



CRITERION: 3.3- Research Publication and Awards

METRIC : 3.3.1.Number of research papers published

YEAR : 2020-2021



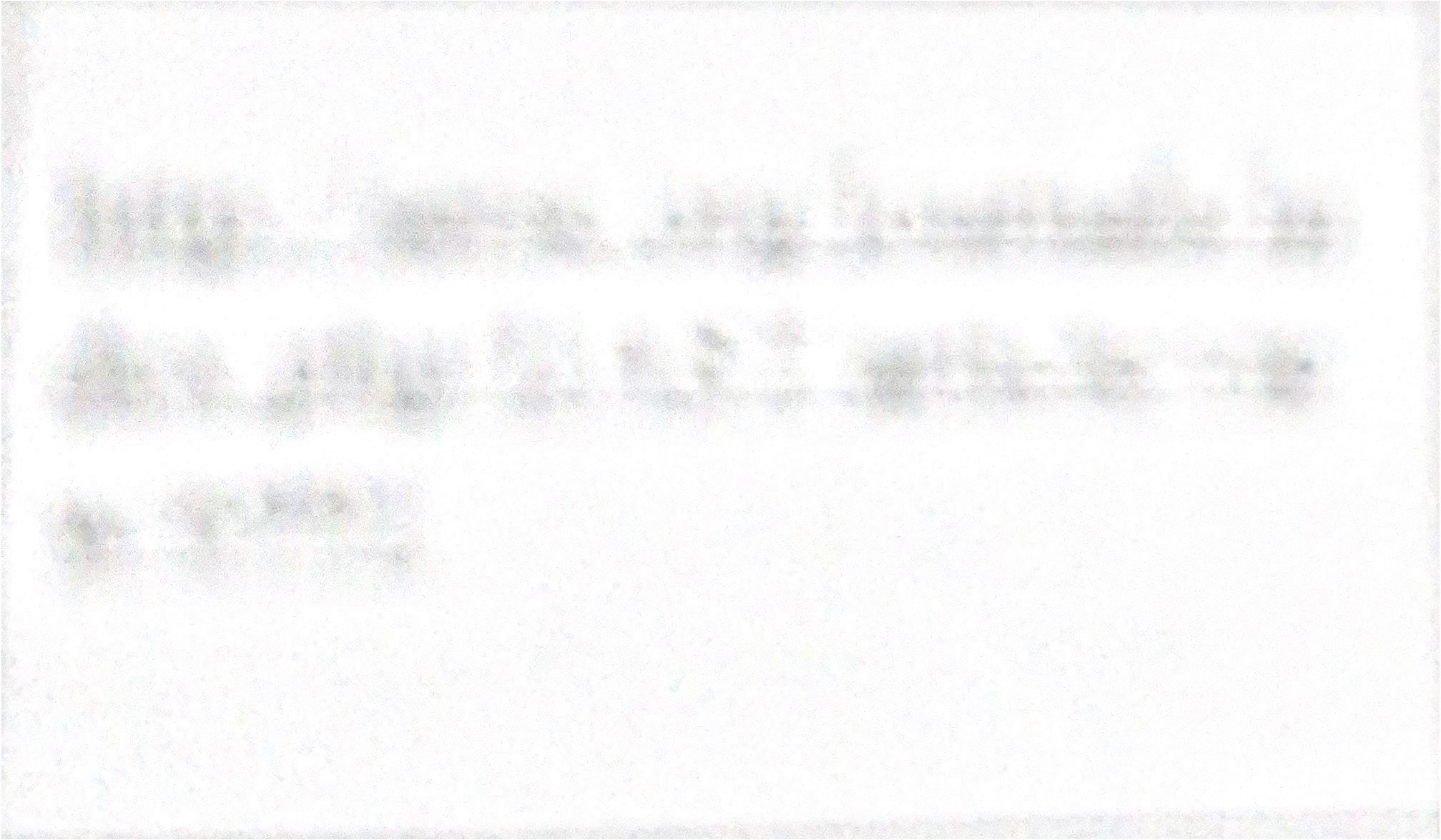
S. No	Title of paper	Name of the author/s	Department of the teacher	Name of journal	Year of publication	ISSN number	Link to the recognition in UGC enlistment of the Journal /Digital Object Identifier (doi) number	
							Link to website of the Journal	Link to article / paper / abstract of the article
2020-2021								
1	Theme of Alienation and Colonial Displacement in Amitav Ghosh's The Glass Palace	Dr.K.M.Sumathi	English	Kala : The Journal of Indian Art History Congress	2020 - 2021	ISSN : 0975-7945	http://indianculture.gov.in/union-catalogue/kala-journal-indian-art-history-congress-4	Printed Journal
2	Agrarian Economy of southeast India (1700-1900AD)	Dr.R.Abbas	History	Proceedings of the South Indian History Congress Journal	2020 - 2021	ISSN NO. 2229-3671	https://journal.southindianhistorycongress.org/journals/articles/2020/SIHC_2020_156.pdf	
3	Influence of conjoint termite microbial consortia and inorganics on soil nutrient content at different growth stages of Zea mays L	Dr. P. Sathiya Bama	Zoology	Research journal of Agricultural sciences.	2020 - 2021	ISSN : 0976-1675 E-ISSN : 2249-4538	http://rjas.org/	http://rjas.org/ViewIssue?IssueId=68

4	"Urban disease ecology and its spatial variations of Chikungunya in Madurai City, Tamilnadu, India: a geomedical study"	Dr. J. Vimala Vinnarasi	Geography	International Journal of GeoJournal Springer	2020 - 2021	ISSN:2348-5906	https://link.springer.com/	https://link.springer.com/article/10.1007/s10708-020-10192-6
5	Spatial temporal variation of leptospirosis disease in Madurai city – Medico-geographical analysis"	Dr. J. Vimala Vinnarasi	Geography	International Journal of Geography, Geology and Environment	2020 - 2021	ISSN: 2706-7483 E-ISSN:92706-7491	https://www.geojournal.net/	https://www.geojournal.net/archives/2020.v2.i1.A.14
6	Social media literacy skills of post graduate students and m.phil scholars of arts and science colleges affiliated to mother teresa women's university, kodaikanal : a discipline based evaluative study using the indigenous model	Dr.K.Ramasamy	Central Library	Library Philosophy and Practice (e-journal), August 2020 (Scopus Indexed)	2020 - 2021	ISSN: 1522-0222	https://digitalcommons.unl.edu/libphilprac/	https://digitalcommons.unl.edu/libphilprac/4089/?utm_source=digitalcommons.unl.edu%2Flibphilprac%2F4089&utm_medium=PDF&utm_campaign=PDFCoverPages
7	Does the gender influence the reading habits, preferences and attitudes of school students? : A case study	K Ramasamy and P Padma	Central Library	Library Philosophy and Practice	2020 - 2021	ISSN: 1522-0222	https://digitalcommons.unl.edu/libphilprac/	https://digitalcommons.unl.edu/libphilprac/3549/?utm_source=digitalcommons.unl.edu%2Flibphilprac%2F3549&utm_medium=PDF&utm_campaign=PDFCoverPages
8	Clustering Mushroom 5.8s rRNA Sequences using K- means Algorithm with predicted K Value	Dr. B. Ashadevi	Computer Science	IEEEXplore	2020 - 2021	ISBN: 978-0-7381-1327-2	https://ieeexplore.ieee.org/Xplore/home.jsp	https://ieeexplore.ieee.org/abstract/document/9432167

9	Green Marketing: Consumers Attitude And Awareness Towards Environmental Protection	Dr.S.Nagarajan	BBA	Dogo Rangsang Research Journal	2020 - 2021	ISSN:234-7180	https://www.journal-dogorangsang.in/	Printed Journal
10	Man - Woman Relationship in Jaishree Mishra's Afterwards	Dr.M.Rajaram	English	Parishodh Journal	2020 - 2021	ISSN No. 2347-6648	https://parishodhpu.com/	UGC (Old List)
11	Changing Phases of Feministic Attitude in Margaret Laurence's Manawaka Fiction	Dr.G.S.Angelin	English	Parishodh Journal	2020 - 2021	ISSN: 2347-6648	https://parishodhpu.com/	UGC (Old List)
12	Diverse Ethnicities and Hybridization in Margaret Laurence's Manawaka Fiction	Dr.G.S.Angelin	English	Shodh Sarita	2020 - 2021	ISSN: 2348-2397	http://seresearchfoundation.in/shodhsarita/	UGC (Old List)
13	Unveiling the Purdah: A Feminist Reading of Imtiaz Dharker's Purdah - I & Purdah - II	SM.Gayathri	English	Alochana Chakra Journal	2020 - 2021	ISSN 2231-3990	http://www.alochonachakra.com/	UGC (Old List)
14	Marginalization in Chetan Bhagat's Revolution 2020	R.Joemala	English	Alochana Chakra Journal	2020 - 2021	ISSN 2231-3990	http://www.alochonachakra.com/	UGC (Old List)
15	Ecocritical Concerns in Amitav Ghosh's Sea of Poppies	B.Vishnu Priya	English	Alochana Chakra Journal	2020 - 2021	ISSN 2231-3990	http://www.alochonachakra.com/	UGC (Old List)

16	Irony and Humour in Kiran Nagarkar's Trilogy, Ravan and Eddie: A Postmodern Study	M.Anushya	English	Alochana Chakra Journal	2020 - 2021	ISSN 2231-3990	http://www.alochonachakra.com/	UGC (Old List)
17	Taxila Palkalaikazhagam (Tamil)	Dr.R.Muthu	History	Journal of Modern Thamizh Research	2020 - 2021	ISSN: 2321-984X	Printed Journal	UGC (Old List)
18	Pandaiyakala Penin Iruppu Nilai	M.Mariyammal	Tamil	Indhamizh Aaivu Mandram	2020 - 2021	ISSN:2454-3993	Printed Journal	UGC (Old List)
19	Vertex Coloring of Graph Using Adjacency Matrix	Dr. T Ramachandran	Mathematics	Journal of Engineering Research and Application	2020 - 2021	ISSN:2248-9622	http://www.ijera.com	https://www.ijera.com/papers/vol10no4/Series-5/A1004050105.pdf
20	Optimization Of Multi-Item (Eoq) Model For A Single-Buyer Using Fuzzy Geometric Programming	M.Sabina begum	Mathematics	Journal Of Critical Reviews	2020 - 2021	ISSN 2394-5125	Journal of Critical Reviews (jcreview.com)	file:///C:/Users/acer/Downloads/863-881.pdf
21	Optimization Of Unconstrained Multi-Item (Epo) Model Using Fuzzy Geometric Programming With Varying Fuzzification And Defuzzification Methods By Applying Python	M.Sabina begum	Mathematics	Materials Today: Proceedings	2020 - 2021	E-ISSN:2214-7853	https://www.scopus.com/sourceid/21100370037	https://www.researchgate.net/publication/348427398 Optimization_of_unconstrained_multi-item_EPQ_model_using_fuzzy_geometric_programming_with_varying_fuzzification_and_defuzzification_methods_by_applying_python

22	Fuzzy Economic Order Quantity Inventory Model Using Lagrangian Method	S.Daisy	Mathematics	Advances In Mathematics: Scientific Journal	2020 - 2021	ISSN:18 57-8365E-ISSN:18 57-8438	https://www.scopus.com/sourceid/21100913565	https://www.researchgate.net/publication/342683829_FUZZY_ECONOMIC_ORDER_QUANTITY_INVENTORY_MODEL_USING_LAGRANGIAN_METHOD
23	An Geometric Programming Approach For Deteriorating Single Item Inventory Model With Fuzzy Parameters	S.Daisy	Mathematics	International Journal Of Advanced Science And Technology	2020 - 2021	ISSN: 2 207-6360	http://serisc.org/journals/index.php/IJAST/index	http://serisc.org/journals/index.php/IJAST/article/view/24725
24	Optimal route selection in MANET based on particle swarm optimization utilizing expected transmission count	Dr.A.Subramani	Computer Science	Jour of Adv Research in Dynamical & Control Systems	2020 - 2021	ISSN: 1943-023X	http://www.jardcs.org/	<u>RETRACTED ARTICLE:</u> <u>Optimal route selection in MANET based on particle swarm optimization utilizing expected transmission count SpringerLink</u>
25	A study of intrusion detection System combining with visualization using machine learning techniques	Dr.B.Ashadevi	Computer Science	International Journal of Analytical and Experimental Model Analysis	2020 - 2021	ISSN : 0886-9367	http://www.ijaema.com/	file:///C:/Users/acer/Downloads/165-IJAEMA-JULY-2020.pdf
26	Pairwise Sequence Alignment Similarity Score Prediction on Mushroom Biological data	Dr.B.Ashadevi	Computer Science	International Journal of Advanced Science and Technology	2020 - 2021	ISSN: 2 207-6360	http://serisc.org/journals/index.php/IJAST/index	<u>Pairwise Sequence Alignment Similarity Score Prediction on Mushroom Biological data International Journal of Advanced Science and Technology (serisc.org)</u>



27	Elimination of Noise in CT Images of Lung Cancer using Image Preprocessing Filtering Techniques	Dr.B.Ashadevi	Computer Science	International Journal of Advanced Science and Technology	2020 - 2021	ISSN: 207-6361	http://serisc.org/journals/index.php/IJAST/index	http://serisc.org/journals/index.php/IJAST/article/view/6991
28	Enhance the network Intrusion detection system classification performance using Three-dimensional virtualization	Dr.B.Ashadevi	Computer Science	Enfflatounia	2020 - 2021	ISSN :1110-8703	https://efflatounia.com/index.php/journal	https://efflatounia.com/index.php/journal/article/view/239
29	A Brief Survey On Underwater Wireless Sensor Network Routing Protocol For Acoustic Communications Techniques	Dr .A. Subramani	Computer Science	International Journal Of Scientific & Technology Research	2020 - 2021	ISSN 2277-8616	https://www.scopus.com/sourceid/21100894501	https://www.ijstr.org/final-print/feb2020/A-Brief-Survey-On-Underwater-Wireless-Sensor-Network-Routing-Protocol-For-Acoustic-Communications-Techniques.pdf
30	Forward Node Selection Using Particle Swarm Optimization (PSO) for Broadcasting in MANET	Dr.A. Subramani	Computer Science	Journal of Advanced Research in Dynamical and Control Systems	2020 - 2021	DOI: 10.5373/JARDCS/V12I1/20201042	https://www.scopus.com/sourceid/20500195215	https://www.jarcds.org/abstract.php?id=3919
31	Sister of My Heart and the Vine of Desire: Denial of Conservative Myths and Formation of New	H.Surya Prabha	English	Journal of the Asiatic Society	2020 - 2021	ISSN0368-3308	https://abcdindex.com/Journal/Journal-of-Asiatic-Society-0368-3308	Printed Journal

32	The Initiation Process of Wallace and Aditya as Warrior Archetypes	Dr.T.K.Vedhara ja	English	International Journal of Tamil Language and Literary Studies	2020 - 2021	2581-7140	https://ijtlls.com/	https://ijtlls.com/volume-3-issue-1-july-2020.html
33	Marginalization in Chetan Bhagat's Revolution 2020	R.Joeamala	English	Alochana Chakra Journal	2020 - 2021	ISSN 2231-3990	http://www.alochonachakra.com/	Printed Journal

D. Laksh
PRINCIPAL

PRINCIPAL
M.V.Muthiah Govt
Arts College for Women,
Dindigul - 624 001, Tamil Nadu

KALĀ

The Journal of Indian Art History Congress

Certificate of Publication

Certificate of publication for the article titled:

**THEME OF ALIENATION AND COLONIAL DISPLACEMENT IN AMITAV
GHOSH'S *THE GLASS PALACE***

Authored by

D. Sangeetha

Research Scholar Guest Lecturer Department of English M.V.Muthiah
Govt. Arts College (W) Dindigul

Volume No. 26 No. 2 (XXIII) 2020 - 2021

in

KALĀ : Journal of Indian Art History Congress

Impact Factor = 6.125



Editor:

Kala Journal



ज्ञान-विज्ञान विमुक्तये

UGC

University Grants Commission

Approved Journal

Kala : The Journal of Indian Art History Congress
ISSN : 0975-7945

THEME OF ALIENATION AND COLONIAL DISPLACEMENT IN AMITAV GHOSH'S
THE GLASS PALACE

D. Sangeetha Research Scholar Guest Lecturer Department of English M.V.Muthiah Govt. Arts
College (W) Dindigul Email Id: Sankeeta18@gmail.com
Dr. K.M.Sumathi Research Supervisor Associate Professor Department of English M.V.Muthiah
Govt. Arts College (W) Dindigul

Amitav Ghosh is prominently a writer of histories and indulges in an introspective exploration of self and society primarily a post-colonial trait. He celebrates and explores diversity, hybridity and difference apart from diminishing all divisions, physical or psychological. *The Glass Palace* is an ideal demonstration of nearly all the major concerns of Ghosh, blended into a wonderful epic narrative. The destitute and displaced migrant native is an indivisible part of a post-colonial novel. Nation formation is a main device in the process of colonization, as in journeying from an unstructured nation less state to that of conscious nationhood, the new nation people feel privileged and later relegate their apparently disorganized past to the realms of history.

This nation-formation involves a moving diffusion and scattering of people across man-made borders. The wide group of people in the recent history of human race in the rouse of imperialist and expansionist programmes across Africa and eastward in Asia bear adequate testimony to this. *The Glass Palace* retraces the history of the three South Asian countries, Myanmar, India and Malaysia of the late 19th and 20th centuries. Rajkumar, the chief protagonist of the novel, epitomizes the lost, exiled and homeless native whose family is further scattered in the course of the novel through post imperialist dislocation in different parts of the Asian continent. The dramatic conflation of cultures and nationalities is evident at the very outset when the eleven year old Rajkumar witnesses the booming of English cannons and British foray of Burmese Royal Palace in Mandalay.

It's not just the marches and the scared mobs but the fact that most of the British invading forces involve Indian soldiers, which is a surprising presence in the novel. Even the royal proclamation before the surprise invasion of Burma bears testimony to this:

To all royal subjects and inhabitants of the royal empire those heretics, the Barbarian English -Kalaas having most harshly made demands calculated to bring about the impairment and destruction of our religion...the degradation of our race, are making a show and preparation as if about to wage war, have been replied with the usages of great nations and in words which are just and regular. (15-16)

True to an Amitav Ghosh novel, *The Glass Palace* contains an abundance of characters which comprise the fortunate as well as the subaltern. The noble personages like King Thebaw, Queen Supayalat and the Burmese princesses; the common people like Dolly, Rajkumar, Saya John and Uma are united ironically by the storm of colonial dislocation. In the very opening of the novel these characters forced by the forceful historical winds are dislocated from Burma to India, Malaya, Singapore and back again, each time involving a pattern of panic, crowded mobs and soldiers on the march are illustrated.

Rajkumar, a true transnational post-colonial subject firstly by being a *Kalaa*, a stranger in an unknown territory, then by being subjected to migration of a more severe kind in participating in the great national disorder that the British occupation of Burma involves, followed by another chaotic experience in imperial India and his foray into the Malayan forest resources. He resides in a really borderless post-colonial space beyond the interstices of race, class and nation in which his life is entangled.

The royal maid Dolly too shares her predicament with Rajkumar. She feels the same incomprehensible loyalty to the royal family's deportment to India. She began to notice odd little changes around her, of the servants' impudence, their refusal to *shiko* and her own ambivalent position. She was free, she was told for she was a slave not a prisoner, but in her heart she knew she was bound with the princesses, who she had been enslaved to look after. Dolly signifies the twice colonized casualty of the infringement of a nation. She symbolizes the quiet

D. Sangeetha Research Scholar Guest Lecturer Department of English M.V.Muthiah Govt. Arts
College (W) Dindigul Email Id: Sankeeta18@gmail.com
Dr. K.M.Sumathi Research Supervisor Associate Professor Department of English M.V.Muthiah
Govt. Arts College (W) Dindigul

Amitav Ghosh is prominently a writer of histories and indulges in an introspective exploration of self and society primarily a post-colonial trait. He celebrates and explores diversity, hybridity and difference apart from diminishing all divisions, physical or psychological. *The Glass Palace* is an ideal demonstration of nearly all the major concerns of Ghosh, blended into a wonderful epic narrative. The destitute and displaced migrant native is an indivisible part of a post-colonial novel. Nation formation is a main device in the process of colonization, as in journeying from an unstructured nation less state to that of conscious nationhood, the new nation people feel privileged and later relegate their apparently disorganized past to the realms of history.

This nation-formation involves a moving diffusion and scattering of people across man-made borders. The wide group of people in the recent history of human race in the rouse of imperialist and expansionist programmes across Africa and eastward in Asia bear adequate testimony to this. *The Glass Palace* retraces the history of the three South Asian countries, Myanmar, India and Malaysia of the late 19th and 20th centuries. Rajkumar, the chief protagonist of the novel, epitomizes the lost, exiled and homeless native whose family is further scattered in the course of the novel through post imperialist dislocation in different parts of the Asian continent. The dramatic conflation of cultures and nationalities is evident at the very outset when the eleven year old Rajkumar witnesses the booming of English cannons and British foray of Burmese Royal Palace in Mandalay.

It's not just the marches and the scared mobs but the fact that most of the British invading forces involve Indian soldiers, which is a surprising presence in the novel. Even the royal proclamation before the surprise invasion of Burma bears testimony to this:

To all royal subjects and inhabitants of the royal empire those heretics, the Barbarian English -Kalaas having most harshly made demands calculated to bring about the impairment and destruction of our religion...the degradation of our race, are making a show and preparation as if about to wage war, have been replied with the usages of great nations and in words which are just and regular. (15-16)

True to an Amitav Ghosh novel, *The Glass Palace* contains an abundance of characters which comprise the fortunate as well as the subaltern. The noble personages like King Thebaw, Queen Supayalat and the Burmese princesses; the common people like Dolly, Rajkumar, Saya John and Uma are united ironically by the storm of colonial dislocation. In the very opening of the novel these characters forced by the forceful historical winds are dislocated from Burma to India, Malaya, Singapore and back again, each time involving a pattern of panic, crowded mobs and soldiers on the march are illustrated.

Rajkumar, a true transnational post-colonial subject firstly by being a *Kalaa*, a stranger in an unknown territory, then by being subjected to migration of a more severe kind in participating in the great national disorder that the British occupation of Burma involves, followed by another chaotic experience in imperial India and his foray into the Malayan forest resources. He resides in a really borderless post-colonial space beyond the interstices of race, class and nation in which his life is entangled.

The royal maid Dolly too shares her predicament with Rajkumar. She feels the same incomprehensible loyalty to the royal family's deportment to India. She began to notice odd little changes around her, of the servants' impudence, their refusal to *shiko* and her own ambivalent position. She was free, she was told for she was a slave not a prisoner, but in her heart she knew she was bound with the princesses, who she had been enslaved to look after. Dolly signifies the twice colonized casualty of the infringement of a nation. She symbolizes the quiet and concealed



SOUTH INDIAN HISTORY CONGRESS

Proceedings of the South Indian History Congress
Journal of the South Indian History Congress since 1981
ISSN No.: 2229-3671
UGC CARE Listed Journal

Sectional President's Address - Economic History Section Agrarian Economy of Southeast India (1700-1900

Author(s): Dr. R. Abbas

Source: Proceedings of the South Indian History Congress 40(2020), pp. 506-510

Stable URL: http://journal.southindianhistorycongress.org/journals/articles/2020/SIHC_2020_156.pdf

Published By: South Indian History Congress

© 2022 South Indian History Congress. All rights reserved.

SECTIONAL PRESIDENT'S ADDRESS - ECONOMIC HISTORY SECTION
AGRARIAN ECONOMY OF SOUTHEAST INDIA (1700-1900 AD.)

Dr. R. Abbas

I am extremely obliged to thank the President, General Secretary, the office bearers and the members of the Executive Committee of South Indian History Congress for nominating me to preside over the Economic History section of the 40th Annual session of the South Indian History Congress being held at our university. I feel indebted to the organization that my services are recognized and my association with this academic body since 1999 is truly honoured. I feel privileged to present to you some of my views on the concerned topic: "Agrarian economy of Southeast India (1700-1900AD)".

The region of 'south-east' India, on which this paper concentrates, can most easily be conceived as consisting of the territories governed by the Presidency of Madras from c.1801 – with the exclusion of the two western districts of Malabar and South Kanara. It stretches down the south-eastern littoral from Vizagapatnam in the North to Kanyakumari in the South and reaches as far inland as Bellary, Coimbatore and the environs of Bangalore. In economic terms, this conception is somewhat arbitrary and has mainly been chosen because the data from the colonial era is most facily organised in this way. In fact, there were always important flows of goods and people linking this region to economies further to the west (in the territories of the princely states of Hyderabad, Mysore and Travancore) and also to the North, especially Bengal. Nonetheless, the region also has a certain degree of historical integrity. Its local cultures escaped Mughal overlordship until very late and preserved patterns of 'little kingship' and temple based religion, which were distinctive in relation to the rest of India. The region's definition also properly highlights the significance of the sea, which provided conduits for bulk as well as luxury commerce and which, in many ways, dominated economic aspirations. Further, and over many centuries, the region saw intensive forms of interaction between its Telugu speaking North and Tamil speaking South with the former constituting source territories for the

migration of peoples, goods and ideas towards the latter. In 1957, when proposals emerged to split the Telugu country (Andhra) from the Tamil in order to form linguistically based regional states, the extent of their effective engagement became clear in the bitter struggle for possession of Madras city whose population was almost equally divided between 'native' Tamil and Telugu speakers. Tamil Nadu won the city but Andhra Pradesh maintained control of some of its most vital water resources which has been the cause of scarcely less bitter controversy ever since.

From certain angles, the story of the south-eastern agrarian economy between 1700 and 1900 might be summarized as quantitative expansion but qualitative stagnation or even decline. While it is difficult to provide meaningful aggregate statistics because of local variations, differential soil-fertility and the significance in the region of double- and triple-cropping the same land, the balance of the secondary literature is in agreement that cultivation expanded at least in line with population growth until 1900 and may even have moved ahead of it in the first half of the century.¹ However, there were few signs of farming adopting any startlingly new technologies and some indications that per acre/per crop yields might have declined.² Cultivation was expanding beyond its traditional foci of concentration in the better watered river valleys. Also, it was plainly being less supported by inputs derived from adjacent forest wastes and from animals, both of which were under pressure from the expansion of human population. While the nature of the data prevents it from being anything more than an impression, perhaps the greatest difference between farming at the turn of the 18th and of the 20th centuries may have been the relative lack of animal power by the latter date. Cattle used to abound, when not pulling ploughs then in trains carrying the bulk commodities (cotton, salt, iron) whose trade articulated the various specialist sub-zones of the region. The cotton carrying trade from the

[Farmers Usage Pattern of Mobile Agro Advisory Service for Attaining the Agricultural Information](#)

[Farmers Usage Pattern of Mobile Agro Advisory Service for Attaining the Agricultural Information](#)

[Influence of Conjoint Termite Microbial Consortia and Inorganics on Soil Nutrient Content at Different Growth Stages of Zea mays L.](#)

Research Journal of Agricultural Sciences

Vol : 11- Issue : 3 ; 717-719

P Sathiya Bama*1 and A David Ravindran2

Department of Zoology, M. V. Muthiah Govt Arts College, Affiliated to Mother Teresa Women's University, Dindigul- 624 001, Tamil Nadu, India

Abstract

Soil fertility refers to the inherent capacity of the soil to release essential nutrients in adequate amount for optimum crop productivity. Biofertilizers most commonly refers to the use of soil microbes that increase the availability and uptake of mineral nutrients for plants. The knowledge on microbial communities within the intestinal gut of termite species *Odontotermes obesus*, *Trinervius trinervoides* and its mound sheds light on the microbial habitat serving termites as ecologically important insect. Hence, termite microbes are utilized as microbial consortia to find its importance as organic amendment for analyzing soil nutrient status on different days of maize (*Zea mays* L.) cultivation. Application of nitrogen fixers, phosphorus solubilizers from termite source along with inorganics had a significant effect on the availability of soil macronutrients. The available nitrogen, phosphorus and potassium content in the soil was increased by the conjoint application in the initial period on 30 DAS and started to decline with increase in the age of the cultivated crop. Maize (*Z. mays* L.) has an expanded use in the agro industries and is recognized as a leading commercial crop of great agro economic value. Our results signify that conjoint termite microbes and inorganic fertilization greatly influenced the soil nutrient condition. In agriculture, combined fertilization promotes the sustainability and agronomic efficiency of maize crop. Therefore, the use of biofertilizers in agricultural practice would not only offset the high cost of chemical fertilizers but also mobilize insoluble form of nutrient into a soluble form for enriching soil fertility. Various environmental determinants and factors inherent to termite biology influence termite role in influencing soil fertility by providing organic nutrients for agriculture productivity.

P Sathiya Bama*1 and A David Ravindran2

| Published online : 20-May-2020


[Efficacy of Leaf Extract of *Aloe barbadensis* against Oral Microflora](#)

[Rice Yield in Kari Soils as Influenced by Foliar Nutrition](#)

[Evaluate the Vase-life and Biochemical Parameters of Different Varieties of *Gladiolus* \(*Gladiolus grandiflorus* L.\)](#)

[Effect of Seed Weight on Seedling Quality in Jack \(*Artocarpus heterophyllus* Lam.\) Cv. Panruti Local](#)




Address

 Bhat Complex,
Opp. SBI,
National Highway
44,
Awantipora- 192
122,




Quick Links

Author
Guidelines

FOLLOW US

 Facebook
 Twitter
 Instagram

CONTACT US


 +91 9596779291
 01933-294741
 rjas.editor@gmail.com
rjas2010@gmail.com

© All rights reserved with Center for Advanced
Research in Agricultural Sciences

[Home](#) > [GeoJournal](#) > Article

[Published: 23 April 2020](#)

Urban disease ecology and its spatial variation of Chikungunya in Madurai City, Tamilnadu, India: a geo-medical study

[V. Saravanabavan](#) , [D. Balaji](#), [C. U. Reshma](#), [S. K. Sheheersha](#), [R. Sudharsan](#), [J. Vimala Vinnarasi](#), [J. Ganesan](#), [R. Rahamath Nisha](#), [S. Eswari](#) & [K. Balasubramani](#)

[GeoJournal](#) **86**, 2335–2350 (2021)

469 Accesses | **5** Citations | [Metrics](#)

Abstract

Medical Geography today draws on the concepts and techniques of geography, and epitomes the interdisciplinary nature of urban health discipline. Chikungunya is one of the Vector-borne diseases and today it continues to remain an important public health problem in Madurai city. It is a mosquito-borne viral infection caused by the Chikungunya Virus (CHKV). The sudden onset of very high fever along with a rash and severe arthralgia especially in the small joints of hands and toes are the characteristics of the disease. The study area, Madurai is the oldest and second-

largest city in Tamil Nadu situated on the banks of river Vaigai in the south-central part of Tamil Nadu, India. The main objectives were to identify the major disease zones concerning Chikungunya cases and to observe the related urban ecological and environmental conditions. The study also aimed to derive a conceptual framework towards strengthening, control and sustainable development of the urban landscape. The data collected were taken by using the method of stratified Random sampling and a total of 600 samples were collected. Standard score (Z-score) technique was used to describe the relationship between the sets of variables and total conditions of selected urban environmental variables. It includes mapping of the disease using GIS software of Arc GIS. Apart from this, the multi-variant statistical technique, factor analysis is used to find the major associations and interrelationship between Chikungunya and people. The twelve factors rotated by explaining the varimax procedure registered more than 89.83 percent of the total variance. Among these, the first factor alone accounted for 33.52 percent of the total variance and eigenvalue of 21.45 was qualified as the primary factor. Our study concludes that in Madurai city's built-up area, a landscape environment of transmission of Chikungunya epidemics with a high prevalence is noted since it is associated with urban environmental factors.

This is a preview of subscription content, [access via your institution.](#)

Access options

Buy article PDF

39,95 €

Price includes VAT (India)

Instant access to the full article PDF.

[Rent this article via DeepDyve.](#)

[Learn more about Institutional subscriptions](#)

References

Alto, B. W., Wiggins, K., Eastmond, B., Ortiz, S., Zirbel, K., & Lounibos, L. P. (2017). Diurnal temperature range and chikungunya virus infection in invasive mosquito vectors. *Journal of Medical Entomology*, 55(1), 217–224.
<https://doi.org/10.1093/jme/tjx182>.

Arunachalam, N., Tana, S., Espino, F., Kittayapong, P., Abeyewickreme, W., Wai, K. T., et

al. (2010). World Health Assembly. *Bulletin of the World Health Organization*, 88(3), 173–184.

<https://doi.org/10.2471/BLT.09.067892>.

Balaji, D., & Saravanabavan, V. (2019). A geo medical analysis of dengue cases in Madurai city-Tamilnadu India. *GeoJournal*.

<https://doi.org/10.1007/s10708-019-10006-4>.

Balasubramani, K., Veena, M., Kumaraswamy, K., & Saravanabavan, V. (2015). Estimation of soil erosion in a semi-arid watershed of Tamil Nadu (India) using revised universal soil loss equation (rusle) model through GIS. *Modeling Earth Systems and Environment*, 1(3), 10.

<https://doi.org/10.1007/s40808-015-0015-4>.

Begum, A. S., Alok, S., & Nessa, S. (2019). Larval survey and spatial epidemiological analysis of vector *Aedes aegypti* to study the risk of dengue outbreak in India. *GeoJournal*.

<https://doi.org/10.1007/s10708-019-10060-y>.

Carrel, M., & Michael, E. (2013). Genetics: A new landscape for medical geography. *Annals of the Association of American Geographers*, 103(6), 1452–1467.

<https://doi.org/10.1080/00045608.2013.784102>.

Coffey, L., Failloux, A. B., & Weaver, S. (2014). Chikungunya virus–vector interactions. *Viruses*, 6(11), 4628–4663. <https://doi.org/10.3390/v6114628>.

Corrin, T., Waddell, L., Greig, J., Young, I., Hierlihy, C., & Mascarenhas, M. (2017). Risk perceptions, attitudes, and knowledge of chikungunya among the public and health professionals: A systematic review. *Tropical Medicine and Health*, 45(1), 21. <https://doi.org/10.1186/s41182-017-0061-x>.

da Chunha R. V., & Trinta, K. S. (2017). Chikungunya virus: Clinical aspects and treatment - A review. *Memorias do Instituto Oswaldo Cruz*, 112(8), 523–531. <https://doi.org/10.1590/0074-02760170044>.

Dash, A. P., Bhatia, R., Sunyoto, T., & Mourya, D. T. (2013). Emerging and re-emerging arboviral diseases in Southeast Asia. *Journal of Vector Borne Diseases*, 50(2), 77.

Deeba, F., Islam, A., Kazim, S. N., Naqvi, I. H., Broor, S., Ahmed, A., et al. (2015). Chikungunya virus: recent advances in epidemiology, host pathogen interaction and vaccine strategies. *FEMS Pathogens and Disease*, 74(3), ftv119. <https://doi.org/10.1093/femspd/ftv119>.

Dhiman Ramesh, C., Pahwa, S., Dhillon, G. P. S., & Dash, A. P. (2010). Climate change and threat of vector-borne diseases in India: are we prepared? *Parasitology Research*, 106(3), 763–773.
<https://doi.org/10.1007/s00436-010-1767-4>.

Fischer, D., Thomas, S. M., Suk, J. E., Sudre, B., Hess, A., Tjaden, N. B., et al. (2013). Climate change effects on Chikungunya transmission in Europe: Geospatial analysis of vector's climatic suitability and virus' temperature requirements. *International Journal of Health Geographics*, 12(3), 51. <https://doi.org/10.1186/1476-072X-12-51>.

Fradelos, E. C., Papathanasiou, I. V., Mitsi, D., Tsaras, K., Kleisiaris, C. F., & Kourkouta, L. (2014). Health based geographic information systems (GIS) and their applications. *Acta Informatica Medica*, 22(6), 402.
<https://doi.org/10.5455/aim.2014.22.402405>.

Ganesan, J., & Saravanabavan, V. (2018). Nutritional problems of Anaemia disorders among the Tea plantation labourers in Nilgiris district- A Geo Medical Study. *IJSRSET*, 4(4), 1360–1366.
<https://doi.org/10.13140/rg.2.2.29982.08008>.

Ganesan, V. K., Duan, B., & Reid, S. P. (2017). Chikungunya virus: Pathophysiology, mechanism, and modeling. *Viruses*, 9(12), 368. <https://doi.org/10.3390/v9120368>.

Garchitorena, A., Sokolow, S. H., Roche, B., Ngonghala, C. N., Joeque, M., et al. (2017). Disease ecology, helath and the environment: A framework to account for ecological and socio-economic drivers in the control of neglected tropical diseases. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 372(1722), 20160128. <https://doi.org/10.1098/rstb.2016.0128>.

Mohan, A., Kiran, D. H. N., Chiranjeevi Manohar, I., & Prabath Kumar, D. (2010). Epidemiology, clinical manifestations, and diagnosis of chikungunya fever: Lessons learned from the re-emerging. *Epidemic Indian Journal of Dermatology*, 55(1), 54–63. <https://doi.org/10.4103/0019-5154.60355>.

Musa, G. J., Chiang, P. H., Sylk, T., Bavley, R., Keating, W., Lakew, B., et al. (2013). Use of GIS mapping as a public health tool—From cholera to cancer. *Health Services Insights*, 6(3), HSI-S10471. <https://doi.org/10.4137/HSI.S10471>.

Palaniyandi, M. (2014). Remote sensing and Geographic Information Systems (GIS) as the applied public health & environmental epidemiology. *International Journal of Medical Science and Public Health*, 3(12), 1430–1438.
<https://doi.org/10.5455/ijmsph.2014.081020141>.

Powell Jeffrey, R. (2018). Mosquito-Borne human viral diseases: Why *Aedes aegypti*? *American Journal of Tropical Medicine and Hygiene*, 98(6), 1563–1565.

Pravin, A., Jacob, T. P., & Nagarajan, G. (2019). An intelligent and secure healthcare framework for the prediction and prevention of Dengue virus outbreak using fog computing. *Health and Technology*. <https://doi.org/10.1007/s12553-019-00308-5>.

Pyle, G. F. (1979). Applied medical geography. VH Winstond and Sons. ISBN 0470266430, 9780470266434.
<https://www.abebooks.com/9780470266434/Applied-Medical-Geography-Scripta-series-0470266430/plp>

Reshma, C. U., Sheheersha, S. K., & Saravanabavan, V. (2014). Enhancing the quality and accessibility of geographic learning through modern instructional strategies in the school: Its

implications and opportunities. *International Organization of Scientific Research*, 4(3), 25–30.

Reshma, C. U., Sheheersha, S. K., & Saravanabavan, V. (2015). A case study on the influence of socio-economic status of women on infant healthcare in Kerala state. *International Journal of Physical and Social Sciences*, 5(1), 128.

Rezza, G. (2014). Dengue and chikungunya: Long-distance spread and outbreaks in naïve areas. *Pathogens and Global Health*, 108(8), 349–355.
<https://doi.org/10.1179/2047773214y.0000000163>.

Samarasundera, E., Walsh, T., Cheng, T., Koenig, A., Jattansingh, K., Dawe, A., et al. (2012). Methods and tools for geographical mapping and analysis in primary health care. *Primary Health Care Research Development*, 13(1), 10–21.
<https://doi.org/10.1017/S1463423611000417>.

Saravanabavan, V. (2011). GIS analysis of pedestrian problem and spatial risk areas for each buffer zone in uraban cities a case study of Madurai city in Tamlnadu, India. In *1st International symposium held on 19–21 April, 2011 at South Eastern University of Sri Lanka*.
<http://ir.lib.seu.ac.lk/handle/123456789/862>

Saravanabavan, V., Balaji, D., & Preethi, S. (2018). Identification of dengue risk Zone: A geo-medical study on Madurai city. *International Journal of Geo Journal*. <https://doi.org/10.1007/s10708-018-9909-9>.

Saravanabavan, V., Reejo, R. J., Neethidevi, A., & Jayashree, R. (2006). Travel and health care utilization pattern of patients in Vadipatti panchayat union: A micro level study using GIS. *Journal of Deccan Geographer*, 44(2), 97–108.

Saravanabavan, V., Reshma, C. U., & Preethi, S. (2019). Determinants of reproductive health in working women in Thrissur district, Kerala. *GeoJournal*. <https://doi.org/10.1007/s10708-019-10051-z>.

Saravanabavan, V., Sudharsan, R., Balaji, D., & Rahamath Nisha, R. (2014). Patient perception and epidemiological characteristics of dengue in Madurai city-using factor analysis. *International Journal of Mosquito Research*, 1(2), 18–24.

Sheheersha, S. K., Reshma, C. U., & Saravanabavan, V. (2015). Sanjeevani Comprehensive Cancer Control Programme and Mobile TeleMedicine (SCCP&MTM) for rural poor: Design features, technical feasibility and

usability. *International Journal of Applied Management Research (IJAMR)*, 7(1), 212–216.

Sudharsan, R., & Saravanabavan, V. (2019). *Availability and utilization of primary healthcare centre in Thanjavur District. Tamilnadu: IJSRST*.
<https://doi.org/10.32628/IJSRST196451>.

Sui, D. Z. (2007). Geographic information systems and medical geography: Toward a new synergy. *Geography Compass*, 1(3), 556–582.
<https://doi.org/10.1111/j.1749-8198.2007.00027.x>.

Tzoulas, K., & Greening, K. (2011). Urban ecology and human health. In *Urban Ecology. Patterns, processes and applications*. Oxford University Press: Oxford.
<https://doi.org/10.1093/acprof:oso/9780199563562.003.32>

Vimala Vinnarasi, J., & Saravanabavan, V. (2017). Tuberculosis types and its characteristics in Dindigul District-A Geomedical study using GIS. *International Journal of Geomatics and Geosciences*, 7(3), 262–274.

Waldoc Joanna, K., Chandra, N. L., Lelieveld, J., Proestos, Y., Michael, E., Christophides, G., et al.

(2013). The role of environmental variables on *Aedes albopictus* biology and chikungunya epidemiology. *Pathogens and Global Health*, 107(5), 224–241.

<https://doi.org/10.1179/2047773213Y.0000000100>.

Zeller, H., Van Bortel, W., & Sudre, B. (2016). Chikungunya: Its history in Africa and Asia and its spread to new regions in 2013–2014. *The Journal of Infectious Diseases*, 214(5), S436–S440.

<https://doi.org/10.1093/infdis/jiw391>.

Funding

Sources of Funding for this research is from UGC (University Grants Commission, New Delhi).

Author information

Authors and Affiliations

Department of Geography, School of Earth and Atmospheric Sciences, Madurai Kamaraj University, Madurai, Tamilnadu, 625 021, India

V. Saravanabavan, D. Balaji & C. U. Reshma

Department of Geography, University College, Thiruvananthapuram, Kerala, 695034, India

S. K. Sheheersha

**Aadhi Boomi Mining and Enviro Tech
Private Ltd., Salem, Tamilnadu, 636004,
India**

R. Sudharsan

**Department of Geography, M.V.Muthiah
Govt Arts College for Women, Dindigul, 624
001, Tamilnadu, India**

J. Vimala Vinnarasi

**Department of Geography, Bharathiar
University Arts and Science College,
Gudalur, Nilgiris, 643 212, Tamilnadu, India**

J. Ganesan

**Department of Geography, Sri Meenakshi
Govt Arts College for Women (A), Madurai,
625 002, Tamilnadu, India**

R. Rahamath Nisha

**Department of Geography, Tourism and
Travel Management, Madras Christian
College (A), E. Tambaram, Chennai,
Tamilnadu, 600059, India**

S. Eswari

**Department of Geography, School of Earth
Sciences, Central University of Tamilandu,
Thiruvarur, 610005, Tamilnadu, India**

K. Balasubramani

Corresponding author

Correspondence to [V. Saravanabavan](#).

Ethics declarations

Conflict of interest

For this research the compliance with ethical standards is not applicable since only the data collected at various centres are used and find out the result.

Additional information

Publisher's Note

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Rights and permissions

[Reprints and Permissions](#)

About this article

Cite this article

Saravanabavan, V., Balaji, D., Reshma, C.U. *et al.* Urban disease ecology and its spatial variation of Chikungunya in Madurai City, Tamilnadu, India: a geo-medical study.

GeoJournal **86**, 2335–2350 (2021).

<https://doi.org/10.1007/s10708-020-10192-6>

Published

Issue Date

23 April 2020

October 2021

DOI

<https://doi.org/10.1007/s10708-020-10192-6>

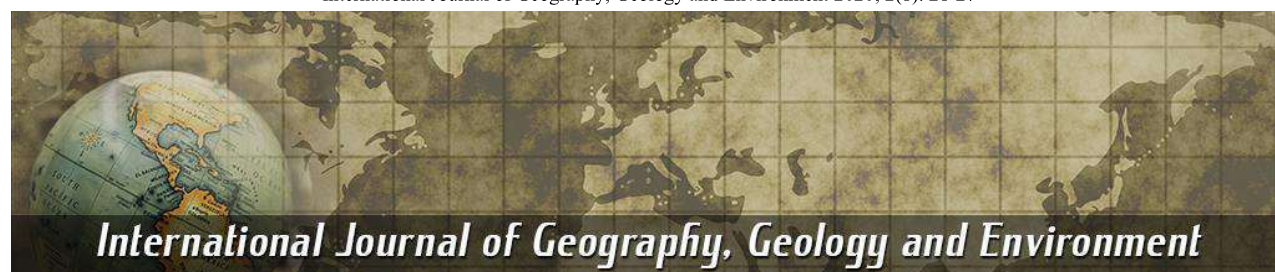
Keywords

Disease ecology **Chikungunya**

Z score techniques **Factor analysis**

Urban landscape

Urban environmental factors



International Journal of Geography, Geology and Environment

P-ISSN: 2706-7483
E-ISSN: 2706-7491
IJGGE 2020; 2(1): 21-27
Received: 08-11-2019
Accepted: 10-12-2019

Saravanabavan V
Assistant Professor,
Department of Geography,
School of Earth and
Atmospheric Sciences, Madurai
Kamaraj University, Madurai,
Tamilnadu, India

Eswari S
Research Scholar, Department
of Geography, School of Earth
and Atmospheric Sciences,
Madurai Kamaraj University,
Madurai, Tamilnadu, India

Vimala Vinnarasi J
Gust Faculty, Department of
Geography, MVM Govt. Arts
College, Dindigul, Tamilnadu,
India

Ganesan J
Assistant Professor,
Department of Geography
Bharathiar University Arts
and Science College, Gudalur,
Nilgiris, Tamilnadu, India

Sudharsan R
Functional Area GIS Expert
(IU/SE Category-A), AADHI
Boomi Mining and Enviro
Tech Private Ltd.,
K.S.V. Nagar, Narasothipatti,
Alagapuram, Salem,
Tamilnadu, India

Corresponding Author:
Saravanabavan V
Assistant Professor,
Department of Geography,
School of Earth and
Atmospheric Sciences, Madurai
Kamaraj University, Madurai,
Tamilnadu, India

Spatial temporal variation of leptospirosis disease in Madurai city – Medico-geographical analysis

Saravanabavan V, Eswari S, Vimala Vinnarasi J, Ganesan J and Sudharsan R

Abstract

Leptospirosis is a zoonotic disease caused by bacteria of the genus *Leptospira*. The bacteria are typically found in animals, including rodents, farm animals, and dogs. Humans become infected when water or soil contaminated with the bacteria come into contact with their eyes, mouth, nose, or open cuts on the skin. It is also possible to be infected through rodent bites and drinking contaminated water. Leptospirosis it continues to remain as an important public health problem in Madurai city. The study area, Madurai is the oldest and second largest city in Tamil Nadu situated on the banks of river Vaigai in south central part of Tamil Nadu, India. It is located on 9° 30' and 10° 30' longitudes and between 77° 00' and 78° 30' latitudes. The broader objective of this study is to analyse the spatio temporal variation noticed between different unit areas of study area. The collected data includes both primary and secondary source. Standard score (Z-score) technique, is used to synthesize the relationship between the sets of variables and total conditions of selected urban environmental variables. It includes mapping of the disease using the GIS software of Arc GIS. The study's social aspect of leptospirosis with reference to selected socio-economic determinants and suggests suitable preventive measures.

Keywords: Leptospirosis – Spatio temporal variation- Z score techniques - Quantitative techniques- GIS

1. Introduction

Leptospirosis is a zoonotic disease caused by bacteria of the genus *Leptospira* [1] It is most commonly spread via water contaminated with urine from infected animals, but contaminated food or soil can also act as vehicles for the disease [2]. The main animal reservoirs are rodents, livestock and dogs. The patients suffer from fever, swelling of legs, and sever body pain. Some severe complications include kidney damage, liver failure, respiratory distress, meningitis and death [3].

Leptospirosis is most common in urban slum areas, where there is inadequate sewage disposal and water treatment [4]. It can also be an occupational hazard for those working outdoors or with animals and a recreational hazard for those participating in water related activities. Epidemics are typically seen during flooding. Changing environmental trends, with extreme weather patterns, may perpetuate these epidemics [6].

Transmission of the disease in humans occurs by either direct or indirect contact with the urine, blood, or tissue of an infected animal. Animals known to spread leptospirosis to humans include cattle, pigs, dogs, reptiles and amphibians, rats and other rodents, which are the most important sources for human infection [7, 8].

The urine of infected animals or healthy carriers, which may contaminated soil, pasture, drinking water and food, is the main source of infection. In the case of leptospira abortion, infection can spread through the aborted fetus and uterine discharges [9].

Humans are accidental hosts and acquire infection due to several occupational and recreational hazards associated with leptospirosis. Butchers, veterinarians, farmers and rodent control workers are at increased risk [10]. Outbreaks associated with recreational exposure to water have been reported from several countries [11].

Leptospirosis has been recognized as a potential hazard of water sports, swimming in the river and other recreational activities that expose people to possible contaminated waters. Direct transmission between humans is not indicated. They are not proven to be important epidemiological source of transmission although the excretion of leptospirosis in human urine occurs for months after recovery has been recorded [12, 13].

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Library Philosophy and Practice (e-journal)

Libraries at University of Nebraska-Lincoln

August 2020

SOCIAL MEDIA LITERACY SKILLS OF POST GRADUATE STUDENTS AND M.PHIL SCHOLARS OF ARTS AND SCIENCE COLLEGES AFFILIATED TO MOTHER TERESA WOMEN'S UNIVERSITY, KODAIKANAL : A DISCIPLINE BASED EVALUATIVE STUDY USING THE INDIGENOUS MODEL

RAMASAMY K Dr.

M V MUTHIAH GOVERNMENT ARTS COLLEGE FOR WOMEN,DINDIGUL,TAMILNADU,INDIA,
ramasamy1975@gmail.com

Follow this and additional works at: <https://digitalcommons.unl.edu/libphilprac>



Part of the [Library and Information Science Commons](#)

K, RAMASAMY Dr., "SOCIAL MEDIA LITERACY SKILLS OF POST GRADUATE STUDENTS AND M.PHIL SCHOLARS OF ARTS AND SCIENCE COLLEGES AFFILIATED TO MOTHER TERESA WOMEN'S UNIVERSITY, KODAIKANAL : A DISCIPLINE BASED EVALUATIVE STUDY USING THE INDIGENOUS MODEL" (2020).

Library Philosophy and Practice (e-journal). 4089.

<https://digitalcommons.unl.edu/libphilprac/4089>

**SOCIAL MEDIA LITERACY SKILLS OF POST GRADUATE STUDENTS AND
M.PHIL SCHOLARS OF ARTS AND SCIENCE COLLEGES AFFILIATED TO
MOTHER TERESA WOMEN'S UNIVERSITY, KODAIKANAL : A DISCIPLINE
BASED EVALUATIVE STUDY USING THE INDIGENOUS MODEL**

Dr.K.Ramasamy

College Librarian, M V Muthiah Government Arts College for Women,
Dindigul, 624001 Tamilnadu, India. Email: ramasamy1975@gmail.com

Cell: 08608943149

Abstract

The present study aimed at evaluating the information literacy skills and social media literacy skills of the post graduate students and M.Phil scholars of Arts and Science Colleges affiliated to Mother Teresa Women's University, Kodaikanal. Out of 10 such colleges, 8 colleges were randomly selected. Questionnaires were used to collect data from the randomly drawn sample of Post graduate students and M.Phil scholars. In toto, 940 duly filled-in questionnaires were considered for the study. RPG's 10 pillar model was used to evaluate the skills. The model was indigenously developed one by the researcher. The study reveals that : The science students are better skilled than non-science students in many of their basic skills in respect social media. The science students are better skilled than non-science students in all these skills to create groups in social media tools. The science students are better skilled than non-science students in seven skills and the non-science students are better skilled than science students in the remaining seven skills in respect of creation of contents in social media tools. The science students are better skilled than non-science students in four skills required to undertake content management tasks as an administrator. Non-science students are better skilled than science students in the remaining four skills. The science students are better skilled than non-science students in three skills required to be cautious in social media tools. Non-science students are better skilled than science students in the remaining two skills.

More than half of the respondents are highly capable to use social media tools to communicate and interact with friends and to learn online, to share notes with their classmates. One third of the

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Library Philosophy and Practice (e-journal)

Libraries at University of Nebraska-Lincoln

January 2020

DOES THE GENDER INFLUENCE THE READING HABITS, PREFERENCES AND ATTITUDES OF SCHOOL STUDENTS? : A CASE STUDY

RAMASAMY K Dr.

M V MUTHIAH GOVERNMENT ARTS COLLEGE FOR WOMEN,DINDIGUL,TAMILNADU,INDIA,
ramasamy1975@gmail.com

PADMA P (Dr.)

MADURAI KAMARAJ UNIVERSITY, MADURAI, TAMILNADU, INDIA

Follow this and additional works at: <https://digitalcommons.unl.edu/libphilprac>



Part of the [Library and Information Science Commons](#)

K, RAMASAMY Dr. and P, PADMA (Dr.), "DOES THE GENDER INFLUENCE THE READING HABITS,
PREFERENCES AND ATTITUDES OF SCHOOL STUDENTS? : A CASE STUDY" (2020). *Library Philosophy
and Practice (e-journal)*. 3549.

<https://digitalcommons.unl.edu/libphilprac/3549>

DOES THE GENDER INFLUENCE THE READING HABITS, PREFERENCES AND ATTITUDES OF SCHOOL STUDENTS? : A CASE STUDY

Ramasamy, K (Dr.)

College Librarian, M V Muthiah Government Arts College for Women, Dindigul, Dindigul
District Tamilnadu, India. Email: ramasamy1975@gmail.com

Padma, P (Dr.)

Assistant Professor, Department of Library and Information Science, Madurai Kamaraj
University, Madurai. Email: ppadmajournal@gmail.com

Abstract

The present study aims at investigating the effect of gender on the reading habits, reading preferences and attitudes towards reading among the school students. Survey research with a well-structured questionnaire was employed by the researchers. Five matriculation schools of Madurai City, Tamil Nadu State, India are the unit of study. The secondary and higher secondary students form the sample of the study. Out of 250 questionnaires distributed, 200 duly filled questionnaires were received back. The study reveals that : More boys than girls prefer non-fiction, prefer science fiction, crime and fantasy stories, prefer biographies and autobiographies and essays, spend 1-2 hours per week on reading, prefer Tamil language materials to read, read to pass time and get a job, prefer lips reading, decide to read a book based on table of contents, depend on school library, prefer to read in the early morning, spend 5-10 minutes to read newspaper every day, read GK magazines, visit the library daily, visit the library to borrow books and read newspapers, prefer to visit the library during lunch breaks and read e-magazines. More girls than boys prefer horror stories, motivational books, spend 3-4 hours per week on reading, read to improve knowledge and relax, decide to read a book based on authors, depend on own collection, prefer to read before bed hours, read comics, visit the library once in a week, visit the library to read books, prefer to visit the library during library hours and read e-newspapers. Both boys and girls prefer both fiction and non-fiction, prefer to read English language materials, prefer silent reading, prefer to read at home, prefer Tamil newspapers, prefer to read newspapers in the morning, look for local news and entertainment news in the newspaper, prefer Dinamalar newspaper, prefer Tamil magazines, read subject magazines, prefer to use laptops and desktops, spend less than one hour, read e-books, use search engines to access required e-materials, e-read for time pass,

Scheduled Maintenance: On Friday, September 22, IEEE Xplore will undergo scheduled maintenance from 2:00-4:00 PM ET (6:00-8:00 PM UTC). The site will be down intermittently during this time. We apologize for any inconvenience. ✕

IEEE.org | IEEE Xplore | IEEE SA | IEEE Spectrum | More Sites | [Subscribe](#) | [Subscribe](#) | [Cart](#) | [Create Account](#) | [Sign In](#)



[Browse](#) ▼ | [My Settings](#) ▼ | [Help](#) ▼

[Institutional Sign In](#)

[Institutional Sign In](#)

All



[ADVANCED SEARCH](#)

Conferences > 2021 5th International Confer... ?

Clustering Mushroom 5.8s rRNA Sequences using k-means algorithm with predicted k value

Publisher: [IEEE](#)

[Cite This](#)

PDF

P. Sudhasini ; B. Ashadevi | [All Authors](#) ...

49
Full
Text Views



Alerts

[Manage Content Alerts](#)
[Add to Citation Alerts](#)

Abstract



Downl
PDF

Document Sections

- I. Introduction
- II. Related Work
- III. Data Collection
- IV. Methodology
- V. Results and Discussions

[Show Full Outline](#) ▼

- [Authors](#)
- [Figures](#)
- [References](#)
- [Keywords](#)
- [Metrics](#)
- [More Like This](#)

Abstract:In the recent bioinformatics research field, dealing with biological data like RNA, DNA, Protein sequences is enormous on discovering meaningful information. The data seq... [View more](#)

► Metadata

Abstract:

In the recent bioinformatics research field, dealing with biological data like RNA, DNA, Protein sequences is enormous on discovering meaningful information. The data sequences are growing rapidly every day by day, the collected data should be properly analyzed and incorporated with some kind of technical aspects on handling heterogenous or homogenous sequences to reveal the similarity or dissimilarity of these sequences will be helpful for the researchers by the way of identifying analogous functionality and reasonable outcome for further studies. This paper contributes on finding similarity of 30 biological Mushrooms (5.8s rRNA) sequences around Tamilnadu, India using Clustal Omega Multiple Sequence alignment tool. Since Clustering is one of the unsupervised learning methods to underly the similarity of data by grouping them. The research work carried down as implementation of K-Means Clustering algorithm to group the sequences with the result of percent identity matrix for every pair of sequences retrieved from Clustal Omega tool on finding the centroid value of related data points. Apart from the traditional clustering techniques mainly motivated to find the best number of clusters for the effective clustering technique, so here mainly deal with elbow method to fine tune the k value of k-means algorithm to give the optimal number of clustering aspects. Based on the above research approach, it will be used to determine same kind of functionality, features, activities or acceptance of medicinal values can resemble on these clustered mushroom sequences to discover novel insights.

Published in: 2021 5th International Conference on Intelligent Computing and Control Systems (ICICCS)

Date of Conference: 06-08 May 2021

INSPEC Accession Number: 20764037

GREEN MARKETING: CONSUMERS' ATTITUDE AND AWARENESS TOWARDS ENVIRONMENTAL PROTECTION

Dr. S. NAGARAJAN, Assistant Professor
Department of Business Administration
Government Arts College for Women
Nilakottai – 624 208, Tamil Nadu

B. VIDHYA, Research Scholar
Department of Business Administration
Annamalai University
Annamalai Nagar – 608 002, Tamil Nadu

Dr. M. RAMESH, Professor
Department of Business Administration
Annamalai University
Annamalai Nagar – 608 002, Tamil Nadu

Abstract

Nowadays consumers are aware of the environmental issues like global warming and its influence on environmental pollution. They know that their individual consumption behaviour affects the environment and it has a serious effect on environmental degradation. Many scientific studies have evidence that the artificial product contains chemicals which cause even cancer. Consumers comprehend the side effects of using chemical products and it creates a negative perception and lack of trust. Further, it generates an increasing interest for them to move towards natural products. To sustain in the competitive market, companies have to produce natural products according to the need and expectations of the consumers. This paper tries to depict the awareness and attitude level of consumers towards green marketing and how green marketing can be a means for sustainable development. It keenly speaks about the preferences of consumers towards natural products and their attitude and interest in environmental protection.

Key words: Green marketing, sustainable development, ethical banking, paperless banking, etc.

1. Introduction

In the modern era of globalization, it is the responsibility of every industry to protect our environment from air pollution, energy depletion, global warming and water pollution. In most of the countries government is concerned about the environmental problems and insisting the industries to produce environmental

Man-Women Relationship in JaishreeMisra's *Afterwards*

S. Anbu Christa

Reg.No-192303ER001

M.Phil scholar in English

M.V.M Govt Arts College for Women, Dindigul, Tamil Nadu – 624 001

Affiliated to Mother Teresa Women's University, Kodalkanal, 624101

anbuchrista96@gmail.com

&

Dr.M.Rajaram. M.A., M.P.hil., Ph.D.

Assistant Professor in Department of English

M.V.M Govt Arts College for Women, Dindigul, Tamil Nadu – 624 001

Affiliated to Mother Teresa Women's University, Kodalkanal, 624101

mrajarams@gmail.com

JaishreeMisra is a famous contemporary woman writer of Indian Writing in English. She has won her fame in the literary world with her debut novel *Ancient Promises* published in 2000. JaishreeMisra usually focuses on the familial relationship and the struggles of women-folk in the patriarchal setup in her novels. The female protagonists of her novels face dishonour and under the male supremacy in the family and societies. Misra exposes how the oppressed women can eventually break the boundaries of tradition and culture of the society in order to determine their individuality. Also she portrays the psyche of modern educated women who realize their suppression and escape to the place where they get respect. Misra's protagonist Maya in her *Afterwards* is such a woman who becomes conscious of her underprivileged position in the family, decides to leave her ruffian husband Govind to Rahul a nice gentle man of music. Misra deals the novel with the theme of man-woman relationship that a good understanding between a man and woman is essential for family and society.

CHANGING PHASES OF FEMINISTIC ATTITUDE IN MARGARET LAURENCE'S MANAWAKA FICTION

G.S. Angelina
 (Ph.D Scholar, MTW University,
 Kodaikanal)
 Associate Professor,
 Department of English,
 M.V.Muthiah Govt. Arts College (W),
 Dindigul, Tamil Nadu
 gsangelin1964@gmail.com

Abstract: Margaret Laurence is one of the most important writers of Canadian fiction. Her Manawaka fiction comprises of four novels and a short story collection namely, *The Stone Angel*, *A Jest of God*, *The Fire Dwellers*, *The Diviners* and *A Bird in the House*. Her novels have female protagonists who resist the patriarchal hegemony. The heroines are controlled by the male members with patriarchal attitudes in their families and the town's stereotyping which upholds patriarchal ideals. These are the barriers the women should overcome in their journey towards personal identity and autonomy. The Manawaka fiction deals with four generations of women and the change in their feministic attitude. The women characters attempt to have personal, social and gender identities which can fill their lives with respect, dignity, happiness and satisfaction. They are not triumphant in all aspects but they have managed to survive, experiencing success in certain aspects of their lives. The change in their feministic attitude has enabled them to preserve their individuality to some extent averting the annihilation of it through patriarchal domination.

Keywords: hegemony, stereotype, manawaka, feministic, dignity, happiness

Margaret Laurence is one of the most important writers of Canadian fiction. Her Manawaka fiction comprises of four novels and a short story collection namely, *The Stone Angel*, *A Jest of God*, *The Fire Dwellers*, *The Diviners* and *A Bird in the House*. Her novels have female protagonists who resist the patriarchal hegemony. The heroines are controlled by the male members with patriarchal attitudes in their families and the town's stereotyping which upholds patriarchal ideals. These are the

RECENT TRENDS IN LITERARY CRITICISM – 21ST FEBRUARY 2020

SPECIAL ISSUE

APPROVED UGC CARE
JOURNAL OF
ARTS, HUMANITIES AND SOCIAL SCIENCES

ISSN No. 2348-2397

SHODH SARITA

AN INTERNATIONAL MULTIDISCIPLINARY QUARTERLY BILINGUAL
PEER REVIEWED REFEREED RESEARCH JOURNAL

• Vol. 7

• Issue 25

• January - March 2020

≡ EDITORIAL BOARD ≡

Dr. Surya Prasad Dixit

University of Lucknow, Lucknow

Dr. Parmeshwari Sharma

University of Jammu, Jammu

Dr. Yogendra Pratap Singh

University of Lucknow, Lucknow

Dr. M.P. Sharma

Jamia Millia Islamia University, New Delhi

Dr. S. Padmasani Kannan

Dr. M.G.R. Educational and Research Institute

Dr. Girish Pant

Jamia Millia Islamia University, New Delhi

Dr. V. Saraswati

University of Madras, Chennai

Dr. Arun Hota

Paschimvang University, Baarasaat, Kolkata

Dr. S. Ganesh

Madras Christian College, Tambaram

Dr. Digvijay Pandya

Lovely Professional University, Punjab, India

≡ EDITOR IN CHIEF ≡

Dr. Vinay Kumar Sharma
Chairman

Sanchar Educational & Research Foundation, Lucknow

Published by
SANCHAR EDUCATIONAL & RESEARCH FOUNDATION LUCKNOW. U.P. (INDIA)

Diverse Ethnicities and Hybridization in Margaret Laurence's Manawaka Fiction

□ G. S. Angelina

ABSTRACT

The Manawaka fiction of Margaret Laurence comprises of four novels namely, *The Stone Angel*, *A Jest of God*, *The Fire Dwellers*, *The Diviners* and a short story collection *A Bird in the House*. Canada is multicultural and one can find settlers from different parts of the world who form distinct ethnic groups. Canada as an ethnic mosaic is portrayed in the Manawaka fiction. Laurence has included characters from various ethnic groups such as the Scots, the Ukrainians, the English, the German, the Metis and so on. This results in hybridization among the settlers and the first nations, namely the Metis. Laurence brings out the superiority of the Scots. But the protagonists who have Scottish Presbyterian background do develop relationships with the other groups. The Manawaka series culminates in the union of the Scottish heroine Morag and her Metis lover Jules Tonnerre and this paves way to hybridity.

Keywords: Settlers, Ethnic groups, Aborigines, Hybridity

The superiority of the Scots is obvious in the Manawaka fiction. In *The Stone Angel*, Hagar marries Bram who does not belong to the Scottish background. He has his relationship with the half breed girls and he appears to be an Indian. In the hospital room where Hagar is seen, the fellow patients belong to different ethnic groups. Elva Jardine is from the Prairies, Mrs. Dobereiner is a German lady and Mrs. Reilly is an Irish woman.

A Jest of God includes Nick who is a Ukrainian. Miklos and his wife are the Greeks. They run the Parthenon Café, after coming to Canada with an intention of becoming prosperous. In *The Diviners*, Julie refers to Miklos as a 'rough guy'. Bee Toy who has the Regal Café is a Chinese. His family is in China. He uses his business to send money home. Luke Venturi in *The Fire Dwellers* is an Italian. The Metis is represented by the presence of the members from the Tonnerre family. They appear in all the works except in *A Jest of God*. The diverse ethnicity in the Manawaka cycle is obvious by the instances given above.

Laurence as a writer transcends the ethnic barriers and tries to bring about a union among the ethnic groups and this paves way for hybridity. Manawaka is a small town which insists on rigid code of behaviour with its patriarchal views. In Manawaka, women are expected to marry within their own ethnic groups to maintain the purity of their body and their race. They are discouraged from developing relationships with the other ethnic groups. In *The Stone Angel*, Currie discourages Hagar from marrying Bram. May in *A Jest of God* does not approve of Rachel's relationship with Nick. Women in their families and society feel fettered. When they are suppressed, they seek freedom by developing relationships with the members belonging to the other ethnic groups. Laurence permits it as a mark of resistance to the rigidity and as a means of relief and survival.

In *The Stone Angel*, Hagar Currie, a Scottish protagonist marries Bram Shipley who is low in status. Currie, is a self made man and is respectable in society and in church. Bram's condition is

Unveiling the Purdah: A Feminist Reading of Imtiaz Dharker's *Purdah- I & Purdah- II*

Author: SM .Gayathri M.A., M.Phil , SET.,

Research Scholar , PHDENG19P606, Department of English, Mother Teresa Women's University, Kodaikanal-624101

pretteegayu@gmail.com

&

Co-Author : Dr. R. Karthika Devi .M.A., M.Phil., Ph.D., PGCTE,M.A (HIS),MCJ SET'06,NET'19

Research Guide

Assistant Professor, Department of English, M .V Muthiah Government Arts College for Women, Dindigul-624001

Karthikadevi68@gmail.com

Abstract: Feminism talks about gender inequalities in the social world. It focuses on the plight of women in patriarchal society. Today women have an equal share of social responsibility. Feminist writers bring out the issues of women. Imtiaz Dharker is one among them. Her Perspective is wider and deeper and extends its horizon to study the problems of other people in a sympathetic way. Dharker has written seven books of poetry *Purdah* (1989), *Postcards from God* (1997), *I speak for the Devil* (2001), *The Terrorist at My Table* (2006), *Leaving Fingerprints* (2009), *Over the Moon* (2014) and *Luck is the Hook* (2018). *Purdah – I* and *Purdah – II* are taken for study. These poems illustrate a Muslim woman's life in various aspects. Dharker explores how women are oppressed by the culture of purdah.

Key Words: Imtiaz Dharker, Feminist reading, Concept of purdah, Condition of Woman, Poetess' view

Feminist literary texts question the current social assumptions which depict women as being subjective, prejudiced and one-sided. They capture the depressing condition of women, implicitly suggesting ways and means for resolving their problems. They plead for a kind of literature which would be free from the biased portraits of individuals because of race, class and gender. Irrespective of the ideologies about women found in religious scriptures, practically speaking all women have been oppressed and treated as the other in all societies at all ages.

Imtiaz Dharker born in Pakistan, living in Glasgow is also adopted in the circle of Indian English poetry as she had married an Indian Anil Dharker and begot Ayesha Dharker. She started her poetic career with *Purdah and Other Poems* (1989) in Indian English poetry. Her first poem *Purdah-I* portrays the oppression against women by the name of culture and religion. Wearing purdah is a religious practice in Muslim culture to cover a skin of women from the evil sight of men. The religion advocates a woman to

ALOCHANA CHAKRA JOURNAL
(UGC-CARE GROUP-1 JOURNAL)

An ISO : 7021 - 2008 Certified Journal

ISSN NO: 2231-3990 / Web : <http://alochanachakra.in///> e-mail : submitacj@gmail.com

Certificate of Publication

This is to Certify that the Paper Entitled
Marginalization in Chetan Baghat's Revolution 2020

Authored by:

R. Joeamala

From

Mother Teresa Women's University, Kodaikanal, 624101

Has been published in

AC JOURNAL, VOLUME IX, ISSUE IV, APRIL-2020



L. Zadeh (Univ. of California, USA)

Editor-In-Chief

ALOCHANA CHAKRA JOURNAL

<http://alochanachakra.in/>





ALOCHANA CHAKRA JOURNAL

(UGC-CARE GROUP-1 JOURNAL)

An ISO : 7021 - 2008 Certified Journal

ISSN NO: 2231-3990 / Web : <http://alochanachakra.in/> // e-mail : submitacj@gmail.com



Certificate of Publication

This is to Certify that the Paper Entitled
Ecocritical Concerns in Amitav Ghosh's Sea of Poppies

Authored by:

B. Vishnupriya

From

Mother Teresa Women's University, Kodaikanal, 624101

Has been published in

AC JOURNAL, VOLUME IX, ISSUE IV, APRIL-2020



L. Zadeh

L. Zadeh (Univ. of California, USA)

Editor-In-Chief

ALOCHANA CHAKRA JOURNAL

<http://alochanachakra.in/>

Irony and Humour in Kiran Nagarkar's Trilogy, *Ravan and Eddie: A Postmodern Study*

Author : M.Anushya M.A.,M.Phil.,SET.,

Research Scholar, Reg. No. PHDENG19P607 Department of English, Mother Teresa Women's University, Kodaikanal-624 101

anushyaanu122@gmail.com

&

Co-Author : Dr. R. Karthika Devi, MA.,M.Phil.,Ph.D., PGCTE, M.A (HIS), MCJ SET'06, NET'19

Research Guide

Assistant Professor, Department of English, M.V.Muthiah Government Arts College for Women, Dindigul-624 001

karthikadevi68@gmail.com

Abstract - Postmodernism refers to the depiction of life after World War II in art, culture and literature. In India, post 1980's is described as the Postmodern period. Several writers have tried their talents in writing Postmodern novels and have succeeded in it. One such novelist is Kiran Nagarkar. He has written eight novels - *Seven Sixes are Forty Three*(1980), *Ravan and Eddie*(1995), *Cuckold*(1997), *God's Little Soldier*(2006), *The Extras*(2012), *Rest in Peace*(2015), *Jasoda*(2017) and *The Arsonists*(2019). The salient features of a Postmodern novel include Intertextuality, Pastiche, Fabulation, Irony, Humour, Historiographic Metafiction, Paranoia etc., Among these, Irony and Humour is a conspicuous characteristics of a Postmodern text. Nagarkar's trilogy, *Ravan and Eddie* is taken for an analysis and the Paper aims to study 'Irony and Humour in Kiran Nagarkar's Trilogy, *Ravan and Eddie*'.

Key Words - Kiran Nagarkar, Postmodernism, Irony, Humour, Style

Kiran Nagarkar, an excellent story teller has eight novels to his credit. His novels deal with the religious ideologies, terrorism, poverty, love, friendship that are over coated with irony and humour. Dr. Pravin Waghmare rightly remarks, "Nagarkar's dominant stylistic devices are black humour and corrosive irony"(82). *Ravan and Eddie* is the first novel of Nagarkar's trilogy – *Ravan and Eddie*. It was published in 1995. The other two novels include *The Extras*(2012) and *Rest in Peace*(2015). *Ravan and Eddie* exposes the life and struggles of urban people, especially the chawl residents. The novel revolves around two main characters named Ravan and Eddie. They represent two religions, former belongs to a Hindu family and latter belongs to a Christian Roman Catholic family.

In the first novel of Nagarkar's trilogy, the author has started narrating the childhood stages of Ravan and Eddie and how they are brought up by their parents in Indian Chawl and ends the novel with the boys attaining adulthood stage. Ram@Ravan is the son of Shankar Rao and Parvati Pawar. Eddie is the son of Victor Coutinho and Violet. He has one elder sister, Pieta. Both the families are hostile towards each other. Because, Eddie's family thinks that Ravan is the murderer who has killed Eddie's father, Victor. Based on this aspect, Nagarkar has begun his story of *Ravan and Eddie*. The novel begins with the death of Victor. Victor is portrayed as a womanizer who has a lusty feel towards Ram's mother, Parvati. Victor has come home after his work and happens to meet Ram's mother carrying Ram in her hands.

பண்டைய காலப் பெண்ணின் இருப்புநிலை

முனைவர் மா. மாரியன்
கௌரவ விரிவுரையாளர், தமிழ்நாடு
எம்.வி.முத்தையா அரசு, மகளிர் கல்வித் துறை
திண்டுக்கல்.

வரை: 4

புள்ளி: 2

வரை: 1988

வருட: 2020

P-ISSN: 2454-3993

"மனிதன் கூடி வாழும் பிராணி" என்பார் சமுதாயவியலார். தனித்து வாழ இயலாத மனிதர்கள் உயிர் வாழ்வதற்கான இயற்கைக்குழந்தை ஒற்றுமையைப் பெற்றிருந்த நிலப்பகுதிகளில் நெருங்கி வாழத் தொடங்கினார். குழுவாகவும், கூட்டமாகவும் வாழ்ந்த மனிதர்க்கு கட்டற்ற முந்தைய வாழ்க்கையை விடுத்து ஒரு பண்பட்ட வாழ்க்கையை அமைத்துக்கொள்ள முனைந்தனர். அதற்கென பசுவரையறைகளையும் தங்களுக்கென சில தலைமைகளையும் ஏற்படுத்திக் கொண்டனர். நீர்நிலைகளுக்கு அருகில் தங்கி கால்நடைகளை வளர்த்து, பயிர்களை விளைவித்து, அடுத்தநாள் பற்றிய சிந்தனையையும் வளர்த்துக்கொண்டு வாழத்தொடங்கிய மக்களிடம் நாகரீகம் முளைவிடத் தொடங்கியது. இதன் படிப்படியான வளர்ச்சியாக சமுதாயம் என்ற பெரும் அமைப்பு உருவாகி நிலைபெறத் தொடங்கியது.

சமுதாயம் - விளக்கம்

மனிதனின் பரிணாம வளர்ச்சி பல நூறாயிரம் ஆண்டு வரலாற்றைக் கொண்டது மனிதன் கூடிவாழத் தொடங்கியது முதலே சமுதாயம் உருப்பெற்றுவிட்டது. சமுதாயவியலாரும் பிற ஆய்வாளர்களும் சமுதாயம் என்பதைப் பல்வேறு நிலைகளில் விளக்குகின்றனர். மாசிடவியலார், "நெடுங்காலம் ஒன்றாய்க்கூடி வாழ்ந்தும் தொழில் புரிந்தும் வரும் மக்கள் கூட்டம் சமுதாயம்" (பரிணாமம், ப.35) எனக் குறிக்கின்றனர்.

"குரங்கிலிருந்து தோன்றிய மனிதன் எப்பொழுது சேர்ந்து வாழத் தொடங்கினானோ அன்றே சமூகம் என்பது உருவாக்கப்பட்டு விட்டது என்று கூறலாம். சமுதாயம் என்பது ஒழுங்கற்ற கூட்டமன்று. சில ஒப்புக்கொள்ளப்பட்ட நெறிமுறைகளுக்கு உட்பட்டு ஒருவரோடொருவர் ஒரு குழுவோடு மற்றொரு குழு. ஒரு நிலையினரோடு இன்னொரு நிலையினர் உறவுகொள்வதாலேயே சமுதாயம் உருவாக்கப்படுகிறது" (சா.அரிச்சந்திரன், சங்கஇலக்கியச் சிந்தனைமரபில் ஆண்களின் ஆளுமை, பக்.42-43) எனச் சமுதாயத்தை விளக்குகின்றனர் ஆய்வாளர்கள்.

Vertex Coloring of Graph Using Adjacency Matrix

T.Ramachandran¹, N.Deepika²

¹Head and Assistant Professor, ² Research scholar

^{1,2} Department of Mathematics, M. V. Muthiah Government Arts College for Women, Dindigul, Tamil Nadu, India.

ABSTRACT

Graph coloring problem is one of the most popular areas in the field of graph theory and has a long and illustrious history. In a graph coloring, each vertex of the graph is colored in such a manner that no two adjacent vertices have the same color. So far there are several techniques are presented for vertex coloring. In this paper, we propose an algorithm based on the adjacency matrix, to color all the vertices of the given graph with the minimum number of colors and we provide the numerical examples for the proposed algorithm. This algorithm helps us to determine the chromatic number of any graph.

Keywords - Adjacency matrix, Vertex coloring, Chromatic number, Matrix algorithm.

Date of Submission: 14-04-2020

Date of Acceptance: 28-04-2020

I. INTRODUCTION

Many real – world situations can conveniently be described by means of a diagram consisting of a set of points together with lines joining certain pairs of these points. For example, the points could represent people with lines joining pair of friends. Notice that in such diagrams one is mainly interested in whether or not two given points are joined by a line; the manner in which they are joined is immaterial. A mathematical abstraction of situations of this type gives rise to the concept of graph [1]. A graph is a set of vertices and edges, the vertices being denoted by set V and edges by set E [2]. Graph coloring has been studied as an algorithmic problem since the early 1970s. The first result about graph coloring deals almost exclusively with planar graphs in the form of the coloring of maps. Graph coloring problem belongs to the class of combinatorial optimization problem and studied due to its lot of application in the area of data science, networking, register allocation and many more. There are many types of coloring such as vertex coloring, edge coloring, total coloring, fractional coloring etc.

Vertex coloring problem can be defined as to assign the color to every vertex of the graph by keeping the constraints that no two adjacent vertices receives the same color such that the number of colors assigned to the vertices should be minimum. The minimum number of colors that will be used to color the vertices of the given graph G is called the chromatic number of the graph and it is denoted by $\chi(G)$ [3]. A graph is said to be k –colorable if it can be colored by using k – colors and its chromatic

number is k and the graph is called k – chromatic graph [2]. An edge coloring of a graph is a proper coloring of the edges, which means an assignment of colors to edges so that no vertex is incident to edges of the same color. An edge coloring of a graph with k colors is called a k – edge coloring. The smallest number of colors needed for an edge coloring of a graph G is the edge chromatic number and it is denoted by $\chi'(G)$. Total coloring is a type of coloring of both the vertices and edges of a graph. Total coloring is always assumed to be proper in the sense that no adjacent vertices, no adjacent edges and no edge and its end vertices are assigned the same color. The total chromatic number of a graph G is the fewest colors needed in any total coloring of G and is denoted by $\chi''(G)$.

On the greedy algorithms which mostly uses the techniques of deciding the color of vertices sequentially in the coloring process [2]. Greedy algorithm gives the minimum number of colors for vertex coloring but it need not to be a chromatic number. Tabu search techniques provide the optimal coloring of a graph [4]. David S. Johnson et al presented the simulated annealing schemes for graph coloring [5]. Daniel Brelaz presented the new methods to color the vertices of a graph [6]. One of the algorithms uses the machine based learning for graph coloring problem and used 78 identified features for that problem [7]. Amit Mittal et al described a method for graph coloring with minimum number of colors and it takes less time as compared to other techniques [8]. K A Santosa et al, presented the vertex coloring using adjacency matrix [10]. In this paper we propose an algorithm to find the proper coloring of graph using adjacency matrix,

OPTIMIZATION OF MULTI-ITEM (EOQ) MODEL FOR A SINGLE-BUYER USING FUZZY GEOMETRIC PROGRAMMING

K. Kalaiarasi¹, M. Sumathi², M. Sabina Begum³

¹Department of Mathematics, Cauvery College for Women, Trichy-2, Tamilnadu, India. kalaishruthi12@gmail.com

²Department of Mathematics, Khadhir Mohideen College, Adhirampattinam, Tanjore District. Tamilnadu, India. sunsumi2010@gmail.com

³Research Scholar, Department of Mathematics, M.V.Muthiah Government Arts College For Women, Dindigul-2, Tamilnadu, India. sabinasharifmasc@gmail.com

Received: 12.04.2020

Revised: 19.05.2020

Accepted: 10.06.2020

Abstract

In this paper, fuzzy multi-item (EOQ) model with shortage for a single-buyer is formulated and solved using fuzzy geometric programming (GP) technique. The inventory parameters are considered as a generalized triangular fuzzy number and generalized trapezoidal fuzzy number. The optimal order quantity has been determined. The Numerical examples are produce to encapsulate the results of proposed models.

Keywords: Geometric Programming, Mean of Expected Interval (MEI) Method, Mean of α -Cut (MC) Method.

© 2020 by Advance Scientific Research. This is an open-access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>)
DOI: <http://dx.doi.org/10.31838/jcr.07.11.155>

INTRODUCTION

Many researchers enlarged part of the classical inventory models by undertake that the demand is a function of the inventory level. Baker and Urban [1] were extending the EOQ model by considering a demand rate of the items. Zadeh (1965) [2] and Bellman (1970) [3] introduced fuzzy goals, costs and constraints using fuzzy concept. Later, solving fuzzy linear programming models with fuzzy numbers were formulated by Zimmermann (1976).

Non linear programming problem is solved by one of the powerful method Geometric Programming (GP). Zener(1971) is introduced the method Geometric programming. Peterson E. L, Duffin R. J,Zener C. M[6] (1967) is developed and studied Geometric Programming Theory and Application. Klain and Jung [7] introduced single item inventory problems. Abouel-ata and Hariri [8] introduced solving multi-item inventory problems using Geometric programming. Further Abou-El-Ata and Mousa (1998)[11] developed multi-item inventory model under two restrictions. Liu (2008) was developed solution of posynomial geometric programming. Kotba. M. Koth[9], Halla. Fergancy [10] (2011), investigated Multi item EOQ model using Geometric Programming. Fuzzy EPQ model with flexibility and reliability under a space constraint is studied by S. Islam, T. K. Roy [17] (2006).

In This paper, The Mathematical model is formulated in crisp and fuzzy environment.A numerical example is encapsulate the solution in crisp and fuzzy environment. we analyse the results. Finally, we conclude this result.

MATHEMATICAL MODEL

1) Notations

- Let paremeters are,
 n: number of items
 Q_j: order quantity of item j (a decision variable).
 D_j: demand rate of item j.
 F_j: vendor's fixed emissions tax.
 ρ: emissions function's factor.

$$TC(Q) = \sum_{j=1}^n \left(\frac{2D_j(O_{jV} + O_{jB}) + t_2 B_j^2 + 2t_1 B_j D_j + H_j B_j^2}{2Q_j} \right) + \sum_{j=1}^n \frac{Q_j(H_j + 2\rho D_j F_j)}{2} \text{---- (3.1)}$$

Subject to the constraints

- O_{jV}: vendor's ordering cost of item j.
 O_{jB}: buyer's ordering cost of item j.
 H_j: holding cost per unit of item j.
 B_j: maximum backorder level of item j.
 t₁: fixed backorder cost per unit.
 t₂: linear backorder cost per unit.
 TC : Total costs of the inventory model

2) Assumptions

The assumptions are,

1. There is a single buyer n items.
2. Suppose lead time is zero.
3. Quantity discount is not allowed.
4. The demand for all items is deterministic.
5. The limited is storage capacity.

3) Mathematical Model

The minimum total cost of this multi items inventory model is,

$$TC(Q) = \sum_{j=1}^n \left(\frac{2D_j(O_{jV} + O_{jB}) + t_2 B_j^2 + 2t_1 B_j D_j + H_j B_j^2}{2Q_j} \right) + \sum_{j=1}^n \frac{Q_j(H_j + 2\rho D_j F_j)}{2} \text{----(2.3.1)}$$

The constraints are,

$$\left. \begin{aligned} \sum_{j=1}^n \left(\frac{2D_j(O_{jV} + O_{jB}) + t_2 B_j^2 + 2t_1 B_j D_j + H_j B_j^2}{2Q_j} \right) &\leq L_1 \\ \sum_{j=1}^n \left(\frac{Q_j(H_j + 2\rho D_j F_j)}{2} \right) &\leq L_2 \end{aligned} \right\} \text{----(2.3.2)}$$

MATHEMATICAL MODEL IN CRISP ENVIRONMENT

The minimum total cost of this model is,
 Min

Home > Mathematical Sciences > Geometrics

Article

Optimization of unconstrained multi-item (EPQ) model using fuzzy geometric programming with varying fuzzification and defuzzification methods by applying python

January 2021 · [Materials Today Proceedings](#)

DOI:10.1016/j.matpr.2020.10.588

Authors:



K. Kalaiarasi Kalaichelvan
Cauvery College for Women



M. Sabina Begum



M. Sumathi
Khadir Mohideen College

Request full-text

Download citation

Copy link



To read the full-text of this research, you can request a copy directly from the authors.

Citations (4)

References (13)

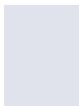
Abstract

This article has been withdrawn: please see Elsevier Policy on Article Withdrawal (<https://www.elsevier.com/about/our-business/policies/article-withdrawal>). This article has been withdrawn as part of the withdrawal of the Proceedings of the International Conference on Emerging Trends in Materials Science, Technology and Engineering (ICMSTE2K21). Subsequent to acceptance of these Proceedings papers by the responsible Guest Editors, Dr S. Sakthivel, Dr S. Karthikeyan and Dr I. A. Palani, several serious concerns arose regarding the integrity and veracity of the conference organisation and peer-review process. After a thorough investigation, the peer-review process was confirmed to fall beneath the high standards expected by Materials Today: Proceedings. The veracity of the conference also remains subject to serious doubt and therefore the entire Proceedings has been withdrawn in order to correct the scholarly record.

Discover the world's research

- 25+ million members
- 160+ million publication pages
- 2,3+ | citatic [Join for free](#)

No full-text available



To read the full-text of this research, you can request a copy directly from the authors.

Request full-text PDF

Citations (4)

References (13)

Article

FUZZY ECONOMIC ORDER QUANTITY INVENTORY MODEL, USING LAGRANGIAN METHOD

July 2020

DOI:10.37418/amsj.9.4.17

Authors:



K. Kalaiarasi Kalaichelvan
Cauvery College for Women



M. Sumathi
Khadir Mohideen College



S. Daisy

Request full-text

Download citation

Copy link



i To read the full-text of this research, you can request a copy directly from the authors.

Citations (1)

References (3)

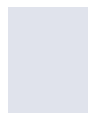
Discover the world's research

- 25+ million members
- 160+ million publication pages
- 2.3+ billion citations

[Join for free](#)

Sponsored videos

No full-text available



To read the full-text of this research, you can request a copy directly from the authors.

Request full-text PDF

International Journal of Advanced Science and Technology

[Home](#) [Editorial Board](#) [Journal Topics](#) [Archives](#) [About the Journal](#) [Submissions](#)[Privacy Statement](#) [Contact](#)[Home](#) / [Archives](#) / [Vol. 29 No. 08 \(2020\)](#) / [Articles](#)

An Geometric Programming Approach for Deteriorating single item Inventory Model with fuzzy parameters

R. KALAIARASI ,M.SUMATHI and S.DAISY

Abstract

In view of this study, single item inventory deteriorating model with fuzzy parameters are worked out and explained in both fuzzy and crisp environment. Some of the inventory criterions are appropriated generalized triangular and trapezoidal fuzzy numbers. The main dispassionate view of this study is to complete the length of the ordering cycle and maximize the total profit. Here we handle RA and COM methods for defuzzification. Later by geometric programming mode we settle this model. Numerical examples and sensitivity analysis are also presented here.

[PDF](#)

How to Cite

R. KALAIARASI ,M.SUMATHI and S.DAISY. (2020). An Geometric Programming Approach for Deteriorating single item Inventory Model with fuzzy parameters. *International Journal of Advanced Science and Technology*, 29(08), 2712 - 2739. Retrieved from <http://serisc.org/journals/index.php/IJAST/article/view/24725>

[More Citation Formats](#)

[Home](#) > [Cluster Computing](#) > Article

[Published: 07 December 2017](#)


RETRACTED ARTICLE: Optimal route selection in MANET based on particle swarm optimization utilizing expected transmission count

[N. Saravanan](#) , [A. Subramani](#) & [P. Balamurugan](#)

[Cluster Computing](#) **22**, 11647–11658 (2019)

319 Accesses | **4** Citations | [Metrics](#)

 This article was [retracted](#) on 01 December 2022

 This article has been [updated](#)

Abstract

In the mobile ad-hoc network (MANET) frameworks towards the route revealing techniques; there exists route disappointment in entire route identification methods delivery regarding information loss and Communication overheads. Thus, the routing improvement should be made as per the mobility character that belongs to the network. In this work, a particle swarm optimization (PSO)-based approach

A STUDY OF INTRUSION DETECTION SYSTEM COMBINING WITH VISUALIZATION USING MACHINE LEARNING TECHNIQUES

DIVYA.S.S¹ , DR.B.ASHADEVI²

¹Research Scholar, Department of Computer Science, Mother Teresa University, Kodaikanal, Tamilnadu, India.

²Assistant professor, Department of Computer Science, M.V Muthiah Government Arts College for Women, Dindigul, Tamilnadu, India.

¹divya2ss@gmail.com

²asharajish2005@gmail.com

Abstract -- The Hackers are utilizing various methods to attack the system server in nowadays. They are annoying many ways to attack the servers in different system from different places. The Network Intrusion detection system is used to prevent the attacks from the hackers and safe the network. This is also monitoring the system and secures the servers. There are a few strategies in Machine learning techniques which are used to detect the intrusions. The techniques were reviewed which are Rule Based Learning, Decision Tree, Bayesian thinking, Artificial Neural Networks, Support Vector Machines (SVM), Clustering, Deep Learning, Genetic Algorithms, Hoeffding Tree Algorithm, Random Forest Algorithms, Deep learning ,Ensemble Algorithm. This paper reviews various machine learning approaches for Network Intrusion detection system and visualization techniques as well. Presently a portion of these systems are applied upon the Network Intrusion Detection System dataset and Compared at based on their accuracy. Also this paper helps the readers can understand about the Machine Learning techniques, visualization techniques and Network intrusion detection system concepts.

Keywords-- Intrusion Detection System, Machine Learning, Visualization, Cyber Security

I. INTRODUCTION

A. Intrusion Detection System

Intrusion Detection System (IDS) is a network security technology that originally built for detecting vulnerability exploits against a target network or computer. Intrusion Detection System is to detect the threats in the network infrastructure [2]. It is a software or hardware component that monitors the event in a computer or network and analyzes the activity of possible computer security problems. It is the process to identify and respond to the intrusion activities. There are four general types of Intrusion.[1].

Denial of Service (DoS): The general errand of Denial of Service attacks is to interfere with some assistance on a host to keep it from managing certain requests.

Probing: It is to pick up data about the objective host.

User to Root (U2R): User 2 root attacks misuse vulnerabilities in working frameworks and programming to get root access to the framework.

Remote to Local: The intruder doesn't have a record on the host and endeavors to acquire nearby access over a system association.

There are two principle detection methods i) Misuse detection ii) Anomaly detection. These terms are known as knowledge based and behavior based intrusion.[2] The misuse detection methods attempts to encode information on referred to interruption are likewise called as signature based IDS. The Anomaly identification strategy is utilized to break down the profile which represents to the typical system traffic. This methodology potentially identifies the unknown intrusions. Additionally this system have high false alarm Rate. The steady learning of this system can improve the identification accuracy as well as flexibility of identifying unknown attacks.

Pairwise Sequence Alignment Similarity Score Prediction on Mushroom Biological data

P.Sudhasini^{1*}, Dr.B.Ashadevi²

¹Research Scholar, Department of Computer Science

¹Mother Teresa Women's University, Kodaikanal, Tamilnadu, India

²Assistant Professor, Department of Computer Science,

²M.V. Muthaiah Govt. Arts College for women, Dindugul, Tamilnadu, India

Abstract

The role of data science is highly essential in the field of bioinformatics; this is one of the emerging trends in the new era to discover novel insights for the benefit of societal need related to disease and drug discovery. In bioinformatics, sequence alignment is the basic process to identify the similar species. This paper contributes the essence of pairwise sequence alignment algorithm to determine the similar strains of 30 Mushrooms (5.8s rRNA) sequence around Tamilnadu, India. This proposed system given solution to predict, as different categorical ranges of similarity score by comparing all the nucleotide sequences. Though many alignment tools are available in the online, retrieval of raw data with the maximum probability of alignment comparison between sequences with the better data visualization is unique than the Blast alignment tool. Also, it can be convenient to the end user on seeing maximum comparison of alignments in detail as well as it leads to future research enhancement on discovering new perceptions in the sequence alignments.

Keywords: Data science, RNA sequence, Pairwise sequence alignment, Bio python, Bioinformatics

1. Introduction

Data science is an interdisciplinary platform inclusive of information technology, computer science algorithm, statistics, data visualization etc., for implementing various fields in our day to day life. The role of data science in bioinformatics are enormous. In the present scenario, the availability of biological data increasing day by day. It's a very big necessity and challenge to the researchers on handling this data in a proper way to reveal ethical information that helpful to the society. The impact of data science on the field of bioinformatics is diverse like DNA or protein sequencing, prediction of protein structures, text mining in biological literature, adapting and linking internationally approved global databases for searching relevant biological information. However, comprehensive evaluation of many of the most popular methods for multiple sequence alignment (MSA) has been developed based on a new benchmark test set, although novel approaches will still be needed to fully explore the most difficult regions [1]. The alignment of two DNA or RNA sequences is an elementary and essential step in the analysis of biological data. According to the need of new discovery in this bioinformatics field new improvised algorithm is developed [2] and also with improvised computational speed [3] [4]. Though research carry down on various aspects of bioinformatics, this paper conveying the concept on pairwise sequence alignment similarity of 5.8s rRNA nucleotide sequence of mushrooms nearby Tamilnadu. The preliminary and basic requirement of analyzing similar species is the most necessary part on identifying the functionality, structures, behavior of the species to make sure the ancestors and to find the root cause of information on dealing any sort of medical issues according to the similar species.

Elimination of Noise in CT Images of Lung Cancer using Image Preprocessing Filtering Techniques

P. Muthamil Selvi*¹, Dr.B. Ashadevi²

¹Research Scholar, Department of Computer Science,
Mother Teresa Women's University, Kodaikanal

²Assistant Professor, Department of Computer Science,
M.V.Muthiah Government Arts College for Women, Dindigul

Abstract

The Medical Imaging has emerged in the diagnosis of various chronic diseases especially for cancers in large. In current scenario, people affected by the lung cancer have predominantly increased. Computed Tomography (CT) scan imaging are widely used in detection of lung nodules and cancer. In medical imaging, elimination of noises is a challenging task. In order to overcome this challenge, preprocessing is a crucial task to eliminate the noises in medical imaging. In this paper, image pre-processing techniques like noise filters such as Mean, Median, and Wiener are applied on CT scan images of lung cancer, to segment the image for further analysis of cancer detection. The performances of the different filters applied on CT images were evaluated using image quality assessment metrics such as Mean-Squared Error (MSE) and Peak Signal-to-Noise Ratio (PSNR). The experimental study finds the Median filter is more effective in compare to other filters in removing noises present in CT imaging of Lung cancer by having low MSE values and high PSNR values.

Keywords: CT Images, Lung Cancer, Noise Filters, MSE, PSNR

1.Introduction

Globally, Lung cancer is one of the top leading causes of death. It is also identified as a major healthcare problem in India [1]. Adenocarcinoma is the most prevalent histological type of lung cancer in developed countries, while squamous cell carcinoma has been the next most common type of cancer [2]. The screening tool used for randomized controlled trials in earlier stages of lung cancer screening using chest radiography has failed to show reduced lung cancer mortality rate, computed tomography (CT) is a sensitive test for detecting small lung nodules [3].The analysis of CT scan of lung images through various techniques in medical image processing techniques is gaining momentum in recent years [4].

Image noise is an inevitable fluctuation occurred while capturing an image through different sources and there is a possibility of misalignment with the sensors that will create image noise. Certain kind of image noise exists in the selected images. The images which are transmitted over channels are corrupted with impulse noise due to noisy channels. This impulse noise will be having large positive and negative spikes [24].

Salt and pepper noise is an impulse type of noise. This type of noise is an intensity spikes occur during data transmission. In an 8-bit image, the typical value for pepper noise is 0 and for salt noise it is 255. These noises are caused in images due to sensors [22]. Gaussian noise is evenly distributed over signal such that each pixel in the noisy image will be the sum of the true pixel value and a random Gaussian distributed noise value. Here the noise is independent of intensity of pixel value at each point and the white Gaussian noise is a special noise, in which the values are identically distributed and statistically independent [22].

The major task in image processing is image de-noising for the analysis of images. Here image restoration is to remove the noise from the selected image, in such a way that the originality to be maintained. In spatial domain of applications, the filters are categorized as linear and nonlinear filters [10], used to remove certain types of noise. The linear filters remove noise by applying the mask on the original image, that represents a low-pass filter or smoothing operation. These filters also tend to blur the sharp edges, destroy the lines and other fine details of the image. Linear Filters do not

MENU

Vol. 5 No. 2 (2021)

ARTICLES

Enhance The Network Intrusion Detection System Classification Performance Using Three-Dimensional Virtualization

[PDF](#)

Divya.S. S , Dr.B.Ashadevi

Published 2021-08-02

Abstract

Security has become an important part of an organization's information system. Network Intrusion Detection Systems (NIDS) are critical detection systems used as a countermeasure to protect data integrity and system availability from attacks, intruders. Detecting computer network intrusion attacks has become a difficult problem in solving network security. Traditional method error classification is a common problem with machine learning intrusion detection. Improvements in machine learning models are hampered by a lack of insight into the reasons behind this misclassification. This proposed three-dimensional virtualization framework using a Deep Q-Learning Neural Network (DQLNN) to analyze the malicious node, attacker path and traffic conjunction. This method categorizes the traffic based on network parameters such as traffic shaping, bandwidth, total rate, and rate bound. In this process, during the data transmission to verify the network path and request the user to identify the attackers. To introduce a Monte Carlo method to provide random samples to reduce the prediction time delay. The Markov chain model to identify traffic and probability transition states on the network. In this chain, the model constructs the traffic state tree to predict the higher traffic state and attacker states. This model proposed Xgboost classification to predict the traffic path and classify the attackers. After the attacker classified to construct the 3D visual representation to reflect the various attack and traffic. To use a benchmark intrusion detection dataset, which is KDDCup'99 and the accuracy of the classifiers was estimated using the k-fold cross-validation method. In this overall system performance to provide more security and server network detection compared to the existing method.

A Brief Survey On Underwater Wireless Sensor Network Routing Protocol For Acoustic Communications Techniques

Mariyammal, Dr .A. Subramani

Abstract: Internet of things a monster technology that blends the virtual with the material to offer a smarter to keeps attracting market players and increments with its limitless potential. It is a growing network of objects, devices and machines. In Internet of Things (IoT) devices the Dynamic Spectrum access plays an increasingly important role to improve the spectrum efficiency. The global IoT spectrum is confusing with countless licensed and unlicensed frequency bands and regional fragments. The cross-layer design where the boundary range among the protocol layers is violated by sharing the internal information and help layers to become aware of the changes in the others and hence provide higher quality of service to the user. This paper aims to clear the cross-layer design in IoT protocol layers and the spectrum allocation technique.

Keywords: IoT, WSN, Cross Layer, Spectrum Sensing.

1 INTRODUCTION

Nowadays, the Internet is used by more than number of customers roughly the world to surf content, send and accept mails, play online games, access multimedia resources and create social networking, between others. Furthermore, the Internet is also predictable to provide as a worldwide platform to connect physical objects or "things", therefore, allowing latest methods of interacting, working, living and entertaining [1, 2]. Within such viewpoint, the Internet of Things (IoT) is a new networking pattern which permits the communication between all kinds of physical objects over the Internet [3]. The IoT is permitted by embedding communication abilities and, in several cases, classification, sensing and actuation functionalities into each day things and communicating in extended Internet technologies. The IoT describes a truly world-wide cyber-physical structure in which each physical object can be linked and restricted remotely. The collection of applications and services leveraging such knowledges open a overabundance of novel business and market opportunities in the fields of domotics, e-health, real-time monitoring of industrial processes, and intelligent logistics, among others [4]. IoT helped to attach the special devices for special purpose. The devices are proficient to communicate with assist of wireless network to contact the internet. The most current analysis approximates assume that by 2020 there will be over 30 million connected devices. The traditional wireless communication system connects spectrum resource allocated by fixed allocation strategy. But Dynamic spectrum management techniques allow the devices to switch between different options, thereby increasing the overall network capacity by providing more degrees of freedom.

The traditional IoT protocol architecture is a standardized network connection so it affects the quality of service and the response time. The model only offers a limited interaction in that, data communication only takes place between the two adjacent of neighboring layers. Because of the problems the cross-layer design proposed. Its core idea is to maintain the functionalities associated to the original layers but to allow coordination, interaction and joint optimization of protocols crossing different layers.

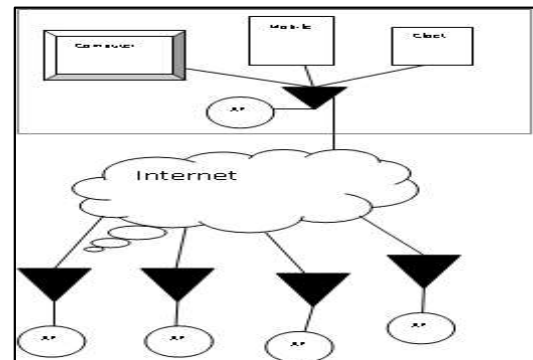


Fig. 1: Abstract network architecture of the IoT

Figure 1 demonstrates the network architecture of the IoT, in which several things are connected to the Internet via a common Access Points (AP). In common scenarios (e.g., at home, in the office), the AP domain is composed by a few tens of things. Access Points (APs): i.e., additional sophisticated devices which cooperates the role of local network coordinator as well as interface and gateway for the communication over the Internet. This paper presents a various cross layer design on Internet of things issues and possible solutions and dynamic spectrum management techniques for IoT devices. The cross layer approach follows a resource allocation approach to integrate different communication functionalities into one coherent mathematical optimization model and to provide an adaptive solution for cross-layer design and control.

2 RELATED WORK

Vaghela Lara (2016) [5] have presented the paper about traditional OSI or TCP/IP model, Cross layer design model,

- Ms. Mariyammal1, Dr .A. Subramani2
- Research Scholar, Department of Computer Science, M.V.Muthiah Govt. Arts College for Women, Dindigul, Mother Teresa Women's University, Kodaikanal. E-mail:
- Assistant Professor, Department of Computer Science, M.V. Muthiah Government Arts College for Women, Dindigul, E-mail: subramani.appavu@gmail.com


ARCHIVES


Forward Node Selection Using Particle Swarm Optimization (PSO) for Broadcasting in MANET

 R. Saraswathi and Dr.A. Subramani

Abstract

In Mobile Ad Hoc Network (MANET), while selecting the intermediate nodes for broadcasting, coverage and channel quality conditions need to be considered along with energy and distance parameters. In this paper, Forward Node Selection using PSO (FNS-PSO) algorithm for broadcasting in MANET, is proposed. In this procedure, PSO is used for choosing a group of applicant nodules which forward the packages with a definite forwarding probability (FP). In PSO, a suitability purpose is made regarding enduring energy, nodule connectivity and channel state. Replication fallouts demonstrate that the suggested FNS-PSO procedure lessens the dormancy, energy ingestion and forwarding proportion with greater package delivery proportion.

 Volume 12 | Issue 1

 Pages: 287-294

DOI: 10.5373/JARDCS/V12I1/20201042 (<http://doi.org/10.5373/JARDCS/V12I1/20201042>)

 Download PDF

 [Back to Archives \(archives.php\)](#)

[Login \(login.php\)](#)

JARDCS

Journal of Advanced Research in Dynamical and Control Systems presents peer-reviewed survey and original research articles.



JOURNAL OF THE ASIATIC SOCIETY

Vol. LXII No. 2 2022
(UGC Approved Journal)



THE ASIATIC SOCIETY
1 PARK STREET • KOLKATA 700 016

*Sister of My Heart and the Vine of Desire: Denial of Conservative
Myths and Formation of New*

H.Surya Prabha & Dr.K.SUMATHI

ABSTRACT

A myth is a story that has significance to a culture (or species), a story that addresses fundamental and different questions that human being ask: who and what I am, where did I come from, why I am here and how should I live, what is the right thing to do, what is the universe, how did it begin? Storytelling involves the recounting of legends, myths and also the tales of one's family and familial history. Indian Women writers have deftly used myth and legend in their writings as a practice of women of all the classes and caste. Fiction becomes an important place for questioning the validity of the patriarchal myths that have created a faulty impression of women and womanhood. When these women novelists start questioning and reinterpreting the male created myths in their works they tend to explore their power both as women and as creative writers. Indian women writers have not rejected myths altogether, but made a positive reconstruction of it. This research paper observes how does Chitra Banerjee Divakaruni, in her two novels *Sister of My Heart* and *The Vine of Desire* deny the conservative myths and created new ones.

Key words: Myth, Denial, Creation, Patriarchy

Myths are not only simple, innocent tales, but also symbols and images which bear political, social, historical and cultural meanings and codes. Many thinkers and writers have tried to analyze these myths and thereafter deconstructed them to uncover the ideology behind them. Similarly, many writers have attempted to rewrite these myths from different point of view to emphasize the missing or consciously underestimated elements. Chitra Banerjee Divakaruni, who has authored celebrated works of fiction, is known for conjuring up a world of fantasy in her novels. Her subjects revolve around Indian migrants settled in the US and their immigrant experience. With these interesting



The Initiation Process of Wallace and Aditya as Warrior Archetypes

M.Vinoth Kumar, Ph.D Research Scholar, Alagappa Govt, Arts College, Karaikudi.

ORCID: <https://orcid.org/0000-0002-1963-0657>

Dr.T.K.Vedharaja, Research Supervisor, Assistant Professor of English, Alagappa Govt. Arts College, Karaikudi.

ORCID: <https://orcid.org/0000-0002-3270-733x>

DOI: 10.38067/ijtlls.2020.v03i01.006

Abstract

The present article is a brief study on the personality of two great national heroes of Scotland and Tamil Nadu. They have been portrayed in a realistic manner by Nigel Tranter and Kalki in their novels, “The Wallace” and “Ponniyin Selvan” respectively. Every individual has initiation step as his age of profession enters. The subject of the novels is about the heroic journey of the national heroes in getting liberty and power to their nations. To justify the theme, assessment of the heroes quality becomes vital. The initiation process the beginning of the individuation process of an individual in his task. Wallace and Aditya start their career as a warrior by avenging the death of their dear ones and to quit the domination of the opponent. To note, the works “The Wallace” as “TW” and “Ponniyin Selvan” as “PS” have been abbreviated for denoting parenthetical documentation. Hence, the article brings forth the first attempt of both heroes in warfield and their tenacity of keeping themselves true to their goals.

Keywords: Initiation Process, Wallace, Aditya, Warrior Archetype.

In a hero's life, the initiation process of his journey becomes vital. It may be a battle, ambush, skirmish, plot to kill him or a battle or war he voluntarily participates to show his might in an innate manner. The beginning of the heroes' fight against tyranny or conspiracy becomes the initiation process of the hero. Tranter's William Wallace and Kalki's Aaditya Karikalan are suitable models of warrior archetypes and their initiation process of their heroic journey prove them as selfless warriors.

William Wallace is the national hero of Scotland. In the beginning of Nigel Tranter's "The Wallace", Wallace happens to see the terrible atrocities of the English over the innocent Scottish folks. His agony frightens his friends because it is the big man weeping sobbing in front of them. He has done everything against the English for the Scottish liberty with his whole heart and mind. He has been a man of fire brand against the English. On seeing the cruelties unleashed by the English "his emotions were strongly aroused, subsequent action could be swift, shattering, shocking, indeed not in sheer impulsiveness nor mindless violence, but in intense, calculate vehemence." (TW 9). The situation shows Wallace has been fully melted for the worst fate of the Scottish people and deeply yearns to avenge their deaths.

Marginalization in Chetan Baghat's *Revolution* 2020

Author: R. Joeamala, M.A., B.Ed., M.Phil., SET.

Research Scholar, Reg.No.PHDENG19P609, Department of English, Mother Teresa Women's University,
Kodaikanal- 624 101

joeamala6@gmail.com

&

Co- Author: Dr. R. Karthika Devi, M. Phil., PGCTE., M.A., (HIS), MCJ SET ' 06, NET ' 19

Research Guide

Assistant professor, Department of English, M. V. Muthiah Government Arts College for Women, Dindigul- 624 001

karthikadevi60@gmail.com

Abstract: Marginalisation (subaltern studies) is one the major themes in postcolonial theory. Postcolonial criticism flourished in 1990's. The prominent personalities traced out postcolonial literature are Edward Said, Frantz Fanon, Gayatri Spivak, Homi. K Bhabha. The main objectives of postcolonialism are reclaiming the past and eradicating the colonialist ideology which devalued the orient's past. Hence the natives are marginalised in their own nation. Chetan Bahat's *Revolution 2020* is a novel makes to realise the self. The novel narrates the triangle love story as well as culturally and morally corrupted Indian society. The novel was published in 2011, a best seller. His other novels are *Five Point Someone*, *One Night @ the Call Center*, *The Three Mistakes of My Life*, *2 States*

Keywords: Marginalisation, Colonialism, Orientalism, Ideology, Eurocentric

Chetan Bhagat is an Indian English novelist. He has written eight bestselling novels and three non-fictions. Basically he is a mechanical engineer from IIT and changed his profession as his passion. His novels are addressed to Indian youth and he becomes the icon of youngsters. His stories hold the issues with Indian background and problem. His first novel *Five Point someone* deals with ranking system in higher education. *Three Mistakes of My Life* deals with the corrupted Indian Cricket and *2 States* is an autobiographical fiction tells the marriage between two different communities. *Half Girl Friend* is about rural primary education system and hero lacks in English speaking. It's a challenge for Madhav to cope up with broken English in India. *One Indian Girl* is all about feminism, that he asks the question why women alone have choices between her passion and home maker. She has to choose either, but for men no choices in his passion or other needs. Chetan Bhagat novels are in postcolonial perspective which speaks about Eurocentricism. Indians are obsessed with western ideology that forgets the past.