable number were Kannur and K

The migrations begin by 1970s reached its peak with a mass migration 980s and 1000 Frein by 1970s reached its peak with a mass migration Kannur and Kasargode). <sup>91980</sup>s and 1990s. This guilfein igration was different from that of the Christ College (Autonomous)

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Fr. Dr. Jolly Antirews Assistant Professor-In-charge of Principal Christ College (Autonomous) Irinjalakuda



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# From Image to the Sound: An Early History Malayalam Cinema till 1947

## Ms. Jincy S. R.

Kerala has its own great tradition of arts. The influence of folk Kerala has its own ground of Kerala, and the large repertoired and culture is visible in the culture of Kerala, and the large repertoired and culture is visible in the culture contributing to the rich and varies form an integral element contributing to the rich and varies form an integral fabric. Surprisingly, the traditional art c folk arts form an integral cherce. Surprisingly, the traditional art formation structure of our cultural fabric. Surprisingly, the traditional art formation structure of our cultural fabric. The shadow puppetry, Tholpavakkow structure of our cultural the shadow puppetry, Tholpavakkoothuk Kerala had a visual appeal. The shadow puppetry, Tholpavakkoothuk Kerala had a visual appendic for it which exhibited at festivals of villa Kerala was a best example for it which exhibited at festivals of villa Kerala was a best example iled many kinds of shadow plays with multiples. In India there prevailed many kinds of shadow plays with multiples. popular appeal, which effectively exploited the possibility of light and shade using leather cutouts and puppets of gods and goddesse accompanied by live instrumental as well as vocal music'(Endnotes) Usually, the stories from the mythology were presented in the shadow dance. Thus much before the arrival of cinema, the people of Keral were familiar with moving images on the screen.

The legacy of Kerala's visual culture may have been helped to the origin and development of cinema as a new medium of expression Moreover Malayalam cinema has its own existence and is one of the most popular arts enjoyed by the mass. Hence cinema has contributed much to the social and political development of Kerala society.

### **Malayalam Cinema: Early period**

Following the screening of the Lumiere moving pictures in London in December 28, 1895, cinema became a sensation across Europe and by the very next year the Lumiere films had entered into India. The first cinematography exhibition in India took place on July 7, 1896. Lumiere brothers, Louis and Auguste at Watson hotel, Bombay? The After the hyperbolic of Principal subcontinent which was under the British rule After the exhibit of Principal Subcontinent which was under the bit of show at various particulation with the base of the show men conducted show at various particulated at the show men conducted show at the show men conducted show at the show men conducted show at the show at the show men conducted show at the sh at various parts of India in temporary tents. Soon after, indigene attempts were started in different parts of the

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<sub>എഡിറ്റർ:</sub> ഡോ. പി എഫ് ഗോപകുമാർ

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# സഹോദരൻ അയ്യപ്പൻ: യുക്തിവാദിയും സാമൂഹ്യബോധമുള്ള വിമർശകനും

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നിലവിലുള്ള സാമൂഹ്യവും രാഷ്ട്രീയവുമായ അവസ്ഥയെ വെല്ലുവിളിക്കുകയെന്ന അർത്ഥ ത്തിൽ, വിമർശനാത്മകമായ ഒരു കർമ്മം നിറവേറ്റുകയെന്നതാ വണം ഗവേഷണത്തിന്റെ ലക്ഷ്യ മെന്നു പല സാമൂഹ്യശാസ്ത്ര ജ്ഞന്മാർക്കും അഭിപ്രായമുണ്ട്. സഹോദരൻ അയ്യപ്പനെപ്പോലുള്ള കർമ്മയോഗികളുടെ 6006 ത്തിലും ഇതു ബാധകമാണ്. എങ്കിലും പലപ്പോഴും ഈ ഗവേ ഷണത്തിനാധാരമായ മൂല്യങ്ങ ളോടുള്ള പ്രതിജ്ഞാബദ്ധത കണക്കിലെടുക്കാറില്ല ബൃക്തിപര 

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# ലിംഗപദവി പഠനങ്ങൾ

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# Gender Studies (Malayalam)

**B.A. History VI Semester** 

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# Gulf Migration and Malayalam Cinema

Ms. Jincy S. R.\*

The increased income of Gulf countries earned from high oil prices in the early 1970s and the lack of skilled labours in the industrial sector, necessitated large number of employment opportunities in the Middle East countries, which accelerated the Gulf migration by 1970s. Among the migrants from India, a sizeable number were from Kerala especially from northern part (Malappuram, Kozhikodu, Kannur and Kasargode). The migrations begin by 1970s reached its peak with a mass migration by 1980s and 1990s. This Gulf migration was different from that of the earlier other migrations (like inter-state and migrations to Ceylon, Malaysia, Singapore, U.S.A. etc.). The large scale migration to the Middle East countries resulted in unprecedented socio-economic changes in Kerala.

The basic motivation for migration is predominantly economic considerations. People move out of the state in search of better employment opportunities, higher income and economic security, with the hope of raising resources for improving the standard of living of their and their families<sup>1</sup>. The demographic factors like high population growth rates and high population density considered as the one of the major cause for unemployment as well as migration. Thus the migration is a reaction to the increasing population pressure in the state.

Kerala has been very successful in developing the social opportunities related to education, health care, social security etc. but it failed to create income generating employment opportunities within the state. As a result the people of Kerala have been much more inclined to make use of economic opportunities outside the state than at home<sup>2</sup>.

Migration has played a vital role in the socio-economic and political changes in Kerala in the last four decades. Gulf migration has a very significant impact on the size and structure of families. In the case of Gulf migration, merio inigrate than women to support their families. Thus in many families, married women are left back at home to shoulder

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# Disaster Management: Principles and Practices

Subin K Jose Vivek Chandran A Sreejith A C Gopakumar P G

Fr. Dr. Jolly Andrews Assistant Professor-In-charge of Principal Christ College (Autonomous) Irinjalakuda



# RENAISSANCE IN KERALA: A REVISIT

Edited by Prof. S. Sivadasan

> Fr. Dr. Jolly Andreaus As istmic of Principal In-ch of Principal Christ College (Autonomous Irinjalakuda

### About the Bool

The prostation of the literaisence in Kersla: A Revisit', is a reflection of the collective efforts of a host of researchers, who study and reflect on the Social History of Kersla with creat difference to unravel its hitherto unexplored periods, personalities and events among others. The proprietary historians of Kersla' generally projected the contributions' of the dominant sections of people but ignored the roles of others in the social transformation of Kersla. Often, they were able to convert the anthentic creators of history into 'absentees in history'. That is why there are people with lesser legacy playing a dominant role with great biographies, while people with greater intervention disappear without any biographical sketch. The present edition is a reaction to this 'marginalisation' in the history of the renaissance movement in Kersla and endeavours to revisit the movement in a broader and deeper sense.

#### About the Editor



### Prof S. Sivadasan

Born (1954) and brought up in the village of Kazhuvoor, near Somatheeram, Vizhinjam, as the son of M. Somanadhan and B. Rajamma. After completing his secondary education in the rural schools, Karichal L.M.S.L.PS and P.K.S.H.S, Kanjiramkulam, he pursued his higher education at University College, Thiruvananthapuram. His teaching and research career span over 35 years in the various Government Colleges of Kerala, including University College and Sree Sankaracharya University of Sanskrit, Kalady, from where he retired as Professor and Head of the Department of History. He is blessed with a long array of research scholars, who gifted him the Festscript, 'Faces of Social Reform in Kerala', the first edition of this book, edited by Dr. P. F Gopakumar, his first Research Scholar. Spouse: Preetha P.K,

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## **Renaissance in Kerala: A Revisit**

Edited by Prof. S. Sivadasan



### Modern Book Centre Thiruvananthapuram

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Assistant Professor-In-charge of Principal Christ Gullege (AutoHolhous) Ifinjalakuda

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## Sahodaran Ayyappan: the Rationalist and Critical Realist

- 15 ---

### S. R. JINCY

Many social scientists have argued that "research should be designed to perform a 'critical' function, in the sense of challenging the sociopolitical status quo". The dictum seems applicable to activists like Sahodaran Ayyappan as well. However, very often, the relationship between the political value judgments underpinning this commitment and the values intrinsic to inquiry, as a distinct form of activity has been left obscure. The validity of those judgments has usually been treated either as obvious or as a matter of personal commitment. But there is an influential tradition of work that claims to derive evaluative and prescriptive conclusions about current society directly from factual investigation of its history and character. In the nineteenth century, Hegel and Marx were distinctive in treating the force of ethical and political ideals as stemming from the process of social development itself, rather than as coming from a separate realm, in the manner of Kant. It is possible to derive negative evaluations of actions and institutions, along with prescriptions for change, solely from the premise that these promote false ideas, or that they frustrate the meeting of needs.

In this article, an attempt is made to introspect the career and activities of Sahodaran Ayyappan, the great humanist in modern Kerala against the theoretical frame above.

Sahodaran Ayyappan adorns a paramount position in the social and cultural history of Kerala. He was instrumental in effecting revolutionary changes that ultimately led to the uplift of the marginalised sections of the Hindu society, especially the EzhavasDand Pulayas. Ayyappan

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was inspired by the ideas of liberty, equality and fraternity as well as rationalism, secularism and humanism. The rational outlook and ac. tivities of this great humanist engraved out an immortal image in the history of social reform movements in Kerala.

As an ardent follower of Sree Narayana Guru, Ayyappan practiced the philosophy and principles of Guru throughout his life. He founded the Sahodara Sangham or Association of Brotherhood in 1917 and the journal Sahodaran and a newspaper to spread the idea of universal brotherhood.<sup>1</sup> This gave him the popular name, Sahodaran Ayyappan. He formulated a revolutionary message "no caste, no religion and no God for man" as against the famous message of Guru, 'one caste, one religion and one god for man'.

Available evidences show that the Hindu society of Kerala was parcelled out among innumerable castes and sub-castes at the beginning of the 19<sup>th</sup> century.<sup>2</sup> The society was based on categorizations of superior and inferior or pure and impure. This inferiority and superiority were marked by pollution attached to touch and approach one another. The casteism therefore kept the Kerala society fragmented into exclusive groups. It acted as a divisive force against the mobility of groups. A person of the low caste status thus occupied the same status in the political or economic hierarchy. Caste status, socio-economic status and political status were corresponding to each other. The social status of a Non Caste Hindu remained unchangeable by education, wealth, power or success. Several irrational practices and customs prevailed in the Hindu society. Hindu society was dominated by the upper castes, especially the Brahmins. The lower caste people were in a subordinate position and were denied social freedom and equality. The upper castes were the land-owning class and all political power and authority in the land were under their control. But the people of lower castes who had no voice or position in the society and government were oppressed, suppressed and marginalised by the higher echelons.

The hegemonic class of Brahmins dominated all the means of production. The Nairs, who occupied a higher position in the society, were the chief tenants of Brahmins. The twin role of the Nairs as a serving class of the Brahmins and the protectors of land enabled them to enjoy a respectable position in the society.3 All other groups below the Nairs, like the Ezhavas/Thiyyas, the Bulayas/Cheramar and Parayar were considered as the avarnas or inferior. Itinjalakuda

## social Revolutionaries and the Display of Radicalism

Though British rule made some changes in the 19<sup>th</sup> century, the conditions of the lower castes did not change basically. They were the victims of social tyranny for centuries. The social evils like untouchability and unapproachability led to segregation of Hindus of one caste from shother. The practice of pollution was widely observed in the Hindu society. The lower castes were denied access to temples, schools and pablic places and were subjected to social humiliation.

Apart from being one of the untouchable castes in the Hindu society, the Ezhavas were educationally, economically and socially backward. Majority of them were uneducated. A few of them constituted an elite section within the community like soldiers, scholars, Ayurvedic physicians, traders, martial artists etc. but majority of them were engaged in cultivation and other labours like toddy tapping, manufacturing of country sugar etc. At the same time, they followed many traditional religious and social customs. They even practiced animal sacrifice in the centers of worship owned by them. There was the paradox that though the Ezhavas were treated as untouchables by the upper castes, they considered themselves superior in relation to the other lower castes and treated them as untouchables.4 The Pulayas and the other lower castes were denied entry into the temples of Ezhavas. There was hardly any free social relation between them and other backward castes. There was no inter-dining and inter-marriage not only between castes but also between the different sub-castes.

Against this context, many social reformers emerged in the society with several revolutionary ideas. But the purpose of this paper is limited to identify the role of Sahodaran Ayyappan, the social reformer, revolutionary, renaissance thinker, writer, rationalist, politician, journalist, poet, the multi-faceted humanist.

K. Ayyappan, (Kulambathuparambil Ayyappan) was born in Cherai near Cochin on August 22, 1889. He was born as the ninth child of Kochavu Vaidyar and Unnuniliyamma. His father, an Ayurvedic physician by profession was not like a typical Ezhava and had a keen interest in literature, especially Hindu Puranas and enjoys. He used to invite the writers of his time to his home and spent money and time to translate the ancient Hindu scriptures. While he was an Ayurvedic physician he had passion for Sanskrit language and literature, which motivated Ayyappan to become a renowned writer, physics, who was greatly influenced by his elder brother Acheronan Valdyar, who was a progressive Irinjalakuda

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-wnodaran Ayyappan

thinker, who taught him English language and gave him progressive education. By virtue of his brother, Ayyappan acquired good association with Sree Narayana Guru and Kumaran Asan

Ayyappan received basic education from the Kalari and English ed. ucation from the Cherai English School. During his high school days. he learned the basic lessons of inter-dining from his school and intermarriage from the books. After high school education he received college education with the help of Guru. During his college life he was also inspired by Swami Vivekananda and his philosophy. He was a scholar in both Sanskrit and English. He was the first Ezhava to become a graduate in the Cochin State. The financial burden forbade him from getting higher education further. However, with the support of Guru and financial help of Kumaran Asan he joined the Maharaja's college, Trivandrum for B.A, which was a turning point in his life.5 During these days he used to visit the S.N.D.P office at Trivandrum. His constant association with Sree Narayana Guru and Kumaran Asan helped him to get sufficient internal and external strength to herald a new social revolution in Kerala.

Ayyappan was a true follower of Guru. He had great affection and admiration to the character and teachings of Guru and even practiced it throughout his life. From his childhood he was attracted towards Guru. His stay at Trivandrum helped him to be closer with Guru and his activities. He decided to propagate the teachings and philosophy of Gura, for which he joined the SNDP while he was at Trivandrum. When Guru started a night school for the deprived castes like Parayas, Pulayas and Kuravas Ayyappan was stimulated by it. He also had a close connection with Kumaran Asan, the disciple of Guru. Though Asan had diverse opinions regarding the activities of Ayyappan, he never disliked Ayyap pan. After returning to Cherai, Ayyappan continued his activities. He established wider appreciation and support from his people.

The varna system, which had been rooted deeply in the minds of the Indians for centuries, could not be easily eliminated. In Kerala, untouch ability and unapproachability made the life of the people deplorable The idea of oneness of all humanity and universal brotherhood could not be easily comprehended by the Hindu rulers of Travancore and Cochin-This made the eradication of untouchability a herculean task for leaders like Avyappen to be like Ayyappan. In his opinion caste had to be eradicated for the attain ment of brotherhood. Irrespective of caste and creed, it was the duly of

social Revolutionaries and the Display of Radicalism

everyone, who had moral consciousness and patriotism, to endeavour for it.

Sahodaran Ayyappan persistently fought against casteism and untouchability as well as for communal representation. He wanted to eradicate the caste discrimination and inequality in the Hindu society. He upheld the anti-caste principles of Guru and for that he formulated various programmes. As part of the social struggle, he advocated the inevitability to get rid of caste by the twin means of interdining and inter-marriage, for which he launched the second or modern phase of the Ezhava movement started by Guru.7 He preached and practiced the concept of equality among the castes. For the fulfilment of his aim he founded the Sahodara Sangham, an association of brotherhood. Throughout his life he fought against caste and social inequality and was against caste hierarchy and Brahmin hegemony.

Ayyappan launched the anti-caste discourse against Hinduism and Hindu society. By challenging Hindu religion, he indirectly rejected the discourse of Guru. As against the meta-physical nature of Guru, Ayyappan, who was a revolutionary, created by modernity, turned against Hinduism.8 While Ayyappan criticized Hindu religion for its anti-human aspects, Guru upheld the humanitarian and ethical role of religion across culture and society. He modified the message of Guru, 'one caste, one religion and one God for man' into 'no caste, no religion and no God for man'.9

Ayyappan viewed inter-dining to achieve the destruction of caste system, which undermined the ideal of brotherhood. In his opinion, demolishing the caste was essential for the welfare of the society. He was putting emphasis on the dictum "ask not, say not and think not caste". given by guru. He said further, caste was an evil and a superstition, and inter-dining and inter-marriage were the only means to bring an end to caste competitions and hatred. The abolition of untouchability was the birth right of the lower communities. "To achieve it, caste should be destroyed for the reason that untouchability and unapproachability should be abolished", he held. 10

He intensified his activism in 1917 by launching the anti-caste agliations and organizing a movement for inter-dining at Cherai. It marked the beginning of a social revolution. In a meeting held at Thundiparambu at Cherai on May 29, 1917, Ayyappan recommended inter-dining to eradicate caste system. Only three people accepted it as

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a challenge, Koru Vaidyar, Raman Pillai and Naikan Aandi. Gradually, many people joined the venture. Though it was a success it created controversies that had far reaching impact in the society. Initially he received reverse response from his people as it was a new one for them and they opposed and criticized him. The organizers were outcasted. It earned him the derogatory titles 'Fulayan Ayyappan', 'Pulayachan' etc. Ayyappan was labeled an outcaste and rebel.

But the initial harsh treatments did not stop Ayyappan. Further he strongly advocated for inter-dining as the only way to eradicate caste distinction. He proclaimed inter-dining as a movement against social inequality and casteism. But the entire society opposed him. Some criticized that he was against Guru. At this moment he appealed for the advice of guru. Guru wrote to him that 'whatever may be the religion, language, custom, caste or dress of individuals, there is nothing maleficent in inter-marrying and inter-dining between them since they belong to one caste'.11 The support of guru was the best example of the success of the movement.

The movement began at Thundiparambu has continued in different parts of the state. Later the movement received wide appreciation, and many joined in it. Though it was partially successful it could reduce the disparity between different castes like Nair, Ezhava and Pulaya. It further eliminated the distinction among the sub-castes of Ezhava. Though the movement lost the relevance in the later period it could bring significant changes in the society and could alter the entire Hindu society of Kerala.

Ayyappan advocated intermarriage for several reasons. It was essential for promoting friendship and co-operation among different communities. Ayyappan argued that religion, science, reason and experience - all attested to the fact that intermarriage was advantageous to man. He advocated intermarriage as a solution to the communal differences which generated communal problems in India.12 Popularization of intermarriage was a difficult job. What could have been successfully done to achieve the goal was to prepare the way for it by removing the taboo by law. That was achieved by Ayyappan by putting pressure for the passing of the Cochin Civil Marriage Bill in 1931 and as an Act in 1935. The act provided legal sanction for intermarriages between mem-

Ayyappan laid a platform for the deprived for affirming and articubers of different castes and religions as well. lating their fraternity. He developed an idea of social equality, without

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the distinction of religion, caste, gender, class and sexual orientation. the unshed to uplift their rights and to align them under the banner of He wished to uplift their rights and to align them under the banner of niversal brotherhood. He was a humanitarian and preached the philosophy of love and fraternity. With a view to practice it he founded the Sahodara Sangham, an association for brotherhood. He formed it mainly to organize the social reform activities and to propagate the ideologies of Guru.

Ayyappan conducted speeches and circulated pamphlets and articles to popularize his vision. He got many followers. They began to propagate the ideas of Guru and Ayyappan. He began to publish some revolutionary writings through the newspapers. Later, some newspapers rejected his revolutionary articles. Realising the situation he decided to launch a publication of his own, which resulted in the beginning of a journal and a newspaper in the same name Sahodaran in 1917 and acted as its editor till its end by 1956.13 This was a turning point in the history of Sahodara Sangham and social reform movement of Kerala.

On the very first issue he stated the vision and mission that "Sahodaran doesn't have any caste or religion". Brotherhood is the only caste and religion according to Ayyappan. He further stated that "everyone should think and act above the caste and should love and respect each other". It covered diverse topics which show his wide knowledge over various subjects and his aim of bringing social equality. He advocated secularism through Sahodaran. Some texts from the Rigveda and Upanishads were included in it along with contemporary issues. To stir up the logical level of the readers he published articles like 'Ramayana Rahasya', Rajaram Mohan Roy, Chaturvarnya, 'Hindu Daivangal', 'Kerathile Hindu Matham' etc.<sup>14</sup>

Sahodaran laid stress on the greatness of principles of truth, liberty, equality, fraternity etc. Once he made a statement in the editorial of Sahodaran that "the only way to eradicate the caste is to practice inter-dining and inter-marriage". The Daily also popularised the principles of inter-dining and inter-caste marriage and asked to practice it. Personalities like Rajaram Mohan Roy, Sree Narayana Guru and E. V. Ramaswamy Naiker were admired through the newspaper. Sahodaran attacked caste and social issues like untouchability and superstitions. In his editorial he envisioned the modern Kerala through the abolition of the zamindari system, granting of titles for farmers and tenants, equal wares to wages for men and women, compulsory free education till the age of

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16, nationalization of large industries and transport etc.

Ayyappan founded the public journalism and mass media cultures in Kerala. As a part of it he supported the new writers ideologically and financially. P. N. Krishnan Pillai, Vaikom Muhammed Basheer, Ketamangalam Pappukutty, M. P. Varkey, P. Kesavadev etc. were important among them. He introduced the modern philosophies of Communism, Socialism, Secularism and Nationalism to the youth of Kerala through his writings.<sup>15</sup> Through its publications his name came to be associated with the great journalists like Mithavadi Krishnan, Desabhimani T.K. Madhavan, Swadesabhimani Ramakrishna Pillai, Yukthivadi M.C. Joseph etc. and came to be called as 'Sakodaran Ayyappan'. He was one among the few who advocated for the betterment of Malayalam language and made a revolutionary step by speaking in Malayalam in the legislature.

Buddhism became popular among the Ezhava social reformers. The prevailing casteism, with its horrible feature of pollution prompted many to seek the ideology of Buddhism as against Brahmanism. Kumaran Asan, the most renowned leader of SNDP Yogam was an admirer of Buddhism. C. Krishnan, a prominent Ezhava social reformer, was a zealous advocate of Buddhism and had made commendable service to spread Buddhist teachings through the press and platform. In his search for values to bring about an egalitarian society, Ayyappan was more fascinated by Buddhism than the teachings of guru. To Ayyappan, Buddha was the 'herald of universal brotherhood'. No wonder that the Ashtanga Marga and non-injury as preached by Buddha and his denunciation of the authority of scriptures and casteism, the silence on the existence of god, and the emphasis on universal brotherhood made an appeal to men like Ayyappan in the context of an awakening against

the evils and superstitions and the struggle for democratic values. Ayyappan believed that Buddhism would bring great moral bene-

fits to man as a religion that inculcated a higher moral consciousness based on the values of humanism and egalitarianism. Ayyappan felt the Buddhist dharma as capable of leading man to achieve international co-operation and peace and the establishment of human greatness and human freedom. It was against this background that Ayyappan was induced to Buddhism as an ideological base for his struggle against casteism and discrimination. The challenge of Buddhism to Hinduism and its negation of casteism were the bases of his rational approach.<sup>17</sup>

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He reformed language, culture and society of Kerala through his radical Heretornico and interventions and rationalist practices and quespounces and qu tioned the social evils existed in the society and even challenged it.

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Ayyappan was one among the pioneers of the rationalist movement in Kerala. While he was a student, he began to think and doubt about in Nerson and caste system. He used to ask several questions to himself and Guru but never accepted the reply of anyone, including Garu, until it satisfied his thirst. He followed a critical approach to everything and was a liberal thinker in the true sense. He had his own opinions regarding every matter, and he used to change it.

'Sahodara Sangham' begun by Ayyappan was a rationalist organization in a true sense. Even the Sahodaran published some writings against superstitious believes and evil practices in the society. Ayyappan took initiative to begin another rationalist journal Yukthivadi, along with K. Ramavarma Thampan, C. V. Kunjuraman, C. K. Krishnan and M.C. Joseph in 1929. The meaning of rationalism and the purpose of the journal had been explained in the first volume of the journal by Ayyappan as "rationalism is not a dogma but a philosophy. It is a mental attitude of accepting only knowledge based on religion".18 The journal was continued till 1960. Religious reform was not his target, rather he stressed on social reform by eradicating the discrimination and social evils. He even advocated that the objective of all religions should be equality. He was an ardent advocate of free thinking. Rationalism and free thinking were advocated as the prerequisites for the progress of the community.

The first target of Ayyappan was to fight against the Bharani festival in the Kurumba Bhagavathy temple at Kodungallur. He led a campaign against the obscene songs and animal sacrifices at Bharani fest. Ayyappan, along with hundreds of followers marched towards it with a slogan don't go to Bharani". He made a speech against it and blocked them. The angry devotees tortured them by throwing the blood and pieces of the animals upon them.<sup>19</sup> Even after the incident he continued this mission and gave a petition to the King of Cochin to pass legislation against

Through Yukthivadi he criticized the religious perceptions of Gandhi and Tagore. He openly criticised Gandhiji for his positive stitude towards the varna system. Ayyappan never accepted and vehement vehemently criticized the 'Hindu Mahamandal', formed by Mannath

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Padmanabhan and R. Sankar. Yukthivadi openly mocked the habits and nature of the '33 crores' and more gods of the Hindu religion. Through his editorials, Ayyappan also criticized the intermediary role played by the priests. He wrote some poems on rationalism and published it in the first volume of Yukthivadi. He used pen as a weapon against inequality and social evils. Poetry was his medium to spread his message of equality and wrote many poems to propagate it. From 1917 to 1940 he wrote about 70 poems, half of dozen of which were on freedom like Swathantrastavam, Swathantra Gadha, Ujjivanam etc.<sup>20</sup> His poetry covered variety of topics like Dharma, Kingship, Freedom, Rationalism, Buddhism, Onani, Death etc. Through these works he shaped the literary culture of Kerala.

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The revolutionary move launched at Cherai was the beginning of his political career. Through several hardships and criticisms, he emerged as a strong activist. He regarded S. N. D. P. Yogam as the platform for his social reform movements. In order to strengthen the organization, he decided to expand the activities of Yogam in different parts of the State. As a part of his activities he decided to construct orphanages, old age homes, hospitals, schools, libraries etc. which made him more popular. He advocated that the political activities should be free from caste/religious activities. Ayyappan cautioned his followers not to have blind faith in him.

In the opinion of Ayyappan, granting of jobs to the lower caste Hindus was not merely to reform those communities but to reform the whole society. Ayyappan was pointing to the real issue at stake, namely, a share in the governance. In his opinion, communal representation was not antagonistic to nationalism, but would foster nationalism by eliminating communal discrimination, by providing equality of opportunity for all in the government services. In other words, the argument of Ayyappan was that natural justice would be ensured to all only when all communities would get representation in the administration. According to him, communal representation was required till the communal system was eliminated. The ideal system of casteless society could be achieved only through the elimination of caste differences after strengthening all the communities by providing temporary safeguards. Communal representation was such a safeguard.<sup>21</sup>

The Abstention movement was organized jointly by Ezhava, Christian and Muslim communities to destroy the monopoly of Brahmins

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and to secure their rightful representation in government services. Ayyappan was the president of the S.N.D.P during this time. Sir C. P. Ramaswamiy lyer, the then Dewan threatened to cancel the license of S.N.D.P. Ayyappan criticized it through his editorials and finally Dewan withdrew it under popular protests. He became the president of Yogam for several times. Being the president of Yogam he got many chances to act more politically. He played a prominent role in the course of the struggle for responsible government in the princely State of Cochin. He took the leadership of the historic 'declaration of human rights' meeting held at Cochin in 1945 and published this incident in his Sahodaran.

Ayyappan also contributed to the development of trade unionism and literacy movement among the working classes. He spread the activities of the Yogam among the working-class communities and organized associations like 'Adi Vypin Thozhilali Sangham', 'Ochanthuruthu Thozhilali Union', "Thruvithamcore Labour Association' and 'Coehin Labour Union'. In 1933, he started a newspaper called *Velakkaran* for the labourers at Alappuzha. But it was short lived. He was inspired by the Russian revolution and shared the communist ideologies among his followers. He popularized the ideology of communism in Kerala. Ayyappan was one of the pioneers in disseminating the revolutionary message of the October revolution and introduced the term 'comrade' in Malayalam. But his radical attempts were deliberately marginalized in the later period.

Ayyappan became a member of Cochin Prajamandal and a minister in the ministry of Paravoor T. K. Narayana Pillai. He was elected to the legislative assembly of Cochin and became the voice of the depressed classes. Very soon he became a popular politician and got continuously elected to legislative assembly without opposition.

As a great man and a great politician, Ayyappan was against the new power politics and never acted against the law and never misused his position as politician and as minister. Ayyappan acted as the minister for Public Works Department and resigned from it when some issues after the Peringalkuthu Hydro Electric project. He made some notable programmes to the development of Cochin, especially by taking initiative in the construction of Cochin-Vypin Bridge. But later, his radical steps were deliberately silenced.<sup>22</sup> Many constitutional reforms introduced in Kerala were the results of his hard work. He became instru-

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mental in the enactment of a series of legislations, including the Cochin Ezhava Matriarchal Bill and Cochin Ezhava Patriarchal Bill, Adult Franchise in the Panchayats and the Civil Marriage Act.

After his retirement from active political life, Ayyappan dedicated more on social welfare programs. Ayyappan founded the 'Sree Narayana Sevika Samaj', along with his wife. As a part of his activities Ayyappan planned to make Sree Narayana Giri, a place near Aluva (where guru used to meditate) a holy place and placed Sreenarayana Giri as the centre of Sree Narayana Sevika Samaj. He constructed a Gurumandir at the hilltop and started a school for the poor children. Later, it became a major pilgrim centre. Ayyappan passed away on March 6, 1968. His body was taken to Sreenarayana Giri and buried there. His social services were continued even after his death by his wife Parvathy Ayyappan and his followers. By his words and deeds, Sahodaran Ayyappan was a rationalist, an Avant Grade critical Realist, in the true sense of the term.

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#### Herman Gundert and the Evolution of Print Movement in Kerala

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#### S. R. HNCY

stermann Gundert was a German missionary scholar, reformer, educanerven inquist and indologist, known for his proneering contributions to the development of Malayalam language and culture. Gundert came in India for mentionary work and as a part of Basel Mission he reached Malabar (north Kezala) and settled down in Illikkunna near Thalassery. Brough Condert was a missionary he has made remarkable contributions in diverse disciplines such as language, history, journalism, litermae, science, religion, geography, astronomy etc. Coundert played a prominent role in Kernia's cultural development.

Permann Gundert was born in Stuttgart, the capital city of Baden-Wienensberg, Germany on 4 February 1814. Till the Second World Was Baden and Willettemberg wave two different states. The place was rich in culture, education, acience and techniclogy. The cultural condimma existed in Baden-Wilritemberg also contributed to the developnext of Gandert family. Hermann Gundert was the third child of Frans listing Gundert and Christiana English, Ludwig by profession was merthere but later changed into a religious person. He established a bible netery Witzttennberg Bible society' in 1813 and became a strong advoour of religious movement in Germany. Hermann's mother Christiana was a pinus religious woman. Hermann was named after the strong national sentiments of Ludwig and Christiana. Hermann Der Chersaker vio a national hero of Germana who fought against Romans during the 1<sup>6</sup> Century A.D.<sup>4</sup> As an homor, Gundert family named their third child An Electronickourt

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Gundert family was very closely connected with the Württemberg pietism.<sup>3</sup> Hermann groomed up as god-centric and religious and was highly influenced by the religious principles of his family, especially his father. Ludwig was the secretary of the Bible Society. Hermann used to visit the office which helped him to learn more about Bible. In 1820, Hermann joined the Latin school at Stuttgart along with his brother Ludwig. By 1823 Hermann began to learn the first lessons of printing and publishing as his father started the publishing of a magazine named 'Stuttgart Mission Magazine'.<sup>4</sup> This experience laid the foundation of the knowledge on printing and writing from childhood onwards. His experience with the magazine also helped him to know about Asia, especially India. The sudden death of his younger sister in 1827 was a tragic incident in his life. This incident turned Hermann to become more religious-centric and he tried to inquire about the meaning of life and death.

#### Maulbronn Life

In 1827, at the age of 13, Hermann joined the Maulbronn Latin school, a very famous school founded in the 12th C A. D.5 Hermann was only an ordinary student, learned history, geography, mathematics from this seminary school. History was his favourite subject. Along with that he had mastered different languages like Hebrew, Greek, Latin, English and French. Hermann was very much impressed with the subject of history especially the war history of Europe. Hermann's first literary work was also a historical study. The article about the 'Thirty years war' in Europe was really an outstanding work which clearly indicates the historical sense and observation skills of Hermann. He also held a speech on the 30 years of war in 1830.6 He wanted to become a history teacher. As a teenager Hermann showed some distress against the strict culture prevailed in the school. Sometimes he wanted to leave the school, but his parents never allowed him to do so. During this period, he showed some interest in music. He found music as a medium to channelize his stress and troubles. He was more interested in the musical instruments like violin, piano and organ.<sup>7</sup> Hermann used to attend the music concerts and wrote about music and songs.

Though he was interested in history, he never left his interest in Bible and theology. It was during his Maulbronn school life he made the Journalistic Platform and Intellectual Articulation

first attempt to translate Bible. At first, he translated some parts from the book of Ezckiel into German.<sup>8</sup> Interactions with David Friedrich strauss, a new teacher at Maulbronn School changed Hermann's attitude towards theology and philosophy. Like most of the other students, filermann was very impressed with the abilities of Strauss, who motivated him to lead his students to a higher level.

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### At Tubingen University

After Maulbronn, Hermann joined the famous Tubingen university for After Maulbronn, Hermann joined the famous Tubingen university for theology on 24<sup>th</sup> October 1831. Hermann was more attracted towards the philosophies of Hegel and Strauss. His principles were different from that of his father who showed some dislike towards it. Hermann started his literary career by 1833 soon after the death of his mother on January 20. About the memories of his mother Christiane he wrote. In the memory of Christiane'.<sup>9</sup> Later he translated some great works including Sophocles' Antigone and King Oedipus into German. During these days he himself turned into a teacher who taught languages like Greek and Hebrew as well as Bible to the fellow students at University. This increased the popularity of Hermann as a scholar and teacher.

Tubingen was a well-known center of theology, philosophy, history etc from 15<sup>th</sup> century onwards. From here Hermann was exposed to the ancient Indian history and Sanskrit. He was impressed with the rich cultural heritage of India and wished to visit India strongly. During this time, he got an opportunity to travel to India as a part of Basel Mission activities in 1835. For that he was invited to Switzerland, headquarters of Basel Mission. He was assigned the duty to teach Hebrew and Greek to the sons of Anthony Norris Groves, an English missionary and to accompany them in their journey to India.<sup>10</sup> At that time, India was an important Centre of their missionary activities. Hermann was delighted to hear the news because he wanted to visit India and was waiting for an opportunity for a long time. Before his mission to India, Hermann secured doctoral degree in theology from Tubingen University in 1835.<sup>11</sup>

### Hermann Gundert in India

On 2<sup>nd</sup> October 1835 at the age of 22, Hermann started his journey to India from Stuttgart. 'Perfect' was the name of the ship which carried Hermann and others to India.<sup>12</sup> During his journey he spent more time

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to learn about Indian native languages like Bengali. Unlike the plan to go to Calcutta, the ship moved towards Madras due to the adverse dimatic conditions. By July 2, 1835 Hermann reached Madras, the southern part of India and thus fulfilled his dream. He visited several places in Madras like fort St. George and staved there for one month. From there he travelled to Tirunelveli to meet Karl Theophilus Rhenius, a missionary. <sup>13</sup> This was a turning point as he decided to start his missionary life from Tirunelveli. Hermann was very much impressed with the personality and knowledge of Rhenius which he utilized to extend his literary knowledge. He stayed with Rhenius and through the interactions Hermann learnt Tamil, native language of Madras. It was during this period that Hermann started writing of world history till the birth of Christ in Tamil language.

As a part of missionary activity Hermann moved to Chittor, a village in Tamii Nadu-Andhra border along with Grove and family. His passion for languages helped him to learn Telugu, another south Indian language. During the journey to Chittor he met two lady missionaries Julie Dubois, a French-speaking Switzerland missionary and Hanna Tome of Baghdad.<sup>14</sup> They worked together in the missionary activities at Chittor which finally changed the life of Hermann. He was attracted with the loving and pleasant Julie Dubois and decided to marry her. They got married on 23 July 1838 at Chittor with the support of Mr. Lesley and his family. They decided to continue their missionary life and joined the Basel Mission.

While he was in the missionary work in Tiruchirappalli, Hermann was invited to Mangalore by Hermann Mugling, a missionary friend from Tubingen. Then the Gundert couple moved to Mangalore on 1 October 1838.<sup>15</sup> During the journey to Mangalore they reached Nagercoil and later entered Kerala.

#### Gundert in Kerala

It was on 6<sup>th</sup> October 1838 that Hermann and Julie reached Travancore, the southernmost state in Kerala. They stayed there for some days and visited some nearby places. His experience in Kerala was described in his diary as "a gifted land with rich greenery and beautiful hills". From there they travelled to Mangalore by covering Kollam. Alappuzha and Cochin, where they met with an accident due to

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heavy wind. Fortunately, all the passengers survived and finally Gundert reached Mangalore by November. He was welcomed by Hermann Mugling and Samuel Hebic, the founder member of Basel Miasion in Malabar (north Kerala). Gundert started his missionary activities at Mangalore with Samuel Hebic, Hermann Mugling and Gotford Wyglee (from Wyglee, Gundert learned Kannada).<sup>10</sup>

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(from WYER). While he was in Mangalore, Gundert heard about the missionary activities of Michael, a missionary from Ancharakandy. Thalassery (in Malabar). Hermann wanted to visit Michael as he was attracted by the missionary activities of Michael in the field of education. Gundert came to Thalassery to meet Michael in February 1839. After his interactions with Michael at Ancharakandy, Gundert explored the possibilities of missionary activities at Thalassery. Very soon he decided to shift to Thalassery which later became the major centre of his missionary as well as social life. He got the permission to begin a mission center at Thalassery.

By receiving the permission from Basel Mission, Gundert couple moved to Malabar and settled at Thalassery in April 1839.<sup>17</sup> They found a good place to settle down in Thalassery. Illikkunnu was a calm and a beautiful place near to Thalassery town: there Gundert lived for twenty years. The house where they stayed was contributed by Mr. Stainge, District Judge, which later came to be known as Gundert Bhavan, the birth place of his literary works and all his children(Herman, Samuel, Ludwig, Marie (mother of Nobel prize winner Hermann Hesse) Christiana, Frederic Powel and David). Through the efforts of Gundert Thalassery emerged as the literary centre of Kerala. From 1836 to 1859 Gundert served India and in 1859 he returned due to poor health conditions.

### Literary and Cultural Contributions of Hermann Gundert

Though missionary work was his prime concern, Hermann Gundert also made outstanding contributions in the field of language and literature. He had a great passion for language and showed great interest in literature. Gundert was proficient in many languages especially south Indian languages like Malayalam, Tamil, Telegu, Kannada etc. His passion for Indian culture and heritage motivated Gundert to learn Sanskrit. For



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Journalistic Platform and Intellectual Articulation

collection of local proverbs. Gundert made tremendous effort in the compilation of these works.

Hermann Gundert devoted himself intensively in research of Malayalam language and grammar. His Malayalabhaasha Vyakaranam Malayilar as the first and prominent work in Malayalarn grammar, is considered and the work was begun by 1851 and was completed The minute work was completed by Rev. E. Diaz). He incorporated by 1868 (the work was completed by Rev. E. Diaz). by 1865 (in: the incorporated the grammatical elements of Tamil, Sanskrit and the popular styles existed in the 19th century Europe into Malayalam and formulated a new style. For the completion of his work he referred several palm-leaf documents. Among his contributions, the introduction of the crescent moon sign (Chandrakala) in Malayalam language is considered as the most reasonable one.41

Gundert also engaged in linguistic research which further led to the publication of the first Malayalam-English dictionary. It was not a mere dictionary but a rich source of words and all related references. Historians considered this attempt of Gundert as the biggest contribution to the Malayalam language. Gundert collected and documented several words and their meanings along with similar/related words. Though there existed several other dictionaries in Malayalam, Hermann's dictionary is considered as the most accurate and scientific one. In his dictionary Gundert incorporated the common words and dialects used by the local people, especially the fishing and tribal communities. Gundert made a massive effort to collect and document various common words used by different castes and communities with its regional variations (but compared with the northern usages the words from the southern parts of the state were very rare).22 For a comparative analysis he referred several literary works such as Kundalatā and Indulekha along with the available government/official records. The dictionary was not just 'mechanical' meaning-making equipment' but also included the names of animals, plants and trees in it. This clearly shows the versatility of the work and reached the level of an encyclopedia (the dictionary was completed in

According to Scaria Zacharia, Gundert was able to popularize the word 'Malayalam' and made it the standard name for the language.\*3 It was through his publications that the name and content of Malayalam language became flourished. In addition to the grammatical and literary works of his own, he also collected and edited some old literary texts

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# From 1840 onwards Gundert began writing in Malayalam. He spent

Herman Gundert and the Print Movement in Keraj

much time to learn the cultural differences, especially the differences in language, pronunciation and usages. Gundert became an influential writer in Malayalam by publishing some books including one on grammar (Malayalabhaasha Vyakaranam) and the first 'Malayalam-English dictionary', highly acclaimed two major works of Gundert. His other major works are Keralolpatthy, Kerala Pazhama, Pazhanchol maala, Muhamad Charithram, Polukarppa Charitham, Lokacharithra Sastram, Kristhu Sabha Charithram, Loka Charithra Samkshepam, Malayala Rajyam, Nasranikalude Pazhama etc.18 His works covered diverse topics such as history, folklore, proverbs, place name history, Christian studies, grammar, biography, travelogue, memories etc. Gundert also made some Malayalam translations of famous works such as pilgrim's progress of John Bunyan's into 'Sanchariyude Prayanam'. He also made a translation of bible in Malayalam. Gundert made notable contributions for the development of Malayalam prose and grammar.

month. Very soon he started writing in Malayalam. He dedicated him.

self for a systematic study of Malayalam language and culture,

Suvisesha Samgraham, Sathyaveda Samkshepa Charithram, Suvisesha Kadhakal, Smarana Vidhya, Prarthana Samgraham, Sahithya Veda Ithihasam etc were the notable works based on bible and religion.<sup>19</sup>The translation of Question-answer book of Martin Luther and Christian Henric Celler and 'Nasranikal Okkeyum Ariyendunna Samkshepa Vedhartham'(the translated work of Clement Pianiyus) etc were used as catechism text books.

Gundert showed interest in the history of Kerala. Lokacharitham, Keralacharithram, Kristhusabha Charithram, Keralolpatthy, Kerala Pazhama, Malayala Rajyam, Loka Charithra Samkshepam, Muhammadiya Charithram, Polukarppu Charithram etc were the major historical works. The folk culture and traditions of Kerala also influenced the writings of Gundert. Local usages, myths, stories, songs etc were included in his writings. Pazhanchol Maala, Arunooru Malayalam Pazhanchol, Orayiram Pazhanchol, Aayirathiorunooru Pazhamchol etc. were the major works on local proverbs.20 These works consist of great

that he appointed a Sanskrit scholar (Munshi) at a salary of Rs 10/ per

Literary contributions

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#### also

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#### In the field of Journalism

Hermann Gundert is also credited with the development of Malayalam journalism. He was involved in the beginning of the first Malayalam newspaper. Rajyasamacharam in 1847 from Illikkunnu in Thalassery is Till its end in 1850, 42 issues of the newspaper were published. Rejyasamacharam was printed at the printing press established by Basel Mission at Illikkunnu. Instead of literary language, he used popular or common language in the paper. Besides Rajyasamacharam he launched another newspaper journal named Patchimodayam in 1847, with an intention to popularize the western ideas and thoughts among Keralites (his friend Frederic Muller was the editor of the paper). Unlike Rajyasamacharam there was a fixed price for the newspaper (two paisa per issue and  $\frac{1}{2}$  rupees for annual subscription)<sup>26</sup>

If Rajyasamacharam was aimed in religious propagation and missionary works. Paschimodayam mainly for the propagation of westers knowledge. The name itself denotes the aims and objectives of the paper. General knowledge, scientific and technological knowledge, grography, history, astrology etc were included in Paschimodayam. For the completion of this task he received assistance from the local experts like C. Kaniyan Kadu, Mooliyil Ramettu Gurukkal, Urachery Gurukkasmar, Yakob Ramavarma, Paval Chandran etc.<sup>26</sup> The primary lessons on printing and publishing acquired from his father helped Gundert in the development of Malayalam literature and journalism.

#### In the field of education

Gundert learned the value of education from Tubingen life which futher expanded during his missionary life. His life proved that Heresann was an eager educationalist who worked hard for the development of education in Kerala. As a part of Basel mission Gundert couple begas the mission of educating the illiterate people of Thalassery. They realized that education is very important for the socio-cultural development and so they popularized the importance of education through their misionary work. Both played a prominent role in the expansion of education in Kerala, especially in Malabar. They took initiative in the establishment of several primary schools like girls' school, night school for workers and school for orphans. Sournalistic Platform and Intellectual Articulation

Oundert started an English pre-school at Thalassery in 1839 as a part of Basel mission. Though the school was a part of missionary part of Basel mission. Though the school was a part of missionary sork. Gundert maintained a secular culture in the school by providing sork. Gundert maintained a secular culture in the school by providing sork. Gundert maintained a secular culture in the school by providing scheme is the second for the school proved successful till August sector sense of knowledge. The school on the porch of his bungalow at 142. He started a Malayalam school on the porch of his bungalow at 143. He started a Malayalam school on the porch of his bungalow at 144. He started a Malayalam school on the porch of his bungalow at 144. He started a main isory and culture.<sup>27</sup> Later he started another class and learn Indian history and culture.<sup>27</sup> Later he started another one Malayalam school near Thalassery Fort. In 1840 he started another one Malayalam school near Thalassery Fort. In 1840 he started another one Kohroor Very soon he expanded his activities to the nearby places iske Anjarakkandy. Mahe etc. Furthermore, Gundert introduced German model seminary schools which gave importance to physical acevines(gymmastics) as well as technical education(handicrafts). Julie maght some handicrafts to the girls at their bungalow school.

Hermann Gundert himself acted as a teacher and taught English eraminar, history and theology. He frequently visited the schools in thalassery to inquire about its functioning. All these led to his appointment as the Government's school inspector for Malabar and Canara in 1892.34 His appointment as the school inspector helped in the develsoment of the system of education in Malabar. As school inspector he worked for the upliftment of education for two years. Though he worked only for a short period his contributions in the field of edusation were outstanding. He gave more importance to the quality of the textbooks for schools. He himself wrote some tutorial books for midents. Pasamala, Malayala Vyakaranam Chodyotharam, School Panchathanthram, Malayalarajyam etc were the main among them. Thus, he laid the foundation for the making of 'syllabus' by including all the whilects like history, geography, proverbs, stories, songs etc with a view to entich the knowledge level. Gundert aimed at the moral, mental, physical development of students. According to him a textbook should be prepared based on the learning level of the students. His contributions have proved that Gundert was an excellent educationalist with a Seturistic vision. Later his works were used as 'models' when Kerala Varma Valiakoi Thampuran started a board of textbooks in 1868.<sup>59</sup>

### Later phase

In 1859, a serious case dysentery forced Gundert to go to Germany. His wife and children initially left India. Gundert slowly recovered from





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illness but going back to India was unimaginable. He continued his missionary work with the Basel mission. Mission sent him to Calw in 1860, to work with Christian Gottlob Barth, the founder and director of Caiwer Verlagsverein (Calw publishing association).<sup>30</sup> There he took to more years to complete the work of Malayalam- English dictionary and completed it in 1872. There he worked as clerk till the death of Barth in 1862 and Gundert took over the duty of director of the printing association. Under his able guidance, Calw Publishing Association gained more popularity and grew considerably. He was assisted by his son Frederic, who joined him in 1875 as managing director of the publishing house.31 In 1877 a new branch of Calwer Verlagsverein was opened in Stuttgart, the hometown of Gundert.

On 15th September 1885 his wife Julie passed away which was a shock to Gundert. Soon after that he fell ill and was bedridden for a long time. Gundert died on 25 April 1893 at the age of 79. Gundert spent nearly two decades in Kerala and made great contributions to Malayalam language and literature. He did a lot for the enrichment of our culture. Undoubtedly this great lover of language and literature is still being remembered for his commitment to the language culture of south India especially Kerala. His rich literary legacy was carried over by his grandson Hermann Hesse, the Nobel Prize winner. Hermann Hesse learned the rich cultural heritage of India through Gundert which further helped him in writing. Gundert bungalow at Thalassery is now preserved as a historical monument.32 As an honor to him a large Gundert memorial statue was erected in Thalassery. Even today Hermann Gundert is remembered for the outstanding contributions made for the cultural development of Kerala.

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# RENAISSANCE IN KERALA: A REVISIT

Edited by Prof. S. Sivadasan

> Fr. Dr. Jolly Andrev Assistant Professor-In-charge of Principal Christ College (Autonomous) Irinjalakuda

#### Naout the Book

The present volume. Renainsance in Kerala: A Revisit', is a reflection of the collective efforts of a host of researchers, who study and reflect on the Social History of Kerala with great difference to unravel its hitherto unexploted periods, personalities, and events among others. The 'proprietary historians of Kerala' generally projected the contributions' of the dominant sections of people but ignored the roles of others in the social transformation of Kerala. Often, they were able to convert the authentic creators of history into 'absentees in history'. That is why there are people with lesser legacy playing a dominant role with great biographies, while people with greater intervention disappear without any biographical sketch. The present edition is a reaction to this 'marginalisation' in the history of the renaissance movement in Kerala and endeavours to revisit the movement in a broader and deeper sense.

#### About the Editor



### **Prof S. Sivadasan**

Born (1954) and brought up in the village of Kazhuvoor, near Somatheeram, Vizhinjam, as the son of M. Somanadhan and B. Rajamma. After completing his secondary education in the rural schools, Karichal L.M.S.L.PS and P.K.S.H.S, Kanjiramkulam, he pursued his higher education at University College, Thiruvananthapuram. His teaching and research career span over 35 years in the various Government Colleges of Kerala, including University College and Sree Sankaracharya University of Sanskrit, Kalady, from where he retired as Professor and Head of the Department of History. He is blessed with a long array of research scholars, who gifted him the Festscript, 'Faces of Social Reform in Kerala', the first edition of this book, edited by Dr. P. F Gopakumar, his first Research Scholar. Spouse: Preetha P.K,

Fr. Dr. Jaly Andrews 

**Reference Manual** 

## **Renaissance in Kerala: A Revisit**

Edited by Prof. S. Sivadasan

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## Sahodaran Ayyappan: the Rationalist and Critical Realist

- 15 -

### S. R. JINCY

Many social scientists have argued that "research should be designed to perform a 'critical' function, in the sense of challenging the sociopolitical status quo". The dictum seems applicable to activists like Sahodaran Ayyappan as well. However, very often, the relationship between the political value judgments underpinning this commitment and the values intrinsic to inquiry, as a distinct form of activity has been left obscure. The validity of those judgments has usually been treated either as obvious or as a matter of personal commitment. But there is an influential tradition of work that claims to derive evaluative and prescriptive conclusions about current society directly from factual investigation of its history and character. In the nineteenth century, Hegel and Marx were distinctive in treating the force of ethical and political ideals as stemming from the process of social development itself, rather than as coming from a separate realm, in the manner of Kant. It is possible to derive negative evaluations of actions and institutions, along with prescriptions for change, solely from the premise that these promote false ideas, or that they frustrate the meeting of needs.

In this article, an attempt is made to introspect the career and activities of Sahodaran Ayyappan, the great humanist in modern Kerala against the theoretical frame above.

Sahodaran Ayyappan adorns a paramount position in the social and cultural history of Kerala. He was instrumental in effecting revolutionary changes that ultimately led to the uplift of the marginalised sections of the Hindu society, especially the Ezhavas and Pulayas. Ayyappan

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was inspired by the ideas of liberty, equality and fraternity as well as rationalism, secularism and humanism. The rational outlook and ac. tivities of this great humanist engraved out an immortal image in the history of social reform movements in Kerala.

As an ardent follower of Sree Narayana Guru, Ayyappan practiced the philosophy and principles of Guru throughout his life. He founded the Sahodara Sangham or Association of Brotherhood in 1917 and the journal Sahodaran and a newspaper to spread the idea of universal brotherhood.<sup>1</sup> This gave him the popular name, Sahodaran Ayyappan. He formulated a revolutionary message "no caste, no religion and no God for man" as against the famous message of Guru, 'one caste, one religion and one god for man'.

Available evidences show that the Hindu society of Kerala was parcelled out among innumerable castes and sub-castes at the beginning of the 19<sup>th</sup> century.<sup>2</sup> The society was based on categorizations of superior and inferior or pure and impure. This inferiority and superiority were marked by pollution attached to touch and approach one another. The casteism therefore kept the Kerala society fragmented into exclusive groups. It acted as a divisive force against the mobility of groups. A person of the low caste status thus occupied the same status in the political or economic hierarchy. Caste status, socio-economic status and political status were corresponding to each other. The social status of a Non Caste Hindu remained unchangeable by education, wealth, power or success. Several irrational practices and customs prevailed in the Hindu society. Hindu society was dominated by the upper castes, especially the Brahmins. The lower caste people were in a subordinate position and were denied social freedom and equality. The upper castes were the land-owning class and all political power and authority in the land were under their control. But the people of lower castes who had no voice or position in the society and government were oppressed, suppressed and marginalised by the higher echelons.

The hegemonic class of Brahmins dominated all the means of production. The Nairs, who occupied a higher position in the society, were the chief tenants of Brahmins. The twin role of the Nairs as a serving class of the Brahmins and the protectors of land enabled them to enjoy a respectable position in the society.8 All other groups below the Nairs, like the Ezhavas/Thiyyas, the Pulayas/Cheramar and Parayar were considered as the avarnas or inferior lakuda

### Social Revolutionaries and the Display of Radicalism

Though British rule made some changes in the 19<sup>th</sup> century, the conditions of the lower castes did not change basically. They were the victims of social tyranny for centuries. The social evils like untouchability and unapproachability led to segregation of Hindus of one caste from another. The practice of pollution was widely observed in the Hindu society. The lower castes were denied access to temples, schools and public places and were subjected to social humiliation.

Apart from being one of the untouchable castes in the Hindu society, the Eshavas were educationally, economically and socially backward. Majority of them were uneducated. A few of them constituted an elite section within the community like soldiers, scholars, Ayurvedic physicians, traders, martial artists etc. but majority of them were engaged in cultivation and other labours like toddy tapping, manufacturing of country sugar etc. At the same time, they followed many traditional religious and social customs. They even practiced animal sacrifice in the centers of worship owned by them. There was the paradox that though the Ezhavas were treated as untouchables by the upper castes, they considered themselves superior in relation to the other lower castes and treated them as untouchables.4 The Pulayas and the other lower castes were denied entry into the temples of Ezhavas. There was hardly any free social relation between them and other backward castes. There was no inter-dining and inter-marriage not only between castes but also between the different sub-castes.

Against this context, many social reformers emerged in the society with several revolutionary ideas. But the purpose of this paper is limited to identify the role of Sahodaran Ayyappan, the social reformer, revolutionary, renaissance thinker, writer, rationalist, politician, journalist, poet, the multi-faceted humanist.

K Ayyappan, (Kulambathuparambil Ayyappan) was born in Cherai brar Cochin on August 22, 1889. He was born as the ninth child of Kochavu Vaidyar and Unnuniliyamma. His father, an Ayurvedic physician by profession was not like a typical Ezhava and had a keen interest in literature, especially Hindu Puranas and entry. He used to invite the writers of his time to his home and spent money and time to translate the ancient Hindu scriptures. While he was an Ayurvedic physician he had passion for Sanskrit language and literature, which motivated Ayyappan to become a renowned writer. Ayyappan was greatly influenced by his elder brother Achuthan Vaidynest who was a progressive Initialakuda Sunodaran Ayyappan

thinker, who taught him English language and gave him progressive education. By virtue of his brother, Ayyappan acquired good association with Sree Narayana Guru and Kumaran Asan.

Ayyappan received basic education from the Kalari and English ed. ucation from the Cherai English School. During his high school days, he learned the basic lessons of inter-dining from his school and intermarriage from the books. After high school education he received college education with the help of Guru. During his college life he was also inspired by Swami Vivekananda and his philosophy. He was a scholar in both Sanskrit and English. He was the first Ezhava to become a graduate in the Cochin State. The financial burden forbade him from getting higher education further. However, with the support of Guru and financial help of Kumaran Asan he joined the Maharaja's college, Trivandrum for B.A., which was a turning point in his life.5 During these days he used to visit the S.N.D.P office at Trivandrum. His constant association with Sree Narayana Guru and Kumaran Asan helped him to get sufficient internal and external strength to herald a new social revolution in Kerala.

Ayyappan was a true follower of Guru. He had great affection and admiration to the character and teachings of Guru and even practiced it throughout his life. From his childhood he was attracted towards Guru. His stay at Trivandrum helped him to be closer with Guru and his activities. He decided to propagate the teachings and philosophy of Guru, for which he joined the SNDP while he was at Trivandrum. When Guru started a night school for the deprived castes like Parayas, Pulayas and Kuravas Ayyappan was stimulated by it. He also had a close connection with Kumaran Asan, the disciple of Guru. Though Asan had diverse opinions regarding the activities of Ayyappan, he never disliked Ayyap pan. After returning to Cherai, Ayyappan continued his activities. He established wider appreciation and support from his people.

The varna system, which had been rooted deeply in the minds of the Indians for centuries, could not be easily eliminated. In Kerala, untouch ability and unapproachability made the life of the people deplorable The idea of oneness of all humanity and universal brotherhood could not be easily comprehended by the Hindu rulers of Travancore and Cochin-This made the eradication of untouchability a herculean task for leaders like Ayyappan to bi like Ayyappan. In his opinion caste had to be eradicated for the attainment of brother had to be eradicated for the attainment of be eradicated for thad to be eradicated for the attainment of be eradicate ment of brotherhood. Irrespective of caste and creed, it was the duty of

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everyone, who had moral consciousness and patriotism, to endeavour for it."

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Sahodaran Ayyappan persistently fought against casteism and untouchability as well as for communal representation. He wanted to eradicate the caste discrimination and inequality in the Hindu society. He upheld the anti-caste principles of Guru and for that he formulated various programmes. As part of the social struggle, he advocated the inevitability to get rid of caste by the twin means of interdining and inter-marriage, for which he launched the second or modern phase of the Ezhava movement started by Guru.7 He preached and practiced the concept of equality among the castes. For the fulfilment of his aim he founded the Sahodara Sangham, an association of brotherhood. Throughout his life he fought against caste and social inequality and was against caste hierarchy and Brahmin hegemony.

Ayyappan launched the anti-caste discourse against Hinduism and Hindu society. By challenging Hindu religion, he indirectly rejected the discourse of Guru. As against the meta-physical nature of Guru, Ayyappan, who was a revolutionary, created by modernity, turned against Hinduism.8 While Ayyappan criticized Hindu religion for its anti-human aspects, Guru upheld the humanitarian and ethical role of religion across culture and society. He modified the message of Guru, 'one caste, one religion and one God for man' into 'no caste, no religion and no God for man'.9

Ayyappan viewed inter-dining to achieve the destruction of caste system, which undermined the ideal of brotherhood. In his opinion, demolishing the caste was essential for the welfare of the society. He was putting emphasis on the dictum "ask not, say not and think not caste", given by guru. He said further, caste was an evil and a superstition, and inter-dining and inter-marriage were the only means to bring an end to caste competitions and hatred. The abolition of untouchability was the birth right of the lower communities. "To achieve it, caste should be destroyed for the reason that untouchability and unapproachability should be abolished", he held. 10

He intensified his activism in 1917 by launching the anti-caste agitations and organizing a movement for inter-dining at Cherai. It marked the beginning of a social revolution. In a meeting held at Thundiparambu at Cherai on May 29, 1917, Ayyappan recommended inter-dining to eradicate caste system. Only three people accepted it as

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a challenge, Koru Vaidyar, Raman Pillai and Naikan Aandi. Gradually, many people joined the venture. Though it was a success it created controversies that had far reaching impact in the society. Initially he received reverse response from his people as it was a new one for them and they opposed and criticized him. The organizers were outcasted, It earned him the derogatory titles 'Pulayan Ayyappan', 'Pulayachan' etc. Ayyappan was labeled an outcaste and rebel.

But the initial harsh treatments did not stop Ayyappan. Further he strongly advocated for inter-dining as the only way to eradicate caste distinction. He proclaimed inter-dining as a movement against social inequality and casteism. But the entire society opposed him. Some criticized that he was against Guru. At this moment he appealed for the advice of guru. Guru wrote to him that 'whatever may be the religion, language, custom, caste or dress of individuals, there is nothing maleficent in inter-marrying and inter-dining between them since they belong to one caste'.11 The support of guru was the best example of the success of the movement.

The movement began at Thundiparambu has continued in different parts of the state. Later the movement received wide appreciation, and many joined in it. Though it was partially successful it could reduce the disparity between different castes like Nair, Ezhava and Pulaya. It further eliminated the distinction among the sub-castes of Ezhava. Though the movement lost the relevance in the later period it could bring significant changes in the society and could alter the entire Hindu society of Kerala

Ayyappan advocated intermarriage for several reasons. It was essential for promoting friendship and co-operation among different communities. Ayyappan argued that religion, science, reason and experience - all attested to the fact that intermarriage was advantageous to man. He advocated intermarriage as a solution to the communal differences which generated communal problems in India.12 Popularization of intermarriage was a difficult job. What could have been successfully done to achieve the goal was to prepare the way for it by removing the taboo by law. That was achieved by Ayyappan by putting pressure for the passing of the Cochin Civil Marriage Bill in 1931 and as an Act in 1935. The act provided legal sanction for intermarriages between mem-

Ayyappan laid a platform for the deprived for affirming and articubers of different castes and religions as well. lating their fraternity. He developed an idea of social equality, without

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the distinction of religion, caste, gender, class and sexual orientation. He wished to uplift their rights and to align them under the banner of ne was a brotherhood. He was a humanitarian and preached the philosophy of love and fraternity. With a view to practice it he founded the Sahodara Sangham, an association for brotherhood. He formed it mainly to organize the social reform activities and to propagate the ideologies of Guru.

Ayyappan conducted speeches and circulated pamphlets and articles to popularize his vision. He got many followers. They began to propagate the ideas of Guru and Ayyappan. He began to publish some revolutionary writings through the newspapers. Later, some newspapers rejected his revolutionary articles. Realising the situation he decided to launch a publication of his own, which resulted in the beginning of a journal and a newspaper in the same name Sahodaran in 1917 and acted as its editor till its end by 1956.13 This was a turning point in the history of Sahodara Sangham and social reform movement of Kerala.

On the very first issue he stated the vision and mission that "Sahodaran doesn't have any caste or religion". Brotherhood is the only caste and religion according to Ayyappan. He further stated that "everyone should think and act above the caste and should love and respect each other". It covered diverse topics which show his wide knowledge over various subjects and his aim of bringing social equality. He advocated secularism through Sahodaran. Some texts from the Rigveda and Upanishads were included in it along with contemporary issues. To stir up the logical level of the readers he published articles like 'Ramayana Rahasya', Rajaram Mohan Roy, Chaturvarnya, 'Hindu Daivangal', 'Kerathile Hindu Matham' etc. 14

Sahodaran laid stress on the greatness of principles of truth, liberty, equality, fraternity etc. Once he made a statement in the editorial of Sahodaran that "the only way to eradicate the caste is to practice inter-dining and inter-marriage". The Daily also popularised the principles of inter-dining and inter-caste marriage and asked to practice it. Personalities like Rajaram Mohan Roy, Sree Narayana Guru and E. V. Ramaswamy Naiker were admired through the newspaper. Sahodaran attacked caste and social issues like untouchability and superstitions. In his editorial he envisioned the modern Kerala through the abolition of the zamindari system, granting of titles for farmers and tenants, equal wages for men and women, compulsory free education till the age of

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16, nationalization of large industries and transport etc.

Ayyappan founded the public journalism and mass media cultures in Kerala. As a part of it he supported the new writers ideologically and financially. P. N. Krishnan Pillai, Vaikom Muhammed Basheer, Ketamangalam Pappukutty, M. P. Varkey, P. Kesavadev etc. were important among them. He introduced the modern philosophies of Communism, Socialism, Secularism and Nationalism to the youth of Kerala through his writings.<sup>15</sup> Through its publications his name came to be associated with the great journalists like *Mithavadi* Krishnan, *Desabhimani* T. K. Madhavan, *Swadesabhimani* Ramakrishna Pillai, *Yukthivadi* M. C. Joseph etc. and came to be called as 'Sahodaran Ayyappan'. He was one among the few who advocated for the betterment of Malayalam language and made a revolutionary step by speaking in Malayalam in the legislature.

Buddhism became popular among the Ezhava social reformers. The prevailing casteism, with its horrible feature of pollution prompted many to seek the ideology of Buddhism as against Brahmanism. Kumaran Asan, the most renowned leader of SNDP Yogam was an admirer of Buddhism. C. Krishnan, a prominent Ezhava social reformer, was a zealous advocate of Buddhism and had made commendable service to spread Buddhist teachings through the press and platform. In his search for values to bring about an egalitarian society, Ayyapan was more fascinated by Buddhism than the teachings of guru. To Ayyappan, Buddha was the 'herald of universal brotherhood'. No wonder that the Ashtanga Marga and non-injury as preached by Buddha and his denunciation of the authority of scriptures and casteism, the silence on the existence of god, and the emphasis on universal brotherhood made an appeal to men like Ayyappan in the context of an awakening against the evils and superstitions and the struggle for democratic values.<sup>16</sup>

Ayyappan believed that Buddhism would bring great moral benefits to man as a religion that inculcated a higher moral consciousness based on the values of humanism and egalitarianism. Ayyappan feit the Buddhist dharma as capable of leading man to achieve international co-operation and peace and the establishment of human greatness and human freedom. It was against this background that Ayyappan was induced to Buddhism as an ideological base for his struggle against casteism and discrimination. The challenge of Buddhism to Hinduism and its negation of casteism were the bases of his rational approach.<sup>17</sup> Social Revolutionaries and the Display of Radicalism

He reformed language, culture and society of Kerala through his radical political democratic interventions and rationalist practices and questioned the social evils existed in the society and even challenged it.

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tioned the summary one among the pioncers of the rationalist movement Ayyappan was one among the pioncers of the rationalist movement in Kerala. While he was a student, he began to think and doubt about the traditions and caste system. He used to ask several questions to himself and Guru but never accepted the reply of anyone, including Garu, until it satisfied his thirst. He followed a critical approach to everything and was a liberal thinker in the true sense. He had his own opinions regarding every matter, and he used to change it.

'Sahodara Sangham' begun by Ayyappan was a rationalist organiration in a true sense. Even the Sahodaran published some writings against superstitious believes and evil practices in the society. Ayyappan took initiative to begin another rationalist journal Yukthivadi, along with K. Ramavarma Thampan, C. V. Kunjuraman, C. K. Krishnan and M.C. Joseph in 1929. The meaning of rationalism and the purpose of the journal had been explained in the first volume of the journal by Ayyappan as "rationalism is not a dogma but a philosophy. It is a mental attitude of accepting only knowledge based on religion".<sup>18</sup> The journal was continued till 1960. Religious reform was not his target, rather he stressed on social reform by eradicating the discrimination and social evils. He even advocated that the objective of all religions should be equality. He was an ardent advocate of free thinking. Rationalism and free thinking were advocated as the prerequisites for the progress of the community.

The first target of Ayyappan was to fight against the *Bharani* festival in the Kurumba Bhagavathy temple at Kodungallur. He led a campaign against the obscene songs and animal sacrifices at Bharani fest. Ayyappan, along with hundreds of followers marched towards it with a slogan 'don't go to Bharani". He made a speech against it and blocked them. The angry devotees tortured them by throwing the blood and pieces of the animals upon them.<sup>19</sup> Even after the incident he continued this mission and gave a petition to the King of Cochin to pass legislation against it.

Through Yukthivadi he criticized the religious perceptions of Gandhi and Tagore. He openly criticised Gandhiji for his positive attitude towards the varna system. Ayyappan never accepted and vehemently criticized the 'Hindu Mahamandal', formed by Mannath

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Padmanabhan and R. Sankar. Yukthivadi openly mocked the habits and nature of the '33 crores' and more gods of the Hindu religion. Through his editorials, Ayyappan also criticized the intermediary role played by the priests. He wrote some poems on rationalism and published it in the first volume of Yukthivadi. He used pen as a weapon against inequality and social evils. Poetry was his medium to spread his message of equality and wrote many poems to propagate it. From 1917 to 1940 he wrote about 70 poems, half of dozen of which were on freedom like Swathantrastavam, Swathantra Gadha, Ujjivanam etc.<sup>20</sup> His poetry covered variety of topics like Dharma, Kingship, Freedom, Rationalism, Buddhism, Onam, Death etc. Through these works he shaped the literary culture of Kerala.

The revolutionary move launched at Cherai was the beginning of his political career. Through several hardships and criticisms, he emerged as a strong activist. He regarded S. N. D. P. Yogam as the platform for his social reform movements. In order to strengthen the organization, he decided to expand the activities of Yogam in different parts of the State. As a part of his activities he decided to construct orphanages, old age homes, hospitals, schools, libraries etc. which made him more popular. He advocated that the political activities should be free from caste/religious activities. Ayyappan cautioned his followers not to have blind faith in him.

In the opinion of Ayyappan, granting of jobs to the lower caste Hindus was not merely to reform those communities but to reform the whole society. Ayyappan was pointing to the real issue at stake, namely, a share in the governance. In his opinion, communal representation was not antagonistic to nationalism, but would foster nationalism by eliminating communal discrimination, by providing equality of opportunity for all in the government services. In other words, the argument of Ayyappan was that natural justice would be ensured to all only when all communities would get representation in the administration. According to him, communal representation was required till the communal system was eliminated. The ideal system of casteless society could be achieved only through the elimination of caste differences after strengthening all the communities by providing temporary safeguards. Communal representation was such a safeguard.<sup>21</sup>

The Abstention movement was organized jointly by Ezhava, Christian and Muslim communities to destroy the monopoly of Brahmins

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and to secure their rightful representation in government services. Ayyappan was the president of the S.N.D.P during this time. Sir C. P. Ramaswamy Jyer, the then Dewan threatened to cancel the license of S.N.D.P. Ayyappan criticized it through his editorials and finally Dewan withdrew it under popular protests. He became the president of Yogam for several times. Being the president of Yogam he got many chances to act more politically. He played a prominent role in the course of the struggle for responsible government in the princely State of Cochin. He took the leadership of the historic 'declaration of human rights' meeting held at Cochin in 1945 and published this incident in his Sahodaran.

Ayyappan also contributed to the development of trade unionism and literacy movement among the working classes. He spread the activities of the Yogam among the working-class communities and organized associations like 'Adi Vypin Thozhilali Sangham', 'Ochanthuruthu Thozhilali Union', 'Thruvithamcore Labour Association' and 'Cochin Labour Union'. In 1933, he started a newspaper called *Velakkaran* for the labourers at Alappuzha. But it was short lived. He was inspired by the Russian revolution and shared the communist ideologies among his followers. He popularized the ideology of communism in Kerala. Ayyappan was one of the pioneers in disseminating the revolutionary message of the October revolution and introduced the term 'comrade' in Malayalam. But his radical attempts were deliberately marginalized in the later period.

Ayyappan became a member of Cochin Prajamandal and a minister in the ministry of Paravoor T. K. Narayana Pillai. He was elected to the legislative assembly of Cochin and became the voice of the depressed classes. Very soon he became a popular politician and got continuously elected to legislative assembly without opposition.

As a great man and a great politician, Ayyappan was against the new power politics and never acted against the law and never misused his position as politician and as minister. Ayyappan acted as the minister for Public Works Department and resigned from it when some issues after the Peringalkuthu Hydro Electric project. He made some notable programmes to the development of Cochin, especially by taking initiative in the construction of Cochin-Vypin Bridge. But later, his radical steps were deliberately silenced.<sup>22</sup> Many constitutional reforms introduced in Kerala were the results of his hard work. He became instru-

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mental in the enactment of a series of legislations, including the Cochin Ezhava Matriarchal Bill and Cochin Ezhava Patriarchal Bill, Adult Franchise in the Panchayats and the Civil Marriage Act

After his retirement from active political life, Ayyappan dedicated more on social welfare programs. Ayyappan founded the 'Sree Narayana Sevika Samaj', along with his wife. As a part of his activities Ayyappan planned to make Sree Narayana Giri, a place near Aluva (where guru used to meditate) a holy place and placed Sreenarayana Giri as the centre of Sree Narayana Sevika Samaj. He constructed a Gurumandir at the hilltop and started a school for the poor children. Later, it became a major pilgrim centre. Ayyappan passed away on March 6, 1968. His body was taken to Sreenarayana Giri and buried there. His social services were continued even after his death by his wife Parvathy Ayyappan and his followers. By his words and deeds, Sahodaran Ayyappan was a rationalist, an Avant Grade critical Realist, in the true sense of the term.

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#### Herman Gundert and the Evolution of Print Movement in Kerala

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#### S. R. JINCY

Bermann Gundert was a German missionary scholar, reformer, educausest, lingoist and indologist, known for his pioneezing contributions to the development of Malayalam language and culture. Gundert came is leads for missionary work and as a part of Basel Mission he reached Malabar (north Kerala) and settled down in Illikkunnu near Thalassery. Dough Gundert was a missionary he has made remarkable contribunons in diverse disciplines such as language, history, journalism, litersize, science, religion, geography, astronomy etc. Gundert played a prominent role in Kevala's cultural development.

Hermann Condect was born in Stutigart, the capital city of Baden-Wirmsmitteng, Germany on a February 1814." Till the Second World was Baden and Wilettemberg were two different states. The place was sich is onlynes, education, science and technology. The cultural confiness existed in Baden-Württemberg also contributed to the developness of Gundert family. Hermann Gundert was the third child of Frans issiwig Gundert and Christiana Englis, Ludwig by profession was merclass but later changed into a religious person. He established a bible solery Wormensberg Bible society in 1813 and became a strong advoout of seligious movement in Germany. Hermann's mother Christiana was a pieces religious woman. Hermann was named after the strong nalonal sentiments of Ludwig and Christians. Hermann Der Cherusker via a national hero of Germans who fought against Romans during the <sup>ch</sup> Contrary A.D.<sup>4</sup> As an homor, Gundert family named their third child in Hermann



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Gundert family was very closely connected with the Württemberg pietism.<sup>3</sup> Hermann groomed up as god-centric and religious and was highly influenced by the religious principles of his family, especially his father. Ludwig was the secretary of the Bible Society. Hermann used to visit the office which helped him to learn more about Bible. In 1820, Hermann joined the Latin school at Stuttgart along with his brother Ludwig. By 1823 Hermann began to learn the first lessons of printing and publishing as his father started the publishing of a magazine named 'Stuttgart Mission Magazine'.<sup>4</sup> This experience laid the foundation of the knowledge on printing and writing from childhood onwards. His experience with the magazine also helped him to know about Asia, especially India. The sudden death of his younger sister in 1827 was a tragic incident in his life. This incident turned Hermann to become more religious-centric and he tried to inquire about the meaning of life and death.

#### Maulbronn Life

In 1827, at the age of 13, Hermann joined the Maulbronn Latin school, a very famous school founded in the 12<sup>th</sup> C A. D.5 Hermann was only an ordinary student, learned history, geography, mathematics from this seminary school. History was his favourite subject. Along with that he had mastered different languages like Hebrew, Greek, Latin, English and French. Hermann was very much impressed with the subject of history especially the war history of Europe. Hermann's first literary work was also a historical study. The article about the "Thirty years war' in Europe was really an outstanding work which clearly indicates the historical sense and observation skills of Hermann. He also held a speech on the 30 years of war in 1830.6 He wanted to become a history teacher. As a teenager Hermann showed some distress against the strict culture prevailed in the school. Sometimes he wanted to leave the school, but his parents never allowed him to do so. During this period, he showed some interest in music. He found music as a medium to channelize his stress and troubles. He was more interested in the musical instruments like violin, piano and organ.7 Hermann used to attend the music concerts and wrote about music and songs.

Though he was interested in history, he never left his interest in Bible and theology. It was during his Maulbronn school life he made the Journalistic Platform and Intellectual Articulation

first attempt to translate Bible. At first, he translated some parts from the book of Ezckiel into German.<sup>8</sup> Interactions with David Friedrich Strauss, a new teacher at Maulhronn School changed Hermann's attitude towards theology and philosophy. Like most of the other students, tude towards theology with the abilities of Strauss, who motivated him to lead his students to a higher level.

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### At Tubingen University

After Maulbronn, Hermann joined the famous Tubingen university for theology on 24<sup>th</sup> October 1831. Hermann was more attracted towards the philosophies of Hegel and Strauss. His principles were different from that of his father who showed some dislike towards it. Hermann started his literary career by 1833 soon after the death of his mother on January 20. About the memories of his mother Christiane he wrote. In the memory of Christiane'.<sup>9</sup> Later he translated some great works including Sophocles' Antigone and King Oedipus into German. During these days he himself turned into a teacher who taught languages like Greek and Hebrew as well as Bible to the fellow students at University. This increased the popularity of Hermann as a scholar and teacher.

Tubingen was a well-known center of theology, philosophy, history etc from 15<sup>th</sup> century onwards. From here Hermann was exposed to the ancient Indian history and Sanskrit. He was impressed with the rich cultural heritage of India and wished to visit India strongly. During this time, he got an opportunity to travel to India as a part of Basel Mission activities in 1835. For that he was invited to Switzerland, headquarters of Basel Mission. He was assigned the duty to teach Hebrew and Greek to the sons of Anthony Norris Groves, an English missionary and to accompany them in their journey to India.<sup>10</sup> At that time, India was an important Centre of their missionary activities. Hermann was delighted to hear the news because he wanted to visit India and was waiting for an opportunity for a long time. Before his mission to India, Hermann secured doctoral degree in theology from Tubingen University in 1835.<sup>11</sup>

### Hermann Gundert in India

On 2<sup>nd</sup> October 1835 at the age of 22, Hermann started his journey to India from Stuttgart. 'Perfect' was the name of the ship which carried Hermann and others to India.<sup>12</sup> During his journey he spent more time

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to learn about Indian native languages like Bengali. Unlike the plan to go to Calcutta, the ship moved towards Madras due to the adverse climatic conditions. By July 7, 1636 Hermann reached Madras, the southern part of India and thus fulfilled his dream. He visited several places in Madras like fort St. George and stayed there for one month. From there he travelled to Tirunelveli to meet Karl Theophilus Rhenius, a missionary.<sup>13</sup> This was a turning point as he decided to start his missionary life from Tirunelveli. Hermann was very much impressed with the personality and knowledge of Rhenius which he utilized to extend his literary knowledge. He stayed with Rhenius and through the interactions Hermann learnt Tamil, native language of Madras. It was during this period that Hermann started writing of world history till the birth of Christ in Tamil language.

As a part of missionary activity Hermann moved to Chittor, a village in Tanul Nadu-Andhra border along with Grove and family. His passion for languages helped him to learn Telugu, another south Indian language. During the journey to Chittor he met two lady missionaries Julie Dubois, a French-speaking Switzerland missionary and Hanna Tome of Baghdad.<sup>14</sup> They worked together in the missionary activities at Chittor which finally changed the life of Hermann. He was attracted with the loving and pleasant Julie Dubois and decided to marry her. They got married on 23 July 1838 at Chittor with the support of Mr. Lesley and his family. They decided to continue their missionary life and joined the Basel Mission.

While he was in the missionary work in Tiruchirappalli, Hermann was invited to Mangalore by Hermann Mugling, a missionary friend from Tubingen. Then the Gundert couple moved to Mangalore on 1 October 1838.<sup>15</sup> During the journey to Mangalore they reached Nagercoil and later entered Kerala.

#### Gundert in Kerala

It was on 6<sup>th</sup> October 1838 that Hermann and Julie reached Travancore, the southernmost state in Kerala. They stayed there for some days and visited some nearby places. His experience in Kerala was described in his diary as "a gifted land with rich greenery and beautiful hills". From there they travelled to Mangalore by covering Kollam, Alappuzha and Cochin, where they met with an accident due to

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heavy wind. Fortunately, all the passengers survived and finally Gundert reached Mangalore by November. He was welcomed by Hermann Mugling and Samuel Hebic, the founder member of Basel Mission in Malabar (north Kerala). Gundert started his missionary activities at Mangalore with Samuel Hebic, Hermann Mugling and Gotford Wyglee (from Wyglee, Gundert learned Kannada).<sup>16</sup>

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(from Wygree, Gundert Mangalore, Gundert heard about the missionary while be was in Mangalore, Gundert heard about the missionary activities of Michael, a missionary from Ancharakandy. Thalassery (in Malabar). Hermann wanted to visit Michael as he was attracted by the missionary activities of Michael in the field of education. Gundert came to Thalassery to meet Michael in February 1839. After his interactions with Michael at Ancharakandy, Gundert explored the possibilities of missionary activities at Thalassery. Very soon he decided to shift to Thalassery which later became the major centre of his missionary as well as social life. He got the permission to begin a mission center at Thalassery.

By receiving the permission from Basel Mission, Gundert couple moved to Malabar and settled at Thalassery in April 1839.<sup>17</sup> They found a good place to settle down in Thalassery. Illikkunnu was a calm and a beautiful place near to Thalassery town; there Gundert lived for twenty years. The house where they stayed was contributed by Mr. Stainge, District Judge, which later came to be known as Gundert Bhavan, the birth place of his literary works and all his children(Herman, Samuel, Ludwig, Marie (mother of Nobel prize winner Hermann Hesse) Christiana, Frederic Powel and David). Through the efforts of Gundert Thalassery emerged as the literary centre of Kerala. From 1836 to 1859 Gundert served India and in 1859 he returned due to poor health conditions.

### Literary and Cultural Contributions of Hermann Gundert

Though missionary work was his prime concern, Hermann Gundert also made outstanding contributions in the field of language and literature. He had a great passion for language and showed great interest in literature. Gundert was proficient in many languages especially south Indian languages like Malayalam, Tamil, Telegu, Kannada etc. His passion for Indian culture and heritage motivated Gundert to learn Sanskrit. For

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that he appointed a Sanskrit scholar (Munshi) at a salary of Rs  $_{10}$ / per month. Very soon he started writing in Malayalam. He dedicated himself for a systematic study of Malayalam language and culture.

#### Literary contributions

From 1840 onwards Gundert began writing in Malayalam. He spent much time to learn the cultural differences, especially the differences in language, pronunciation and usages. Gundert became an influential writer in Malayalam by publishing some books including one on grammar (Malayalabhaasha Vyakaranam) and the first 'Malayalam-English dictionary', highly acclaimed two major works of Gundert. His other major works are Keralolpattky, Kerala Pazhama, Pazhanchol maala, Muhamad Charithram, Polukarppa Charitham, Lokacharithra Sastram, Kristhu Sabha Charithram, Loka Charithra Samkshepam, Malayala Rajyam, Nasranikalude Pazhama etc.18 His works covered diverse topics such as history, folklore, proverbs, place name history, Christian studies, grammar, biography, travelogue, memories etc. Gundert also made some Malayalam translations of famous works such as pilgrim's progress of John Bunyan's into 'Sanchariyude Prayanam'. He also made a translation of bible in Malayalam. Gundert made notable contributions for the development of Malayalam prose and grammar.

Suvisesha Samgraham, Sathyaveda Samkshepa Charithram, Suvise sha Kadhakal, Smarana Vidhya, Prarthana Samgraham, Sahithya Veda Ithihasam etc were the notable works based on bible and religion.<sup>19</sup>The translation of Question-answer book of Martin Luther and Christian Henric Celler and 'Nasranikal Okkeyam Ariyendunna Samkshepa Vedhartham'(the translated work of Clement Pianiyus) etc were used as catechism text books.

Gundert showed interest in the history of Kerala. Lokacharithan, Keralacharithram, Kristhusabha Charithram, Keralolpathy, Kerala Pazhama. Malayala Rajyam, Loka Charithra Samkshepam, Muhammadiya Charithram, Polukarppu Charithram etc were the major historical works. The folk culture and traditions of Kerala also influenced the writings of Gundert. Local usages, myths, stories, songs ete were included in his writings. Pazhanchol Maala, Arunooru Malayalam Pazhanchol, Orayiram Pazhanchol, Aayirathiorunooru Pazhamchol etc were the major works on local proverbs.<sup>20</sup> These works consist of great Journalistic Platform and Intellectual Articulation

collection of local proverbs. Gundert made tremendous effort in the compilation of these works.

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Gundert also engaged in linguistic research which further led to the publication of the first Malayalam-English dictionary. It was not a mere dictionary but a rich source of words and all related references. Historians considered this attempt of Gundert as the biggest contribution to the Malayalam language. Gundert collected and documented several words and their meanings along with similar/related words. Though there existed several other dictionaries in Malayalam, Hermann's dictionary is considered as the most accurate and scientific one. In his dictionary Gundert incorporated the common words and dialects used by the local people, especially the fishing and tribal communities. Gundert made a massive effort to collect and document various common words used by different castes and communities with its regional variations (but compared with the northern usages the words from the southern parts of the state were very rare).22 For a comparative analysis he referred several literary works such as Kundalatā and Indulekha along with the available government/official records. The dictionary was not just 'mechanical' meaning-making equipment' but also included the names of animals, plants and trees in it. This clearly shows the versatility of the work and reached the level of an encyclopedia (the dictionary was completed in

According to Scaria Zacharia, Gundert was able to popularize the word 'Malayalam' and made it the standard name for the language.<sup>23</sup> It was through his publications that the name and content of Malayalam language became flourished. In addition to the grammatical and literary works of his own, he also collected and edited some old literary texts



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#### In the field of lournalism

Hermann Gundert is also credited with the development of Malayalam sournalism. He was involved in the beginning of the first Malayalam newspaper. Rajyasamacharum in 1847 from Illikkunnu in Thalassery is Till its end in 1850, 42 issues of the newspaper were published Remasamacharam was printed at the printing press established by Basel Mission at Illikkunnu. Instead of literary language, he used popular or common language in the paper. Besides Rajyasamacharam he launches another newspaper/journal named Fatchimodayam in 1847, with an intention to popularize the western ideas and thoughts among Kersines (his friend Frederic Muller was the editor of the paper). Unlike Reivasamacharam there was a fixed price for the newspaper (two pairs per issue and <sup>1</sup>/<sub>2</sub> rupces for annual subscription)<sup>25</sup>

If Rajyasamacharam was aimed in religious propagation and missionary works, Paschimodayam mainly for the propagation of western knowledge. The name itself denotes the aims and objectives of the paper. General knowledge, scientific and technological knowledge, geography, history, astrology etc were included in Paschimodayum. For the completion of this task he received assistance from the local experts like C. Kaniyan Kadu, Mooliyil Ramettu Gurukkal, Urachery Gurukkas mar, Yakob Ramavarma, Paval Chandran etc.26 The primary lessons on printing and publishing acquired from his father helped Gundert in the development of Malayalam literature and journalism.

#### In the field of education

Gundert learned the value of education from Tubingen life which for ther expanded during his missionary life. His life proved that Hermann was an eager educationalist who worked hard for the development of education in Kerala. As a part of Basel mission Gundert couple began the mission of educating the illiterate people of Thalassery. They real ized that education is very important for the socio-cultural development and so they popularized the importance of education through their case sionary work. Both played a prominent role in the expansion of edacation in Kerala, especially in Malabar. They took initiative in the estab lishment of several primary schools like girls' school, night school for workers and school for orphans.

Inernalistic Platform and Intellectual Articulation

Oundert started an English pre-school at Thalassery in 1839 as a out of Basel mission. Though the school was a part of missionary part of mass of massionary sork Gundert maintained a secular culture in the school by providing work Guiden of knowledge. The school proved successful till August 1942 He started a Malayalam school on the porch of his bungalow at 1943 The bin 1830. He also brought several scholars and pundits to discuts and learn Indian history and culture.27 Later he started another cuis and notice) near Thalassery Fort. In 1840 he started another one Kohroot Very soon he expanded his activities to the nearby places at Konsolvanakkandy. Mahe etc. Furthermore, Gundert introduced Geran model seminary schools which gave importance to physical acgeneration(handicrafts). Julie aught some handierafts to the girls at their bungalow school.

Hermann Gundert himself acted as a teacher and taught English grammar, history and theology. He frequently visited the schools in Thalassery to inquire about its functioning. All these led to his appointment as the Government's school inspector for Malabar and Canara in 1857.45 His appointment as the school inspector helped in the develsoment of the system of education in Malabar. As school inspector he worked for the upliftment of education for two years. Though he warked only for a short period his contributions in the field of education were outstanding. He gave more importance to the quality of the textbooks for schools. He himself wrote some tutorial books for malents. Patamala, Malayala Vyakaranam Chodyotharam, School Panchathanthram, Malayalarajyam etc were the main among them. Thus, he laid the foundation for the making of 'syllabus' by including all the ubjects like history, geography, proverbs, stories, songs etc with a view to enrich the knowledge level. Gundert aimed at the moral, mental, physical development of students. According to him a textbook should be prepared based on the learning level of the students. His contributons have proved that Gundert was an excellent educationalist with a futuristic vision. Later his works were used as 'models' when Kerala Varma Valiakoj Thampuran started a board of textbooks in 1868.<sup>30</sup>

### Later phase

In 1859, a serious case dysentery forced Gundert to go to Germany. His wde and children initially left India. Gundert slowly recovered from

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illness but going back to India was unimaginable. He continued his missionary work with the Basel mission. Mission sent him to Calw in 1860, to work with Christian Gottlob Barth, the founder and director of Calwer Verlagsverein (Calw publishing association).<sup>30</sup> There he took 10 more years to complete the work of Malayalam- English dictionary and completed it in 1872. There he worked as clerk till the death of Barth in 1862 and Gundert took over the duty of director of the printing association. Under his able guidance, Calw Publishing Association gained more popularity and grew considerably. He was assisted by his son Frederic, who joined him in 1875 as managing director of the publishing house.31 In 1877 a new branch of Calwer Verlagsverein was opened in Stuttgart, the hometown of Gundert.

On 15th September 1885 his wife Julie passed away which was a shock to Gundert. Soon after that he fell ill and was bedridden for a long time. Gundert died on 25 April 1893 at the age of 79. Gundert spent nearly two decades in Kerala and made great contributions to Malayalam language and literature. He did a lot for the enrichment of our culture. Undoubtedly this great lover of language and literature is still being remembered for his commitment to the language culture of south India especially Kerala. His rich literary legacy was carried over by his grandson Hermann Hesse, the Nobel Prize winner. Hermann Hesse learned the rich cultural heritage of India through Gundert which further helped him in writing. Gundert bungalow at Thalassery is now preserved as a historical monument.32 As an honor to him a large Gundert memorial statue was erected in Thalassery. Even today Hermann Gundert is remembered for the outstanding contributions made for the cultural development of Kerala.

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International Educational Leadership Conference - 2018 A STUDY ON LABOUR WELFARE MEASURES AND ITS IMPACT ON JOB SATISFACTION LEVEL OF WORKERS IN CASHEW NUT FACTORY, PULLUR

> \* Ms. Krishna A.S \* Dr. L. Shanthi

Abstract - The cashew nut factories play a vital role in providing employment to rural people from poor families. So they help to socio economic development of rural poor and it is an agro based industry. Welfare measures like medical, first aid, safety measures, rest rooms and other non-monetary benefits are needed to increase the high productivity of employees. So this study is conducted to know the welfare measures taken by the company and the impact of job satisfaction level of employees towards their work in cashew nut factory, pullur. Primary data is used for collecting the information from workers and data are analysed with the help of percentage analysis and Chi square test. From this study we can conclude that some facilities provided by the organization are not satisfied by the employees. The year of experience have not any impact on the satisfaction.

Keywords: Labour welfare, monetary benefit, non-monetary benefit, job satisfaction

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College(Autonomous), Irinjalakuda, Thrissur, Kerala. \*\*Dr. L. Shanthi, Assistant Professor, Department of Business Administration, Government Arts College Udunalpet

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### Temperature Dependence of Relative Permittivity: A Measurement Technique Using Split Ring Resonators

Sreedevi P. Chakyar, Jolly Andrews, V. P. Joseph

Abstract-A compact method for measuring the relative permittivity of a dielectric material at different temperatures using a single circular Split Ring Resonator (SRR) metamaterial unit working as a test probe is presented in this paper. The dielectric constant of a material is dependent upon its temperature and the LC resonance of the SRR depends on its dielectric environment. Hence, the temperature of the dielectric material in contact with the resonator influences its resonant frequency. A single SRR placed between transmitting and receiving probes connected to a Vector Network Analyser (VNA) is used as a test probe. The dependence of temperature between 30 °C and 60 °C on resonant frequency of SRR is analysed. Relative permittivities 'ɛ' of test samples for different temperatures are extracted from a calibration graph drawn between the relative permittivity of samples of known dielectric constant and their corresponding resonant frequencies. This method is found to be an easy and efficient technique for analysing the temperature dependent permittivity of different materials.

Keywords—Metamaterials, negative permeability, permittivity measurement techniques, split ring resonators, temperature dependent dielectric constant.

#### I. INTRODUCTION

A MONG the material characterization studies, the precise determination of dielectric constant at different working environments is important from the application point of view. Out of these different parameters, the variation of dielectric constant with temperature finds its use in different sensor applications in the fields of medical instrumentation, electronic and electrical industry etc. This dependence of dielectric constant on temperature for different materials is already reported [1], [2].

There are several techniques described in the literature to determine the dielectric constant at different temperatures [3], [4]. Among these different techniques, open-ended coaxial probe method, cavity resonance methods, quasi-optical resonator method, split-cylinder resonator method etc. are commonly employed [5], [6]. Many of these methods require specific working conditions to be satisfied for the precise determination of the above-mentioned variation of temperature on relative permittivity. In this paper, we present an efficient and simple method for the measurement of dielectric constant variation with temperature using a SRR metamaterial unit [7], [8].

SRRs are constituent molecules of metamaterials showing negative permeability. SRRs present exotic resonant nature

Sreedevi P. Chakyar, Jolly Andrews, and Joseph V. P. are with the Department of Physics, Christ College (Autonomous), Irinjalakuda, University of Calicut, Kerala, India (c-mail: sreedevip2008@gmail.com, jmalieckkal123@gmail.com, drvpjo@gmail.com). which is highly dependent upon the structural parameters of the resonator and the dielectric environment associated with them [9]-[11]. Since the resonant frequency of the SRR changes with different physical working parameters, they find a number of applications in different microwave employed fields. In literature, the effect of dielectric constant on the resonant frequency of SRR is investigated [12]-[16]. As the properties of the metallic resonator structure and the dielectric substrate upon which it is fabricated are all temperature dependent, SRR is also sensitive to temperature variations. The temperature dependence of SRRs is extensively studied [17] in terms of the thermal expansion of the SRR ring and the temperature dependence of substrate permittivity. In that work, with support of sufficient theory, they have shown that the resonant frequency decreases due to increase in temperature by the contributions due to the change in dielectric constant of the substrate and the thermal expansion of the rings. Singh et al. studied the effect of temperature on terahertz metamaterial fabricated on strontium titanate substrate [18].



Fig. 1 Schematic representation of the SRR with its structural parameters - inner radius r, ring width c and spacing d

The structure of circular SRR with its parameters is represented in Fig. 1. It composes of two concentric metal rings of width c and spacing d. The radius of the inner ring is r. The two metal rings have small splits on the diametrically opposite sides of the structure. The *LC* resonant nature of the SRR arises from the capacitance and the inductance of the two rings due to charges and currents induced in them by applied electromagnetic field. The resonant frequency of the SRR is given by:

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### Determination of permittivity of pulses and cereals using metamaterial split ring resonator

Sreedevi P. Chakyar, Sikha Simon K., Aathira Murali, Shanto T. A., Jolly Andrews, and Joseph V. P.

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### Broadside coupled split ring resonator metamaterial structure for sensitive measurement of liquid concentrations

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## Online Learning among Students during COVID Era: Challenges and Opportunities

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Akhila Jose Jose and Bonsy M.P. and Ajeesh K.G.

#### Abstract

With an increasing number of states and countries closing their educational institutions due to Covid-19 pandemic, the Commonwealth of Learning announces to conduct online learning with the supervision of school management to ensure that learners never lose their time and can learn from any location of their choice. Online education is electronically supported learning that relies on the Internet for teacher/student interaction and the distribution of class materials. Online learning in India become more necessary during these days as the new academic year started. The researchers begin to focus on the effectiveness of online learning and the study on nursing students by School of Health Sciences on April 2020, finds that 95% of the students positively welcomed online learning, but they have connectivity and online platform related challenges. The objectives of study are: 1. To study the personal details of school students. 2. To know about the opportunities of online learning in school students during COVID era. 3. To study about the challenges of online learning among school students. 4. To study the platforms preferred and used by school students. Data collected from primary sources, school students like SSLC and plus two in Thrissur District, through Google form. It is found that most of the students have supportive family environment, good internet connection and teachers are supportive for clearing the doubts. Only few have problems of internet connectivity and issues related to the clarity and less hours of the classes. Some of the students who get classes through television have problems like the difficulty to follow the complete Malayalam words due to they follow English medium school. The preference of students for online classes is zoom and YouTube but school depend mostly on online platforms like Watsapp and Google meet.

Keywords: Online learning, Opportunities, Challenges, COVID er Platform

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Sociology. He has authored 6 books and more than 45 articles published in reputed journals and edited books. He has participated and presented papers in International and National seminars and conferences. His areas of interests are Extension and Community Development, Tribal Development and Community Health. He has received the best NSS programme Officer Award in the year 2014-15 & 2015-16 consecutively. During 2015-16 he has received NSS State Award for best Programme Officer (Kerala).

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## A Study on Job Stress of Health Inspectors during COVID 19 Pandemic in Ernakulam District, Kerala

Josmy Jose and Ajeesh K.G.

#### Abstract

On 2020 October 14; 110586 COVID-19 death cases reported by Indian Government (MoHFW - Ministry of Health and Family Welfare)across the country and is hiking more and more. Role of Health Inspectors is immense where local self-government taking precautions for the same at the grass root levels. Thus Researcher in this paper focus onto study on job stress of health inspectors during COVID19 pandemic in Ernakulam district. Kerala state had shown an effective model to world for its health interventions especially during NIPAH and now COVID. WHO defines that Work-related stress is the response people may have when presented with work demands and pressures that are not matched to their knowledge and abilities and which challenge their ability to cope. As reported by the current Health Inspector of North Paravur Municipality of Ernakulam District, they are working 24×7 to make sure the security of public by strictly keeping guidelines to take care of covid affected as well as quarantined patients. Beside those works as part of the pandemic like disinfecting public stations, welfare activities for the other state labourers; they have to carry out duties like sanitation, food security and to handle and solve the complaints in their local boundary during night time indeed.

Purpose of the Paper is to find the rate of or how high the job stress affect the health inspectors during this pandemic and to suggest measures for the same.Research design is quantitative in nature and sampling method used is non-probability and technique used is convenient sampling. Data collected from primary sources-Health Inspectors (HI) working in Ernakulam District. life balance, adopting positive attitude and resisting perfectionism. It is only Andrews recommended taking timeout of few minutes between works can diffuse the only profession attest stressful situations to an extent Compassionate Fatigue prevalent among them can be reduced by keeping workstressful situations to an extent.

Keywords: COVID-19, Health Inspectors, Job Stress, pandemic

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#### TAXONOMIC ACCOUNT OF EUGLENOIDS IN SELECTED SITES OF

### KARUVANNUR RIVER, KERALA, INDIA

## Devikrishna C.S.<sup>1</sup>, Tessy Paul P.<sup>2</sup> and Mohamed Nasser K.M.<sup>1</sup>

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#### ABSTRACT

The Euglenophytes are one of the important groups of phytoplankton which is primarily freshwater inhabitants and are unicellular flagellates. The present paper is an attempt to explore the euglenoid diversity and to make a taxonomic account on it, from the selected sites of Karuvannur River, Thrissur District, Kerala. Karuvannur River is one of the major freshwater sources of Thrissur district, which is flowing through the famous Kole lands of Thrissur. The study was carried out from June 2017 to May 2018. During the period of study, 25 species of euglenophyceaen members were identified belonging to five genera, namely, Euglena, Lepocinclis, Phacus, Trachelomonas and Strombomonas.

Keywords:Euglenoid diversity, Karuvannur Lepocinclis, Phacus. River, Euglena, Trachelomonas, Strombomonas.

#### INTRODUCTION

Algae play a vital role in maintaining the food chain since they are the primary producers. These lower plants are used as feed, fodder, fertilizer, medicines and even as a source of restriction endonucleases (John and Francis, 2012). Also they have a noticeable role in the ecological aspects, markedly as pollution indicators (Palmer, 1969). Euglenoids are unicellular flagellates primarily occur in freshwater habitat. Although a few are sedentary, most forms are motile with one or two flagella and many of them are highly metabolic, even with an amoeboid type of motility (Prescott, 1982). They are often predominant in eutrophic waters including high organic and inorganic contents (Rahman et al, 2014).

Considerable work has been carried out in India about systematic survey, distribution and seasonal occurrence of euglenoids (Suxena, 1955; Munavar, 1972; Pandey and Pandey, 1980; Rathaet al, 2006). Philipose (1982, 1984, 1988) has done a very extensive work on euglenophytes throughout India.

Very few reports are available on the euglenoid diversity, from the freshwater habitats of Kerala. Shaji and Patel (1991), Shajiet al (1995), John and Francis (2012) and Arulmuruganet al (2010) have described euglenoids from freshwaters of Kerala. This is an attempt to explore the euglenoid diversity and to make a taxonomic account on it,

from the selected sites of Karuvannur River, Thrissur District, Kerala.

#### MATERIALS AND METHODS

Karuvannur River is one of the major freshwater sources of Thrissur district, which is flowing through the famous Kole lands of Thrissur, with its origin at Pumalai hills in Chimmony Wildlife sanctuary. It has two main tributaries, Kurumali River and Manali River, which confluence at Palakkadavu, before Arattupuzha to form the Karuvannur River. For this study ten sampling sites were selected, which include the beginning and end region of the river, viz, Chimmony (S1), Peechi (S2), Kurumali (S3), Puthur (S4), Manali (S5), Palakkadavu (S6), Arattupuzha (S7), Karuvannur (S8), Thriprayar (S9) and Enammavu (S10). The surface water samples were collected from the sites at monthly intervals from June 2017 to May 2018. Collected samples were preserved by adding 4% formalin (APHA, 1998). Each sample was mounted on the glass slide using glycerine and observed thoroughly under research microscope for the taxonomic analysis. Identification of algal forms was made with the help of relevant and available floras and literatures (Prescott, 1982; Philipose, 1982, 1984, 1988; Wolowski, 1998). Photomicrographs of algal taxa taken with digital camera attached to the research microscope.

#### **RESULTS AND DISCUSSION**

During the period of study, 25 species of euglenoids were identified which belongs to five genera, namely, Euglena, Lepocinclis, Phacus, Trachelomonas and Strombomonas from the selected sites of Karuvannur River.

#### **Taxonomic description:**

Genus: EuglenaEhrenberg

#### 1. Euglena acusEhr.

1

Prescott, 1982. p. 390, pl. 85, fig. 28. Cells elongate, spindle shaped, 140-150 am long, 10-14.6 µm broad, produced posteriorly into a long, fine tapering point, narrowed and truncate at the anterior end. [Col. Site: S5, S10]

### 2. Euglena charkowiensisSwirenko

Islam and Irfanullah, 2005. pl. 4, fig. 47. Cells 140–153.0 µm long, 14.6–20.9 µm broad, posterior end with a straight tail-plece! [Col. Site: S3, S5] Assistant Processing In-charge of Principal S3, S5]

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23. TrachelomonasvolvocinaEhr.

Prescott, 1982. p. 419, pl. 83, figs. 1, 7, 8.

Lorica globose, smooth, 14.5–20.4 µm in diameter, collar usually absent. [Col. Site: S1, S2, S3, S5, S7, S8, S9, S10]

24. Trachelomonas sp.1

Philipose, 1988.

Lorica spindle-shaped, cells 17.0-20.0 µm broad, 50.0-58.8 µm long. [Col. Site: S5, S10].

Genus: Strombomonas Deflandre

25. Strombomonasfluviatilis(Lemm.) Defl.

Islam and Irfanullah, 2005. pl. 3, fig. 44

Lorica fusiform, cells 21.5–26.0 µm broad, 46.0– 50.6 µm long, anterior end narrowed, with slightly widened cylindrical neck; narrowed at the posterior end into conical appendix. [Col. Site: S9].

Out of the 25 species, *Trachelomonas* represents more number with 10 species, followed by *Euglena* with 6 species in it. *Lepocinclis* and *Phacus* have 4 species each. *Strombomonas* is represented by single species *S. fluviatilis*. It is *Trachelomonasvolvocina* seen to be present in most of the selected sites.

#### CONCLUSION

This study was to explore the euglenoid diversity of some selected sites from Karuvannur River, Thrissur District. 25 species of euglenoids were observed in the study period which belongs to 5 genera, *Euglena* (6 sps.), *Phacus* (4 sps.), *Lepocinclis* (4 sps.), *Trachelomonas* (10 sps.) and *Strombomonas* (1 sp.).

#### ACKNOWLEDGEMENTS

We wish to thank Principal, MES Asmabi College and Head, Dept. of Botany for the permission to use laboratory and various helps during the study.

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Fr. Dr. Jolly Andrews Assistant Professor-In-charge of Principal Christ College (Autonomous) Irinjalakuda

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# A Field Guide to Trees of Christ Campus, Irinjalakuda

TESSY PAUL P.

JOSHY K. SIMON



Fr. Dr. Jolly Andrews Assistant Protessor-In-charge of Principal Christ College (Autonomous) Irinjalakuda

DEPARTMENT OF BOTANY Ininjalak CHRIST COLLEGE (AUTONOMOUS), IRINJALAKUDA THRISSUR DISTRICT, KERATA, INDIA – 680 125

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Science Popularization Programme

# 21st July 2017

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# MEDICINAL PLANTS OF KARUVANNUR RIVER BASIN, THRISSUR DISTRICT, KERALA

## Athira V.A.<sup>1\*</sup> and Tessy Paul P.<sup>2</sup>

Department of Botany, Christ College (Autonomous), Irinjalakuda, Thrissur 680125, Kerala E-mail : tessyjohnt@gmail.com; Phone : 9446233104

## **Introduction and objectives**

The present investigation was undertaken to evaluate the current status of the medicinal plant diversity in Karuvannur River basin, Thrissur district, Kerala. Biodiversity studies are valuable as a means of improving the structure and function of communities and understanding the overall ecological conditions.

## **Materials and methods**

The floristic investigation was conducted at Naduvazhrichale and Chelakadavu, in the Karuvannur River basin from December 2016 to May 2017. The plants were collected periodically and the photographs were taken. The plants were identified with the help of floras (Manilal and Sivarajan, 1982; Gamble and Fischer, 1915-1936). Important field observations of the plant parts used, local names and local uses were noted (Sivarajan and Balachandran, 1994; Warrier *et al.*, 1996).

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ENVIRONMENTAL SCIENCE [BASICS AND CONCEPTS]

Based on the compulsory syllabus of University of Calicut for Audit Course

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Fr. Dr. Jolly Andrews Assistant Professor-In-charge of Principal Christ College (Autonomous) Irinjalakuda ICT IN EDUCATION AND COMMUNICATION Dr. K.J. Vargheone Associate Professor of English Christ College, Irinjalakuda

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#### Abstract

This century has witnessed a revolution due to onset of technology, and has changed the abmention of various industries, and has also influenced the industries and the way people internet and work in the society. This rapid rising and development of information communication necknology has offered a better patiern to explore the new teaching model. As a result technology plans a very important role in educationand communication. This paper discusses the rationale of using ICT in education and communication and its potentials.

Globalisation and technological development have markedly transformed the way of learning and teaching and communicating in the twenty first century. New technologies have dramatically increased the possibility of interaction and mobility among people around the globe, overcoming many barriers of time and space. The traditional way of teaching writing and communication skills and the materials for tesching and training are not adequate to meet the demand of the society. In this context, Crystal remarks:

> There are no precedents in human history for what happens to languages in such circumstances of rapid change. There has never been a time when so many nations were needing to talk to each other so much .... And there never has been a more urgent need for a global language. (2003: 14)

He underlines the distinctive nature of this age.

Academic Staff College, Directorate of Entrepreheurship, KVASU

This is also a time when communication skills are very important for people working in all walks of life. In order to equip students for the challenges of information era, it has become necessary to identify new methods in the teaching of English as a second language. It has paved the way for the linguists and teachers to identify more suitable, interesting learner-centred and effective modes of teaching. In an information era where storage, retrieval and dissemination of information is important, Kern and Warschauer remarks:

> Pedagogy of networked computers must therefore take a broad view, examining not only the role of information technology in language learning but also the role of language learning in an information technology society. If our goal is to help students enter into new authentic discourse communities and if those discourse communities are increasingly online, that it seems appropriate to incorporate online, activities for their social utility as well as for their perceived particular pedagogical value. (2000: 12-13)

> > Fr. Dr. Jolly Andrews

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Dr. K.J. Vargheese

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Fr. Dr. Jolly Andrews Assistant Professor-In-charge of Primeral Christ College (Autonomous) Irmjatakuda

# A ROADMAP TO ENHANCE CORE TEACHING COMPETENCIES IN ACADEMIC LANDSCAPE

Third Refresher Course from 14.02.2020 to 27.02.2020



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A Roadmap to Enhance Core Teaching Competencies in Academic Landscope

# TEACHING AND LEARNING THROUGH TECHNOLOGY

Dr. K. J. Vargheese

Associate Professor of English

Christ College, Irinjalakuda

Teaching and learning through Technology is the order of the day. E - learning, Web-based learning and online learning are generally used as interchangeable terms in teaching and learning through technology. However, these terms represent concepts with subtle, yet major differences, E-learning is mostly associated with activities involving computers and interactive networks simultaneously. The computer does not need to be the central element of the activity or deliver learning content. However, the computer and the network must hold a significant involvement in the learning activity.

Online learning is related with content readily accessible on a computer. The content may be on the Web or the Internet, or simply connected on a CD-ROM or the computer hard disk. Distance learning involves interaction at a distance between instructor and learners, and allows timely instructor reaction to learners. Simply posting or broadcasting learning materials to learners is not distance learning. Instructors must be involved in receiving feedback from learners. For each of these concepts, the discriminating feature must be the primary characteristic of the learning activity.

Online learning is related to the more common concepts of Online help, online documentation, and online services. It is related with readily available learning materials in a computer environment. Often, online learning refers to learning materials directly accessible from within a core application (like in online help); however, learning materials available online on a network also qualify when readily accessible. Network use is not necessarily required, and in fact the concept of online learning raised before the development of the Web and before learning materials were delivered over the Internet or networks.

## BENEFIT OF INTEGRATING TECHNOLOGY

Development of the Internet has started a revolt in communication that is providing new opportunities for delivering instruction. The Internet began as communication relations among computer facilities and departments accessible to those comfortable with command line language. It became user – friendly with the development of hyper linking on the World Wide Web (www) allowing one document to contain pointers to and from many others. Web browsers were soon developed that maintained display of highly quality images, animation, videos and audios. These graphical browsers opened the door to delivery of multimedia anywhere in the world

401

In the pre – technology education background, the teacher is the sender or the source, the educational material is the information or message and the student is the receiver of the information. The quick development in ICT provides tools such as computers, interactive multimedia CD rooms etc. The use of such well – advanced technologies has now enabled the learners of flexible learning. The flexible teaching learning strategies provide high quality education and confirm equity in educational opportunities. Thus ICT through the use of web assisted instruction helps in the teaching – learning of the current assistant processor.

In-charge of acade 80 ACADEMIC STAFF COLLEGE DIBECTORATE OF ENTREPRENEURSHIP, UCB



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