



Shikashana Prasarak Mandali's
Sir Parashurambhau College, Pune 30.



Shikashana Prasarak Mandali's
Sir Parashurambhau College, Pune

100

Celebrating Centenary Year
1916-2016



Calyx
2015-2016

A Study Circle Activity

शिक्षण प्रसारक मंडळीचे
सर परशुरामभाऊ महाविद्यालय, पुणे



शताब्दी महोत्सव
१९१९-२०१९

**प्रारभ्यते न खलु विघ्नभयेन नीचैः
प्रारभ्य विघ्नविहता विरमन्ति मध्याः ।
विघ्नैः पुनः पुनरपि प्रतिहन्यमानाः
प्रारब्धमुत्तमजना न परित्यजन्ति ॥ (नीतिशतक २६)**

अधम लोकांकडून अडथळ्यांच्या भीतीने (कुठलेच कार्य) सुरु केले जात नाही. मध्यम लोक कार्याला आरंभ करून अडथळ्यामुळे अडून मध्येच थांबतात. अडथळ्यांनी वारंवार आघात केले असतानाही श्रेष्ठ लोक मात्र कार्याचा आरंभ करून (ते) सोडून देत नाही.

The Inferior person does not start (any work) fearing obstacle, the moderate leaves the work having started and stuck by obstacle, the good people do not leave the started (work through (they) are beaten back again and again by obstacles.



SIR PARASHURAMBHAU COLLEGE, PUNE

Shiksha Prasarak Mandal's
Sir Parashurambhau College, Pune



Calyx

(2015-16)

A STUDY CIRCLE ACTIVITY

EDITORIAL

Dear Readers,

We are immensely proud and content to present to you the 9th issue of the students' magazine *Calyx*. A lot of efforts and enthusiasm was shown both by undergraduate as well as post graduate students this year. We certainly hope that the articles written will provide diverse knowledge and an interesting insight towards some of the fields of studies.

As we are in our centenary year of college, the theme 100 years was chosen so that we could learn about how our particular fields grew or developed. The students chose a commonly agreed theme based on the trends and breakthroughs in their particular domain of study keeping in mind that the research they did was the reflection of their own thoughts, ideas and interpretation. Not only this, but the articles cover a variety of issues in the fields of Arts, Science, Commerce respectively over the past 100 years.

This magazine covers a broad and assorted range of interesting research articles from different streams of knowledge viz. languages like Sanskrit, German; Statistics, and social sciences Economics, Psychology, Sociology and Political Science. In the present volume, many interesting and novel trends came in the limelight such as care ethics with a justice perspective, the postmodern approach in the field of sociology, advance new fields of psychology, commerce of Indian stock market, modification of economic theories, new breakthroughs in languages, etc.

Calyx is a magazine of the students of a study circle. All academic, editorial and creative work is done by the students itself. It gives them a platform to express themselves creatively on an academic level. The research done by the students is mostly based on the secondary sources. Though the editing of the articles is done with utmost care, there could be some mistakes that could not be rectified, so kindly overlook our errors.

We hope that you will acknowledge the articles and benefit from them.

Thank you!

Sanika Kulkarni

Nidhi Bellay

We welcome your feedback!

Nidhi: nida.bele@gmail.com

Sanika: sanikaklkrn@gmail.com

FOREWORD

It gives me an immense pleasure to present the ninth issue of the Students' Magazine Calyx in the centenary year of S.P.College.

Calyx is a magazine wholly brought out by the students of the Study Circle group. This platform gives young minds an opportunity to think out of box, go beyond the syllabus and enhance their creative thinking and research. I am sure that the students enjoy this academic space and freedom and it helps them to explore their capacities beyond classroom teaching and examination curriculum.

In this centennial year of the college, Calyx focuses on The Trends in Arts, Commerce and Science in the last 100 years from 1916 to 2016. The undergraduate and postgraduate students from Sanskrit, German, Statistics, Economics, Commerce, Sociology, Psychology and Philosophy have written articles on the said theme. The students have taken all the efforts to survey literature and have expressed their views while writing these articles. All the work related to Calyx from selecting the theme to editing the articles was completed by the members of the group and they have worked at best of their capacities. I would like to appreciate the efforts and contribution by all the study group members, especially the editors of the magazine Sanika Kulkarni and Nidhi Belle. Their dedication, devotion, motivation and commitment definitely deserve a special mention. I wish all the success to the members of the study circle group.

The articles are well researched and point to the efforts taken by the students. The students have included a wide range of subjects like post modernist approach, care ethics, new developments in economics, Indian stock market, new trends in psychology, journey of German literature, Indian statisticians and the changes in Sanskrit literature.

There have been major breakthroughs, innovations and developments in the world and in India in the last hundred years. Be it postmodernism, ethics, new economic theories or literature, the trends definitely throw light on the technological, social, political, economic and scientific developments that have taken place in the last hundred years. The articles in this magazine very well demonstrate these developments. I am sure that readers will enjoy these articles.

I also take this opportunity to thank our Principal Dr. D.N.Sheth for his continuous support and encouragement for this extracurricular activity and allowing the students in exploring their potentials beyond the classroom. I extend my sincere thanks to the librarian Mrs. Sakhare for allowing the students a complete access to the library for writing their articles. My sincere thanks are to my colleague and Calyx committee member Mr. Abhijit Chavan for making this magazine a success. I also thank our teaching and non-teaching staff for their help. Special thanks are due to Mr. Nagpurkar, our printer, for his help and valuable suggestions in bringing out this issue.

Arundhati Agte
In-Charge, Calyx

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संस्कृत भाषेतील शतकातील स्थित्यंतरे

प्रणाली उदय गोगटे (तृ. व. सा. संस्कृत),

संघमित्रा मिलिंद ठाकूर (तृ. व. सा. संस्कृत),

अनिरुद्ध अजित किल्लेदार (द्वि. व. सा. संस्कृत),

अमेय सुनील खरे (द्वि. व. सा. संस्कृत)

मम्मटाने काव्य यश व अर्थप्राप्तीसाठी केले जाते असे सांगितले. परंतु आजच्या काळात जे संस्कृत लेखन करतात त्यांना या दोन्हीची प्राप्ती होणे कठीण आहे. त्यामुळे संस्कृतश्रद्धा, लोकजागृती, अन्यभाषीय साहित्याचा परिणाम, समाजहित, छात्रहित संस्कृतचे अखिल भारतीयत्व अशा प्रयोजनांनी लिहिली जातात. शतकभरातील स्थित्यंतराचा आढावा घेताना आधी उल्लेखल्याप्रमाणे प्रयोजनात झालेला बदल विचारात घेणे क्रमप्राप्त ठरते.

ज्याप्रमाणे प्रयोजने बदलली त्यानुसार विषयही बदलत गेले. प्राचीन संस्कृत वाङ्मयाचे विषय हे मुख्यतः शृंगार, प्रेमकथा, शास्त्रीय असे दिसतात. परंतु अर्वाचीन काळात, किंबहुना त्याच्या काही वर्षे आधीपासूनच लेखन हे लोकाभिमुख झालेले दिसते. त्याचप्रमाणे नवीन प्रकारही रुढ झाले. उदा. नियतकालिक काळाच्या ओघात दुर्लक्षिले गेलेले शास्त्रीय लेखनही या शंभर वर्षात पुन्हा सुरु झालेले दिसते. प्रसिद्ध संस्कृत काव्य-नाटकांमध्ये प्रामुख्याने शृंगार, वीर व करुण रस दिसून येतात. परंतु अर्वाचीन वाङ्मयामध्ये हास्यरसप्रधानही लेखन झालेले दिसून येते. उदा. १९१७ मध्ये कालिदासाच्या मेघदूताचे विडंबन 'काकदूतम्' या नावाने धारवाडचे सहस्रबुद्धेशास्त्री यांनी व १९४० मध्ये त्याच नावाने अन्नमल्लैनगर येथे श्री. एम्. आर्. राजगोपाळ यांनीही केले आहे.

'जननी जन्मभूमिश्च स्वर्गादपि गरीयसी' यासारख्या पंक्तीतून भारतीयांची राष्ट्रभक्ती उत्तम प्रकारे व्यक्त झाली आहे. परंतु आधुनिक काळात विशिष्ट परिस्थितीमुळे या भावनेला जाज्वल्य स्वरूप प्राप्त झालेले दिसते. उदा. भारतीगीता (V. R. Laxmi अम्मल, १९५०)

१९१६ ते २०१६ हा कालखंड आपण निवडलेला आहे. या कालखंडामध्ये 'संस्कृत' मध्ये झालेली स्थित्यंतरे याचा विचार करताना काही प्रमुख मुद्दे डोळ्यासमोर येतात. प्राचीन संस्कृत व अभ्यासासाठी निवडलेल्या शतकातील संस्कृत याचे अवलोकन केले असता, काही नवे प्रकार संस्कृतमध्ये रुढ झालेले आपल्याला दिसून येतात. तर काही प्रकार पुनरुज्जीवित झालेले दिसतात. या बदलाची सुरुवात साहित्य लेखनाच्या प्रयोजनापासून होते. युरोपीय संस्कृतीचा प्रभाव, यंत्रयुग, स्वातंत्र्य चळवळ ते संगणकयुग अशा स्थित्यंतरांचा प्रभाव संस्कृत वाङ्मयावरही दिसतो.

या शतकात आत्मचरित्रे, परकीय राजस्तुती, प्रवासवर्णन, शतककाव्ये, भाषांतरित साहित्य, कोशनिर्मिती, शास्त्रीय ग्रंथ अशा प्रकारात कमी-अधिक प्रमाणात लेखन झालेले दिसते. संस्कृत साहित्यामध्ये या शतकात पूर्णतः नवीन असलेला प्रकार म्हणजे 'नियतकालिके' होय. यामुळे संस्कृत प्रचार-प्रसाराचा वेग वाढला. तसेच अनेक व्यवहारातील इतर भाषीय शब्दांसाठी सार्थ संस्कृत प्रतिशब्द योजणेही काळाची गरज बनली. भाषासमृद्धीसाठी व भाषा, प्रवाही राहण्यासाठीची ही एक मोठी गरज असते.

स्वतःबद्दल संपूर्ण ग्रंथात ३-४ ओळी अप्रत्यक्षरित्या सांगण्याची परंपरा संस्कृतात असल्यामुळे आत्मचरित्रे हा प्रकार प्राचीन संस्कृतात आढळत नाही. मात्र अर्वाचीन संस्कृतात मात्र अल्प प्रमाणात तो दिसून येतो. त्यांचे प्रमाण नगण्य असले तरी तो एक नवीन प्रकार म्हणून ग्राह्य धरला जाऊ शकतो.

इंग्रज सत्ताधीशांचा प्रभाव वाढल्यानंतर साहजिकच संस्कृतात इंग्रज राजे-राण्या यांची स्तुतिकाव्ये लिहिली जाऊ लागली. व्हिक्टोरिया राणीचे चरित्र, यदुवृद्धवर्णनम् असे ग्रंथ निर्माण झाले.

अशा सर्व घटकांचा समावेश या लेखात करणे कठीण असल्याने स्थित्यंतरे दाखवण्यासाठी पुढील चार मुद्द्यांचा आधार येथे घेतला आहे. याद्वारेप्रातिनिधिक स्वरूपात स्थित्यंतराचा नमुना दिसू शकतो.

१) आधुनिक महाकाव्य -

अ) **वैनायकम्** - आधुनिक महाकवी म्हणून प्रख्यात असलेल्या डॉ. ग. बा. पळसुले यांनी स्वातंत्र्यवीर विनायक दामोदर सावरकर यांच्या जीवनावर वैनायकम् हे महाकाव्य लिहिले. वैनायकम् १६ फेब्रुवारी १९९८ रोजी प्रकाशित झाले. स्वातंत्र्यप्राप्तीसाठी लढलेल्या स्वातंत्र्यसैनिकांपैकी विनायक दामोदर सावरकर हे महाराष्ट्रातील जनतेचे प्रेरणास्थान बनले. पळसुले यांनीच उल्लेख केल्याप्रमाणे संस्कृत आणि सावरकर ही दाने त्यांची प्रेरणास्थाने. सावरकरांविषयी इतर भाषेत बरेच लिखाण झाले आहे. परंतु सावरकरांच्या कार्याची ओळख संस्कृतप्रेमींना संस्कृतमधून व्हावी, त्याचा काव्यरूपाने आस्वाद घेता यावा यासाठी डॉ. ग. बा. पळसुले यांनी 'वैनायकम्' हे महाकाव्य रचले. एकूण २५ सर्गात हे महाकाव्य लिहिले आहे. श्लोकरूपाने सावरकरांच्या जीवनातील प्रसंग उलगडून दाखवले आहेत. संस्कृत साहित्यातील स्थित्यंतरांमध्ये आधुनिक महाकाव्य या प्रकारात 'वैनायकम्' या महाकाव्याचा मोलाचा वाटा आहे.

ब) **भीमायनम्** - काव्यतीर्थ, काव्यकोविद प्रा. प्र. शं. जोशी यांनी डॉ. बाबासाहेब आंबेडकर यांच्या जीवनावर रचलेले 'भीमायनम्' हे आधुनिक संस्कृत महाकाव्य 'भीमायनम्' ची प्रथमावृत्ती २०११ मध्ये प्रकाशित झाली. महाकवी कालिदासासारख्या संस्कृत पंडितांची महाकाव्ये तर प्रसिद्धच आहेत. परंतु आधुनिक महाकाव्ये रचण्यात संस्कृत साहित्यिकांचा मोलाचा वाटा दिसतो. अशा आधुनिक महाकाव्यांपैकी एक म्हणजे भीमायनम्. डॉ. आंबेडकरांच्या जन्मापासून त्यांच्या परिनिर्वाणपर्यंतच्या काळात त्यांच्या आयुष्यात घडलेल्या घटना, त्यांना करावा लागलेला संघर्ष यावर हे महाकाव्य आधारित आहे. हे महाकाव्य २१ सर्गात विभागले असून त्यात एकूण १५८० श्लोक आहेत. डॉ. आंबेडकरांच्या जीवनातील लहानलहान प्रसंगही श्लोकरूपात या महाकाव्यात वर्णिलेले दिसतात. मराठी वाचकांना या महाकाव्याचा आस्वाद घेता यावा यासाठी प्रा. प्र. शं. जोशी यांनी मराठी भाषेत या महाकाव्याचा अनुवाद केला आहे. डॉ. बाबासाहेब आंबेडकर या महानायकाच्या जीवनाचा संपूर्ण अभ्यास करण्याच्या दृष्टीने संस्कृत साहित्यातील स्थित्यंतरांमध्ये 'भीमायनम्' हे महाकाव्य महत्त्वाचे ठरते.

२) नियतकालिके -

१९६६ साली 'काशीविद्यासुधानिधिः' नावाचे पहिले संस्कृत नियतकालिक सुरु झाले. त्यानंतर 'विद्योदयः', 'विद्यार्थी', 'आर्षविद्यासुधानिधिः' इ. नियतकालिके प्रकाशित होत राहिली. त्यातील बरीचशी काही काळात बंदही पडली. या काळात संस्कृतमधील स्थित्यंतराची नांदी म्हटल्यास वावगे ठरणार नाही. त्यानंतर २० व्या शतकाच्या पूर्वार्धात संस्कृत नियतकालिके जनमानसात रुजू होऊ लागली. याचे उत्तम उदाहरण म्हणजे संस्कृतम् (१९३०), मधुरवाणी (१९३७), संस्कृतभवितव्यम् (१९५०), दिव्यज्योतिः (१९५५), भारतवाणी (१९५७), शारदा (१९६०), विजयः (१९६१), सुधर्मा (१९७०) ही नियतकालिके होय.

३) कथावाङ्मय गद्य -

कथामुक्तावली - 'कथामुक्तावली' हा क्षमा राव यांचा लघुकथासंग्रह १९३४ साली हा लघुकथासंग्रह प्रकाशित झाला. पंचतंत्र, कथासरित्यागर हे कथासंग्रह सर्वांना परिचितच आहेत. परंतु क्षमा रावांनी स्वतःची लघुकथांची एक नवीन पद्धत अवलंबली. 'कथामुक्तावली' हे पुस्तक पंचतंत्र, कथासरित्सागर यापेक्षा पूर्णपणे निराळे आहे. कारण त्यातील तंत्र, संकल्पना पूर्णपणे वेगळ्या आहेत. या लघुकथांमध्ये भारतीय जीवन आणि भारताच्या विविध भागांवर दृष्टी टाकली आहे. मुख्यत्वेकरून काश्मिर, मुंबई, महाबळेश्वर यांचा अधिक उल्लेख जाणवतो. हे पुस्तक वाचण्यास, समजण्यास अतिशय सोपे आहे. पात्रे प्रभावी, संवाद नैसर्गिक वाटतात. ह्या पुस्तकात बरीच आख्याने आल्याने वेगळेपण दिसून येते. १९३८ मध्ये त्यांना 'पंडिता' ही पदवी तसेच पुढच्या चार वर्षांतच 'साहित्य चंद्रिका' ही उपाधी मिळाली. क्षमा राव ह्या स्त्रीवर्गाचे मोठे प्रेरणास्थान आहेत.

४) भाषांतरित झालेले साहित्य -

गेल्या १०० वर्षातील संस्कृत भाषेतील स्थित्यंतरे अभ्यासताना अनेक गोष्टी समोर आल्या. संस्कृत भाषेचा १०० वर्षांचा इतिहास पाहताना त्याच्या विशालतेची जाणीव झाली. सर्व घटकांचा समावेश या निबंधात करून घेणे कठीण असल्यामुळे अत्यंत उल्लेखनीय आणि खऱ्या अर्थाने लेखनरुढींना छेद देऊन नवीन लेखनशैलीतल्या विषयांवर असणाऱ्या पुस्तकांचा आढावा या लेखात घेत आहोत.

गेल्या १०० वर्षांचा विचार करताना मे १९६२ मध्ये प्रकाशित झालेले 'सुबोधस्तोत्रसंग्रह' हे पुस्तक उल्लेखनीय वाटते. याकाळातील पुस्तकांमध्ये हे सर्वात वेगळ्या धाटणीचे पुस्तक म्हणावे लागेल. 'श्री. आद्यशंकराचार्यकृत' सुबोधस्तोत्रसंग्रहाचे मराठी अनुवादासह विवेचन केलेले या पुस्तकात दिसून येते.

डेक्कन कॉलेज, पुणे येथील साहित्य विशारद, सीनिअर शास्त्री, न्यायाचार्य, आयुर्वेदाचार्य, महामहोपाध्याय डॉ. पांडुरंगशास्त्री गणेशशास्त्री गोस्वामी यांनी या पुस्तकाचे लेखन केले आहे. सुरुवातीला स्तोत्रानुक्रम आणि त्यानंतर विषयानुक्रमही या पुस्तकात दिसून येतो. यामुळे विषयानुसार वाचकांना स्तोत्र शोधणे सोपे जाईल, असा वाचकांविषयी विचार केलेला दिसून येतो. श्री. शंकराचार्यांचे संक्षिप्त चरित्र पुस्तकाच्या पूर्वार्धात सांगितले आहे. आचार्यांच्या जीवनातील प्रत्येक महत्त्वाच्या घटनेचा उल्लेख आणि त्याचे विश्लेषण यात दिसून येते. यामुळे पुढील सर्व स्तोत्रे ज्यांची आहेत, त्या आद्यशंकराचार्यांचे आयुष्य वाचकाला समजून घेता येते. काही छायाचित्रांचाही समावेश या पुस्तकात केलेला दिसतो.

यापूर्वीच्या काही पुस्तकांत शंकराचार्यांच्या कार्याविषयी उल्लेख येतात. स्तोत्रांचेही विवेचन दिसते. परंतु या पुस्तकात मात्र आचार्यांच्या संक्षिप्त चरित्रासह तब्बल ४६ स्तोत्रांविषयी मराठी अर्थासह विवेचन दिसून येते. स्तोत्रसंग्रहातील काही स्तोत्रांना आद्यशंकराचार्यांच्या आयुष्यातील काही घटनांची पार्श्वभूमी आहे. त्या स्तोत्रासमोर तळटीपांमध्ये ती पार्श्वभूमी लेखकाने लिहिली आहे. हीसुद्धा एक उल्लेखनीय बाब म्हणावी लागेल. श्री शंकराचार्यांच्या फक्त देवतांच्या स्तुतीवर आधारित स्तोत्रेच नाही तर आत्मा, प्राणायाम, योग्य, तत्त्वज्ञान, शारीरिक ज्ञान, विश्व ही संकल्पना, प्रलय, अध्यात्म अशा सर्व विषयांची स्तोत्रे या स्तोत्रसंग्रहात दिसून येतात. म्हणूनच या शतकातील पुस्तकांमध्ये हे पुस्तक उल्लेखनीय ठरते. इतर विषयांबरोबर आद्यशंकराचार्यांच्या जीवनपटासह त्यांचा स्तोत्रसंग्रह प्रकाशित होणे, ही त्या काळची वेगळेपण असणारी बाब ठरते.

२१ व्या शतकातील संस्कृतातील स्थित्यंतर म्हणजे संस्कृत आंतरजालावर (इंटरनेटवर) उपलब्ध होणे. आंतरजालावर संस्कृत नियतकालिके, शब्दकोश, याचबरोबर संशोधन इ. बाबत माहिती सतत अद्ययावत होत असते. तसेच आंतरजालाद्वारे संस्कृत शिक्षण, भाषांतराची साधने, ग्रंथालय असे अनेकविध उपक्रम शैक्षणिक संस्था, महाविद्यालये, विद्यापीठे यांच्यातर्फे राबवण्यात येत आहेत.

अशा प्रकारे इतर भाषा व साहित्य याप्रमाणे संस्कृत भाषेमध्येही स्थित्यंतरे होत आहेत.

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JOURNEY OF GERMAN LITERATURE

Aishwarya Subhedar (T.Y.B.A. German)

The emergence of Germany was itself a sudden change when a Roman commander Julius Caesar referred to the unconquered area, east of the Rhine as Germania distinguishing it from France his ruling Roman Empire.

As the German territory develops and language being the basic means of communication has been subject to constant change brought about by changing condition, migration of people. The German language has gone through many evolutionary processes and shows many regional variations. Today German is one of the most widely spoken language worldwide. It is the official language in Germany, Austria, Switzerland, it is also spoken in Belgium, Luxemburg and the bordering areas of Poland. German is a polycentric language (one can easily read it after knowing the pronunciations) and is notable for its broad spectrum of dialects with many unique varieties existing in Europe and also other parts of the world. German is the first language of about 95 million people worldwide and the most widely spoken native language in European Union. It is also the third most widely taught in both the US and the EU and the second most commonly used scientific language. As the impact of the language grew in the literary and the artistic works, German language paved its way to make its position in world literature.

The German literature has gone through many Epochs (Era) which has influenced the world. The changes in the literary field took place from

- Middlealter (1140-1450).It was a literary and cultural movement which influenced the art and architecture of these times.
- German Renaissance which was an artistic and cultural journey which spread in 15th and 16th centuries among the German thinkers. Germany invented Printing.
- Martin Luther initiated the Reformation movement of the church which led to its split into Catholics and Protestants.
- Barock (Baroque 1600-1720) which was one of the most important times in German literature. 1618-1648 was the time of Thirty years war. It was reflected in the writings of that period. Baroque was originally a movement of the European Architecture and Art. There were many new rules introduced in the literary fields for the clarity of language, style, verse and rhyme by Martin opitz.
- Aufklärung (The Enlightenment period 1720-1785) was a philosophical and literary movement. It was known as the “Beginning of the Modern times”. The principal goals of Enlightenment thinkers were Liberty, Fraternity, and Reason. Immanuel Kant, Gotthold Ephraim Lessing, Johann Christof Gottshed and Christian Gellert are known as the important authors of this era.
- Sturm und Drang (storm and impulse period 1767-1785) It was the next phase of Aufklärung and was a Proto-romantic movement in German literature in which individual subjectivity and in particular extremes of emotion were given free expression in reaction to the perceived constraints of rationalism imposed

by the Enlightenment. 'Genie' was an important term used for the people of this time who stood for their opinion and criticized the dominating rules of the society. It was also called as the 'Genie Period'.

- Klassik (Classicism 1786-1805) was a German literary movement which established a new Humanism. The Humanism was the basic principle. It was known as the blooming time for the literature. This time was represented by the two famous writers Johann Wolfgang von Goethe and Friedrich Schiller. It was also called as Weimar Klassik as Weimar was the city where Goethe and Schiller wrote many of their works.
- Romantik (Romanticism 1798-1835). Romantik means something wonderful, adventurous, and full of fantasies. It was an intellectual movement in artistic literary field of Germany. People criticized the tension in the daily worlds and chose to live in a world of fantasies which was better than the real world. Heinrich Heine was a famous poet of this time.
- Biedermeier, Vormärz, Young Germany (1815-1848). Biedermeier was an imaginary character created by Adolf Kussmaul and Ludwig Eichrodt, who portrayed people in this time who always thought of their private life and not about the society. It was the end of the Napoleon's rule in Europe. There were many new rules implemented and there was reformation of 39 German cities which were affected by the Napoleon's rule. Satire was a very famous literary form in this time. Vormärz and Young Germany was a movement initiated by the common people. It was the time before March Revolution. There was fast development of Economy, Technology and Industry but there was social emergency and dissatisfaction amongst the people because of the increasing political suppression in Germany. The main aim of the representative of this time was renewal of the literature. Poems, Novels, Letters, Pamphlets were some of the literary forms in this time. Many writers and their work which were against the political conditions were banned on 10th December 1835.
- Realismus (Realism 1850-1890). It was an attempt in the literary field to present the society objectively truthfully without artificiality. Realistic art was created in these times. Theodor Fontane was one of the famous writers in these times.
- Naturalismus (Naturalism 1880-1900). It was mainly an unorganised movement, that depicted protest against the grievances in everyday reality. Arno Holz, Johannes Schlaf were the authors during Naturalism.
- Impressionismus (1890-1920). It was a literary and artistic movement. It was denial of the naturalism. Stefan George, Stefan Zweig, Hugo von Hofmannstahl were the writers of these times.
- Symbolismus (Symbolism 1890-1910). It was a movement in art and literature. It was an anti-naturalistic movement. It represented the reality.
- Expressionismus (Expressionism 1910-1925) this was the time during First World War. The literature in this period varied from optimistic to pessimistic. Rainer Maria Rilke was one of the famous writers of this time.

- Literature during Weimar Republic (1919-1932). The Authors of this time portrayed the social reality through their writings. 'Neue Sachlichkeit' (New Objectivity) was the main motive of this time.
- Literature during Nazi period (1933-1945) which was produced in Germany was under the rule of the Dictator Adolf Hitler. During his regime the authors and their writings were banned, the works of those who wrote against him and his party NSDAP.

The relations between India and Germany have always been cordial since the end of World War 2 India maintained diplomatic relations with both West Germany and East Germany and supported their reunification in 1990. In the year 1914 the first German lessons in India were imparted in Pune and Mumbai. It all started in Pune with a home-comer from Germany, the Linguist Pandurang D.Gune, who returned to his homeland in 1913 after obtaining a doctorate from the University of Leipzig and started teaching German in New English School. In 1924 Fergusson College introduced German language and literature initially as general subject and later on as a major subject. Over the years many other schools and colleges in Pune and Mumbai introduced German lessons, for example S.P College from Pune and St. Xaviers College in Mumbai. One of the graduates of German in Pune went to Kolhapur to teach German. Therefore in addition to the study of the language, German literature and history also became a pivotal part and was widely spread in other parts of India, becoming an important subject. Thus the study of German literature and culture flourished impacting Indian youth remarkably.

Academic Department of German at various Universities studies the field of Humanities (Academic Disciplines that study human culture) that researches documents and disseminates German language and literature in both historic and present forms. The classes include the History of Germany and Culture. Common German names for the fields are 'Germanistik', 'Deutsche philologie', 'Deutsche Sprachwissenschaft', und 'Literaturewissenschaft'. In English the terms 'Germanistics' or 'Germanis' are sometimes used and the subject is more often referred to as 'German Studies', 'German language and literature', or 'German philology'.

The study of German Literature is divided into two parts 1) 'Altere Deutsche Literature': It deals with the period from the beginning of German literature in the early middle ages up to the post medieval times around AD 1750. 2) 'Neuere Deutsche Literature: It covers the literature after 17th century till the modern era. It systematically examines German literature in terms of Genre, Form, Context, and Motifs as well as looking at it historically by authors and epochs.

Conclusion:

Today German language is the most learnt and taught foreign language in India. Almost 700 educational institutions in India have German as an optional subject and many of the colleges have German as the major subject. In recent years German has been linked to the fields of Communication, Cultural studies, Media studies, Science and Technology, Automotive and Engineering. Due to globalisation and outsourcing, German has found its way in many areas of Development even in Human Resource, Aerospace Technology, and Atomic Energy. There are almost 300

Companies in and around Pune in collaboration with Germany. The language has even spread in areas of films. More than half of the Bollywood films are dubbed and watched in Germany. In various cities of Germany there are fans of Bollywood actors and actresses. Many Cultural exchange programmes are being organised in India and Germany and the response to these events is tremendous.

Looking at the present scenario, one can say that German language and Indo-German relations have a very bright future.

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EMINENT INDIAN STATISTICIANS IN LAST CENTURY

Bhakti Damle (T.Y.B.Sc. Statistics), **Ravina Yeole** (T.Y.B.Sc. Statistics)

In today's modern era, decisions in human life have to be taken in the environment of uncertainty. In our life, while taking vital decisions about education, career, jobs, marriage, housing, proper investments etc., we pray to Good Lord Chance to bring us luck.

The Government wants to forecast the state of economy in coming future from the available data on various factors. The Government needs to infer from facts and figures for planning and policy making. Those in business would like to know the future demand of their products, Doctors try to diagnose the disease of a patient on the basis of numerous tests or information given by a patient, Scientists question whether their experimental data supports a particular theory or not, meteorologists forecast weather and rainfall. Common man tries to find out whether a new car has more mileage than other or certain edible oil helps to reduce cholesterol, prediction about food grains, forecast of rainfall etc.

These all are very simple questions for which there are no definite answers. Apparently, uncertainty in the life makes it little bit impossible to give precise answer. Yet we are in search of that precise answer in personal as well as social stratum. We have developed the method of reasoning by which we can make optimum decisions or minimize the risk involved in decision. Such a method of reasoning is known as inductive reasoning which is mostly used in today's Statistics.

Statistics is the subject which offers many database methods to solve real life problems in many fields. There are great thinkers and statisticians who helped to solve many real life problems. Among them Indian statisticians Prof. P. C. Mahalanobis and C. R. Rao are more noteworthy.

Prof. P. C. Mahalanobis

Prof. Mahalanobis, born in a well-to-do progressive Brahmo family in 1883, had gone to study in Cambridge in 1913 and in 1915 had just finished his Tripos in Physics. And, the amazing fact is that, Prof. Mahalanobis taught himself statistics during early part of 20th century and began practicing statistics from his own home in Calcutta, sometimes in the twenties. Statistics, in the modern sense was born in India through the pioneering studies of Prof. Mahalanobis. Prof. Mahalanobis combined his exceptional flair for empirical studies and decision making, in raising statistics to awesome heights. He also investigated and solved many theoretical problems in statistics, virtually all of which arose from empirical studies.

Prof. Mahalanobis set up the Statistical Laboratory in the Presidency College sometimes in the twenties. In 1931, the Indian Statistical Institute was founded as a registered society and appears to have been housed at Statistical Laboratory. Almost all statistical work that was being done in India in the twenties and thirties was done by P. C. Mahalanobis, his colleagues and his students at Statistical

Laboratory. He called for the industrialization of India on the basis of accelerated development of the state sector and centralization of material and monetary resources in the hands of the state and favored the simultaneous further development of small enterprise. In addition to his anthropometric studies, Prof. Mahalanobis initiated statistical applications to meteorology and flood control. He played significant role in the formation and development of economic and scientific ties between India and the USSR.

Let me quote something from Prof. C. R. Rao about Prof. Mahalanobis's scientific work.

“Such was the man who combined his great intellect and vision with an unlimited capacity for work and brought reputation to the country by his achievements. No one in history could achieve anything great unless he was tough, could act boldly with faith in his convictions, and had the ability to argue... and get things done. Mahalanobis had all these traits in good measure...Statistical science was a virgin field and practically unknown in India before the twenties.... It needed a pioneer and adventure like him, with ... courage and tenacity to all opposition...In India, traditionally there have been no organization set-ups to cause progress in knowledge and advance society. In countries where such organizations exist, individuals have only been instrumental for action. The reverse has been true in India. Individuals dominated the scene, as even now, both in science and in politics...”

As a scientist, Prof. Mahalanobis combined an exceptional flair for empirical studies, especially those which are necessary and important for understanding a society planning and making decisions for it. He brought to his studies an unerring intuition for capturing the essence of a problem and a genius for evolving simple but effective tools for analyzing it.

Prof. Mahalanobis was no exception. He was the boss of the Institute, and an ‘impossible boss’ according to some.... but we do not have any example in India where collective thinking and multilevel responsibilities have yielded fruitful results in public enterprises or educational institutions. Thus, the Ministry Of Statistics and Program Implementation (MOSPI) , Government of India celebrate 29th June, that is birth anniversary of Prof. P. C. Mahalanobis, as Statistics day every year in recognition of his notable contribution in statistics.



(29th June 1893-28th June 1972)

The following are the significant events in India, related to the work of Prof. P. C. Mahalanobis.

- 1895 Establishment of the Statistical Bureau in Calcutta
- 1905 Establishment of Department of Commercial Intelligence and Statistics in Calcutta
- 1931 Founding of the Indian Statistical Institute
- 1931 Creation of the Imperial Indian Council of Agriculture Research with a Statistics branch
- 1933 Starting of 'Sankhya', the Indian Journal Statistics
- 1938 First All Indian Statistical Conference
- 1939 One year training course in Statistics started by the ISI
- 1941 Calcutta University introduces graduate courses, for the first time in any Indian university, leading to master's degree in Statistics
- 1942 Indian Science Congress includes, for the first time, Statistics as a part of the section on Mathematics
- 1950 Establishment of National Sample Survey, the first large scale multipurpose survey in the World
- 1951 27th session of the International Statistical Institute held in New Delhi
- 1951 Establishment of the Central Statistical Organization and State Statistical Bureaus

Honors

- Weldon Memorial Prize from the University of Oxford (1944)
- Fellow of the Royal Society, London (1945)
- President of Indian Science Congress (1950)
- Fellow of the Econometric Society, USA (1951)
- Fellow of the Pakistan Statistical Association (1952)
- Honorary Fellow of the Royal Statistical Society, UK (1954)
- Sir Deviprasad Sarvadhikari Gold Medal (1957)
- Foreign member of the Academy of Sciences of the USSR (1958)
- Honorary Fellow of King's College, Cambridge (1959)
- Fellow of the American Statistical Association (1961)
- Durgaprasad Khaitan Gold Medal (1961)
- Padma Vibhushan (1968)
- Srinivasa Ramanujam Gold Medal (1968)

C. R. Rao

In an article entitled 'The Statistical Century' published in Royal Statistical Society News (Vol. 22, No. 5, January 1995, the distinguished American Statistician Bradley Efron mentions the prominent place in statistical history that, C. R. Rao has rightfully earned by his work. He writes,

"Karl Pearson's famous chi-square paper appeared in the spring of 1900, an auspicious beginning to a wonderful century for the field of Statistics. The first half of the century was 'golden age' of statistical theory, during which our field grew from ad hoc origins similar to the current state of computer science, into firmly grounded to

mathematical science. Men of intellectual caliber of Fisher, Neyman, Pearson, Kolmogrove, Hotelling, Wald, Cramer and Rao were needed to bring statistical theory to maturity.”

In the very early stages of his career, he developed the tools for estimating unknown parameters when sample size is small. The methods are based on results he derived at 25 years of his age and they have found permanent place in statistical literature as the ‘Cramer-Rao inequality’. At the same time, he was working on the adjustments of observations subject to error, in order to estimate the underlying parameters, a topic which has been under investigation for last 200 years by astronomers, including famous mathematician, Gauss. He made some extensions to Gauss’s theory of estimation by least squares, following work of R. C. Bose, one of his teachers in Indian Statistical Institute (ISI) where he studied as a student and worked later as a researcher. He also analyzed large sets of anthropometric data to determine affinities between populations using the Mahalanobis distance, named after one of his mentors at ISI. He introduced what is called the Rao’s U-test for proper choice of measurements in such studies. These contributions were not only significant in their enormous impact but also more outstanding, considering that C. R. Rao made them all before he was 26 years of his age. He did all his research based on knowledge he acquired in India through his university Andhra and Calcutta and after reading original articles in journals and interacting with other research workers at ISI.

C. R. Rao’s research activities at the ISI in Calcutta where he became a professor and Director of the Research Training School (RTS) at 28, consumed a lot of his time and energy. He was focused as well as he had to spend a lot of energy on the administrative tasks needed to keep a large organization like ISI with workforce of about 2000 employees. He had to keep in touch with the research projects of different scientists, give them advice on their projects and statistical methods they were using and also oversee the collaborations between scientists in different areas working on interdisciplinary projects. As an administrator, C. R. Rao pioneered of the ISI making it more democratic and distributing power to the researcher in order to ensure its continued growth. In addition to overseeing research, he was instrumental in shaping the training programs of ISI. B.Stat, M.Stat and Ph.D. in statistics were introduced at the ISI during his tenure as Director of RTS and he was deeply involved in developing and administering the curriculum and programs leading to these degrees. He also guided the research work of numerous students for their Ph.D. Not only that, C. R. Rao also developed various programs to train statistical personnel to work in government and research organizations and directed the activities of the International Statistical Educational Center (ISEC) which is located at ISI to train statisticians from South-East Asia. And thus, ISI became internationally known as center for advanced learning and research in statistics. **C.R. Rao was the founder of Indian Econometric Society and Indian Society for Medical Statistics which hold conferences every year to discuss problems of current interest.**

Rao has received 38 honorary doctoral degrees from universities in 19 countries around the world and numerous awards and medals for his contributions to statistics and science. He is a member of eight National Academies in India, the

United Kingdom, the United States, and Italy. Rao was awarded the United States National Medal of Science, that nation's highest award for lifetime achievement in fields of scientific research, in June 2002. The latest addition to his collection of awards is the India Science Award for 2010, the highest honour conferred by the government of India in scientific domain. He has most recently been honoured with his 38th honorary doctorate by the Indian Institute of Technology, Kharagpur, on 26 July 2014 for "his contributions to the foundations of modern statistics through the introduction of concepts such as Cramér–Rao inequality, Rao–Blackwellization, Rao distance, Rao measure, and for introducing the idea of orthogonal arrays for the industry to design high-quality products." (Rao's 37th honorary doctorate was given to him by the State University of New York at Buffalo at its 167th commencement in May 2013.) He is indeed a fine example of an Indian scientist producing top quality work under the adverse socio-economic-political realities of life in India, to whom, we can consider hundred percent Indian bred scientist since several of his significant contributions were made before he stepped of Indian soil.



Awards and medals :

- Sardar Patel Life time Achievement Award (Sardar Ratna) of the Sardar Patel Foundation India (2015)
- Guy Medal in Gold (2011) of the Royal Statistical Society
- India Science Award 2010 (the highest award in a scientific field presented by government of India)
- International Mahalanobis Prize (2003) of the International Statistical Institute
- SrinivasaRamanujan Medal (2003) of the Indian National Science Academy
- President George W. Bush, on June 12, 2002, honoured him with the National Medal of Science, the highest award in U.S. in the scientific field, as a "prophet of new age" with the citation, "for his pioneering contributions to the foundations of statistical theory and multivariate statistical methodology and their applications, enriching the physical, biological, mathematical, economic and engineering sciences."
- Padma Vibhushan (2001) by the Government of India
- Mahalanobis Centenary Gold Medal (1993?) of the Indian Science Congress
- Wilks Memorial Award (1989) of the American Statistical Association
- Padma Bhushan (1968)

- MegnadhSaha Medal (1969) of the Indian National Science Academy
- Guy Medal in Silver (1965) of the Royal Statistical Society
- S. S. Bhatnagar Award (1963) of Council of Scientific and Industrial Research
- JC Bose Gold Medal of the Bose Institute
- Gold Medal of the University of Calcutta
- He was also awarded an honorary Doctor of Science by the University of Calcutta in 2003. Also honorary doctorates from a number of universities and institutes around the world.

In his honor

- The Pennsylvania State University has established C. R. and Bhargavi Rao Prize in Statistics,
- CR Rao Advanced Institute of Mathematics, Statistics and Computer Science
- National Award in Statistics established by Ministry of Statistics and Programme Implementation (MoSPI), Government of India.
- The road from IIIT Hyderabad passing along Central University of Hyderabad crossroads to Alind Factory, Lingampally is named as "Prof. C.R. Rao Road"

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 "Mahalnobis :The Scientist"



JOURNEY OF INDIAN STOCK MARKET

T. P. V. Ratnasri (M. Com. Part II)

*You have to learn
that there's a company behind every stock,
and that there's only one real reason why stocks go up.
Companies go from doing poorly to doing well or
small companies grow to large companies.
- Peter Lynch.*

Introduction :

Unlike the new issue market, stock market deals in second hand or existing securities. Only individuals can buy and sell securities. This facility is not provided for corporations and partnership firms. In the stock market only those securities which are listed in stock market are transacted. Stock Markets safeguard the interest of investing public who have dealings on exchanges as well as its members. It promotes, develops and maintains a well regulated market for dealing in securities.

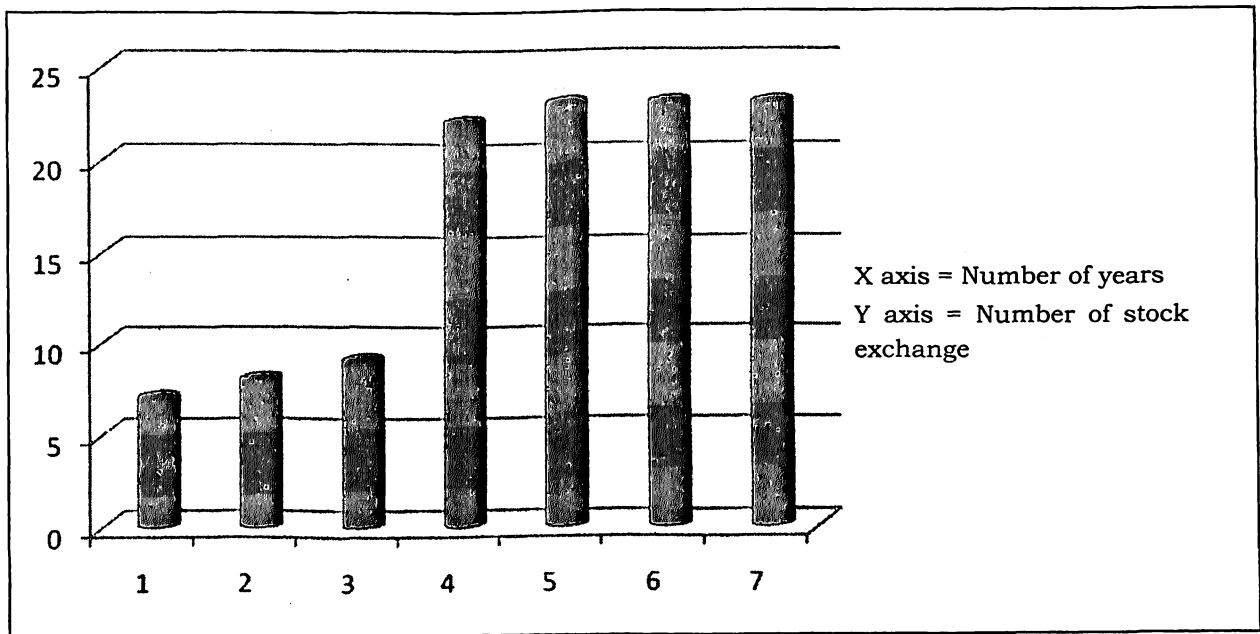
Indian Stock market consists of 23 Stock markets till date out of which the BSE and the NSE are the dominating ones.

The following table shows the stock market development in India from 1961 to 2003:

Stock market development in India

Year	Number of Stock Exchanges	Number of Listed Companies	Market Capitalization (Rs. Billion)
1961	7	1203	12
1971	8	1599	27
1981	9	2265	68
1991	22	6229	1103
2001	23	9871	11926
2002	23	9644	7493
2003	23	9413	6319

Graph showing increase in the number of stock exchanges from 1961 to 2003.
Graph showing increase in the number of stock exchanges from 1961 to 2003.



As mentioned earlier there are 23 Stock Exchanges in Indian Stock Market.

List of Stock Exchanges in India

1. Bombay Stock Exchange
2. National Stock Exchange
3. Ahmadabad Stock Exchange
4. Bangalore Stock Exchange
5. Bhubaneshwar Stock Exchange
6. Calcutta Stock Exchange
7. Cochin Stock Exchange
8. Coimbatore Stock Exchange
9. Delhi Stock Exchange
10. Guwahati Stock Exchange
11. Hyderabad Stock Exchange
12. Jaipur Stock Exchange
13. Ludhiana Stock Exchange
14. Madhya Pradesh Stock Exchange
15. Madras Stock Exchange
16. Magadh Stock Exchange
17. Mangalore Stock Exchange
18. Meerut Stock Exchange
19. OTC Exchange of India
20. Pune Stock Exchange
21. Saurashtra Kutch Stock Exchange
22. Uttar Pradesh Stock Exchange
23. Vadodara Stock Exchange

Bombay Stock Exchange (BSE):

At the close of the eighteenth century when East India Company was a dominant institution, businesses in loan securities of the company used to be transacted. The Indian Stock Market is considered to be one of the **oldest** stock markets in Asia. During 1830s stocks and securities were purchased and sold in **Banks and Cotton presses in Bombay**. The stock brokers used to come together to trade under a banyan tree opposite Town Hall of Bombay. The number of brokers increased from 60 to 250 during the 1960s and the 70s. The **Bombay Stock Exchange (BSE)** came into existence in **1875**. **Premchand Raychand** who was a leading stock broker set out various traditions and procedures for trading of stocks at BSE. His methods are being followed in BSE till date. **The Securities Contract (Regulations) Act, 1956** recognized BSE as the first stock exchange in the country.

The Indian Stock market experienced a major boost during the era of our Late Prime Minister Mr. Rajiv Gandhi. The Indian Stock Market was a bull market during 1985 to 1986. The then Finance Minister, Mr. V.P. Singh, made some remarkable changes in long-term fiscal policy for the Union government. The government at that time cut down income tax to 50% which was 66% earlier and this attracted the investors to invest in our stock markets. This was the first record of bull market. But the occurrence of Bofors scandal shook India's confidence. The end of 1986 witnessed a bear market which lasted till 1988.

The **Foreign Exchange Regulations Act, 1973** limited the share holdings of foreign companies to 40%, if they wanted their companies to be set up in India. In order to attract the public these companies offered shares at attractive rates. This helped individual investors to invest in Indian stock market. The positive response given by the public encouraged the domestic companies to come up with public issues. People were enthusiastically investing in stock market because they were earning more, than in case of other investments. The Stock Market in India began to broaden during this period.

Foreign investments are classified into two categories i.e. FDI (Foreign Direct Investment) and FPI (Foreign Portfolio Investment). Investment in which investors take part in day to day management and organization of the company are considered as FDI. Whereas investments in shares without any control over management and other organizations are considered as FPI.

The emergence of **New Economic Policy 1991** boosted up the Indian stock market. The bulls were on the run with the entry of foreign investors investing in various sectors of our country. The India stock market experienced a major crash down when **Mr. Harshad Mehta's** stock market scam was exposed. The bull market became a bear market with the exposure of this scam. **This Great Indian Stock Market Scam** is considered to be another major event in the history of Indian stock market.

Stock market is a part of Capital market. In India before the establishment of SEBI, the **Capital Issues (Control) Act, 1947** governed capital issues in India. In 1992, the Capital Issues (Control) Act, 1947 was repealed and all controls relating to raising of resources from the market came to an end. Since then the people issuing securities could raise the capital from the market without requiring any

consent from any authority either for making the issue or for deciding its prices. Restrictions on rights and bonus issues have also been removed. New as well as established companies are now able to price their issues according to their assessment of market conditions. This contributed to the increase in stock market during 1990s.

Carry Forward Badla:

Badla or Carry Forward was invented in BSE. It is a deal between the bull and the bear market in which the bull asks the bear to carry forward the settlement of securities to the next cycle. Badla was allowed till 1993 but it was later banned in 1994 by SEBI. In Feb 1995 a three member committee was appointed by SEBI to review badla and its report was submitted in 1997. According to the report carry forward or badla is allowed only till 90 days.

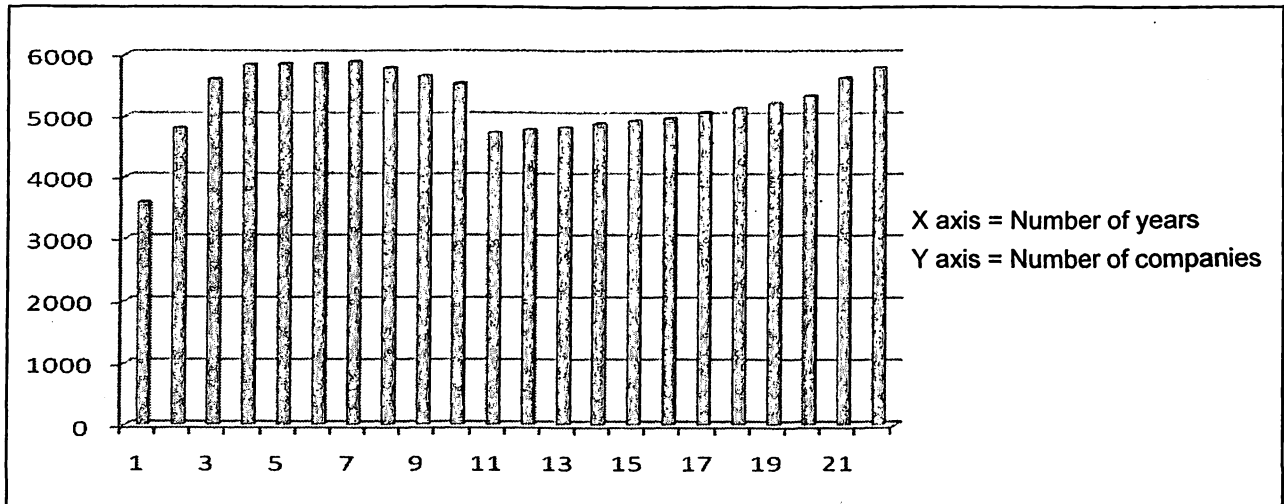
Earlier BSE had an open outlay system of trading but now it has shifted to a fully computerized mode of trading known as BOLT (BSE On-Line Trading) system which started in 1995. BSE 30 senses is the Benchmark Index of Indian Capital Market. It is constructed by 30 scripts and is the first index constructed by Bombay Stock Exchange. SENSEX is calculated by using Free float Market Capitalization methods.

The following table shows the trends in development in Bombay stock exchange:

Trends in development in Bombay Stock Exchange (BSE)

Year	Number of Listed Companies	Market Capitalization of Listed Companies (Rs. Crores)	Level of BSE Sensex
1993-1994	3585	368071	3778.99
1994-1995	4802	435481	3260.99
1995-1996	5603	526476	3366.21
1996-1997	5832	463915	3360.89
1997-1998	5853	560325	3892.75
1998-1999	5848	542942	3739.96
1999-2000	5889	912842	5001.28
2001-2002	5782	612224	3469.00
2002-2003	5650	572197	3049.00
2003-2004	5528	1201207	5591.00
2004-2005	4731	1698428	6493.00
2005-2006	4781	3022191	9397.93
2006-2007	4821	3545041	13786.91
2007-2008	4887	5138015	20286.99
2008-2009	4929	3086076	9647.31
2009-2010	4975	6155620	17464.81
2010-2011	5067	6839084	20509.09
2011-2012	5133	6214912	15454.92
2012-2013	5211	6387887	19426.71
2013-2014	5336	7415296	21170.68
2014-2015	5624	10149290	27499.42
2015-2016	5788	9340276	26117.54

The following is the graph showing the number of companies listed in BSE from 1993 to 2016



As shown in the graph above the period from 2008 to 2009 has shown a reduction in the market capitalization as well as the level of BSE Sensex. India witnessed depression during this period. Today BSE is considered to be the fourth largest stock exchange in Asia and the eleventh largest in the world.

National Stock Exchange (NSE)

The setting up of NSE is considered to be a landmark in the history of Indian Stock Market. The **National Stock Exchange (NSE)** came into existence in **1992**. The main reason for the setting up of NSE was to **bring transparency** to the Indian capital market. It got recognition of stock exchange in 1993 under the Securities Contract (Regulation) Act, 1956, when P.V.Narasimha Rao was the Prime Minister of India and Manmohan Singh was the Finance Minister. NSE consists of global as well as domestic investors. The key investors are Life insurance Corporation of India, State Bank of India, IFCI Limited, and Stock Holding Corporation of India Limited. NSE started operating in the **Wholesale Debt Market (WDM)** segment in June 1994. The Wholesale debt market or money market is a place where pure debt instruments such as treasury bills, government securities, public sector bonds, corporate debentures, etc are traded. Within a year NSE's turnover exceeded that of BSE's. In India, NSE is the leading stock exchange covering more than 160 cities and towns across the country. The establishment of NSE was an attempt to overcome the fragmentation of regional markets by providing a screen system which transcends geographical barriers. The joint venture between NSE and **CRISIL** limited is known as **IISL**. The NSE has certain subsidiaries. They are:

- 1) National Securities Clearing Corporation (NSCC)
- 2) Indian Index Services and Products Limited (IISL)
- 3) National Stock Exchange of India Limited (NSEIT)
- 4) National Securities Depository Limited (NSDL)
- 5) Dot Ex International Limited (Dot Ex)

NSE operates on the '**National Exchange for Automated Trading**' (**NEAT**) system; a fully automated screen based trading system. NSE has moved to

electronic trading system which helps in providing wider reach and ease in trading. NIBIS helps in providing trading information over the internet. The exchange applications are being handled by the use of latest software platforms like RDBMS, ORACLE 7, ORACLE FORMS 4-5, etc. The major indices of NSE are S&P CNX NIFTY, CNX NIFTY Junior, S&P CNX 500, CNX Mid cap, S&P CNX Defty, CNX Mid cap 200.

The instruments traded in NSE are equity shares, preference shares, warrants, debentures, units of mutual funds.

Since 1999 companies were allowed to **buy back shares**. Through buyback promoters reduce the floating equity stock in market. Buy back of shares helps companies to overcome the problem of hostile takeover by rival firms and others. NSE offers trading, clearing and settlement services in equity.

NSE has collaborated with several universities like:

- 1) Gokhale Institute of Politics & Economics (GIPE), Pune
- 2) Bharati Vidyapeeth Deemed University (BVDU), Pune
- 3) Guru Gobind Singh Indraprastha University, Delhi
- 4) Ravenshaw University of Cuttack
- 5) Punjabi University, Patiala

Difference between BSE and NSE:

Point of Difference	Bombay Stock Exchange	National Stock Exchange
i) Meaning	Bombay Stock Exchange is the oldest stock exchange in India. It is the first stock exchange which came into existence in Asia. It got recognition in 1957. It offers high speed trading to its customers.	National Stock Exchange came into existence with a view to bring transparency in trading system. It was incorporated in 1992 and got recognition as Stock exchange in 1993. It is the biggest stock exchange of the country
ii) Market Capitalization	BSE has a market capitalization of 1.7 trillion US dollar.	NSE has a market capitalization of 1.65 trillion US dollar
iii) Screen Based Trading.	BSE has a fully computerized mode of trading known as BSE OnLine Trading (BOLT) system	NSE operates on the 'National Exchange for Automated Trading' (NEAT) system, a fully automated screen based trading system
iv) Indices	The Index for BSE is SENSEX i.e. Sensitive Index	The index for NSE is NIFTY i.e. National Stock Exchange Fifty.

Point of Difference	Bombay Stock Exchange	National Stock Exchange
v) Total listed companies	BSE has approximately 5650 companies.	NSE has approximately 1740 companies
vi) Global rank	BSE stands 10th in Global ranking.	NSE stands 10th in Global ranking.
vii) Network	BSE has its network in around 400 cities	NSE has its network in around 2000 cities.

Over The Counter Exchange of India:

The OTCEI is India's first exchange for small companies and also the first screen based nationwide stock exchange in India. There is no central place for exchange in OTCEI and all trading is done through electronic network. The OTCEI was founded in 1990 and was later recognized as a stock exchange in 1992. The Over the Counter Exchange of India (OTCEI) became functional from September 1992. OTCEI was promoted as a nonprofit making organization and has been registered as a limited company under section 25 of the Companies Act 1956. OTCEI is a company limited by shares but because of its status under section 25 of the Companies Act 1956, it does not use the word 'Limited' with its name. OTC was the first stock exchange in the country to introduce state-of-the-art, screen based, automated trading systems. The OTCEI's unique depository system enables convenient and faster settlement for investors. It transfers delivery electronically to the purchased as soon as the trade is completed.

Depository system:

The OTCEI's depository system enables convenient and faster settlement. The settlement on OTC exchange takes place on a rolling basis three days after the day of trade. To overcome the problems of settlement, the problem of theft, forgery, manipulation, etc the depository ordinance was passed in 1995. The ordinance provided a legal base for establishment of depositories in securities. A company formed and registered under the Companies Act, 1956 can be registered as a depository by SEBI.

The Depository System has various functions. It is almost similar to banking system. A bank holds funds in account while a depository holds securities in account.

a) By setting up depository system the settlement of transaction which is done on any exchange is faster. The settlement cost is also reduced. Depository system provides facilities for depositing and withdrawing securities by investors at their convenience.

b) It provides online services to the customers and keeps a record of all the securities that have been deposited by the investors.

Depositories in India:

A depository is an organization where securities of share holders are held in electronic form at the request of shareholders through the medium of

depository participant. There are two depositories in India i.e. CDSL and NSDL. CDSL was promoted by BSE in 1999. The NSDL was the first Indian Depository which was established in the year 1996.

Rolling Settlement:

The rolling settlement is an important measure to enhance the efficiency and integrity of stock market. Under rolling settlement all traders executed on a trading day (T) are settled after certain days (N). This is called T+N rolling system. It means that trade is settled on the Nth day excluding the T day. Since April 2002, traders are settled under T+3 rolling system. In April 2003 the trading cycle has been reduced to T+2. The shortening of trading cycle has reduced undue speculations to stock markets.

Dmat Account:

In India, shares and securities are held electronically in a dematerialized account. The emergence of dmat account in 1996 marked the beginning of new paperless trading stock market trading environment. A Dematerialized account or Dmat account is opened by the investor while registering with an investment broker or sub-broker. The Dematerialized account number is quoted for all transactions to enable electronic settlements of trades to take place. The bonus shares allotted to the investor will be immediately credited into the customer's account. There is no risk due to loss on account of fire, theft or mutilation. It eliminates the risks associated with forgery and the instance of damaged stock certificates. The fees involved in Dmat accounts are account opening fee, annual maintenance fee, transaction fee, etc. The biggest advantage of having demat account is that you don't have to pay for stamp since these are electronically stored which reduces the transaction cost.

Steps involved in stock market trading:

The steps involved in stock market trading i.e. buying and selling of shares are as follows:

- 1) Finding a broker
- 2) Opening an account with the broker
- 3) Placing an order
- 4) Purchasing the shares

Conclusion:

Stock market is an important part of the economy of a country. The stock market plays a very crucial role in the growth of the industry and commerce of the country. This eventually has an impact on the economy of the country to a great extent. That is why the government, industry and even the central banks of the country keep a close watch on the happenings of the stock market. The stock market is important from both the industry's point of view as well as the investor's point of view. One of the important features of stock market is that it gives liquidity to the investment. Due to the existence of stock market people are being attracted

towards investment. They get to know about the position of the companies in the market.

Also Stock Market is a current affair. In today's scenario, many companies are emerging and so the study of stock market was felt. Stock market has a major control over the financial sector of our country. Stock market is the sign of a developing industrial sector and a growing economy of the country. The development of stock market during these 100 years and the new introductions in this journey has contributed towards making stock market an interesting subject of study.

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RECENT TRENDS IN ECONOMICS : REASON BEHIND THE EVOLUTION OF NEW THEORIES

Nidhi Bellay (T.Y.B.A. Economics)

Introduction

The past hundred years are crucial in the history of Economics because of the downfall of the initially dominant microeconomics Classical Thought^[1] and rise of the present macroeconomic Keynesian thought^[2]. Keynesian Economics evolved around 1930s at the time of the Great Depression^[3], an economic problem which the Classical Economics failed to understand. Keynesian economics did not only explain the causes of the Great Depression but also gave solutions to many other economic problems that the Classical Economics failed to address. However around 1970s the Keynesian economics was challenged by Milton Friedman^[a] when he proved that the Phillips curve^[4] does not exist. This gained mass acceptance after the 1973 stagflation^[5]. George A. Akerlof^[b] then introduced the concept of 'asymmetric information'^[6] in 1970. Akerlof's work was further carried on by Michael Spence^[c] and Joseph E. Stiglitz^[d] which led to the evolution of information economics^[7]. Information economics challenged many major theories of classical and Keynesian thought. Game theory^[8] further helped information economics to a great extent in solving monopolies^[11] of information. But what exactly were the situations that led to the above mentioned findings? Looking at the drawbacks and failures of economic theories, what can we say about the practical applications of the subject? How are the methods of research changing from mathematical to more behavioral? And does this change in the methodology have to do something with the present face of economics? These are the questions that we will try to address in this article.

So as mentioned earlier, it all started with the downfall of the classical economics when at the time of Great Depression (1930), classical economists' macro prescription of no government intervention failed. The most important element of the classical thought was that eventually (in the long run) the economy will tend to achieve full employment. This belief was supported by the Say's law^[9], (a contribution by a French economist J. B. Say^[e]) according to which 'supply creates its own demand'. They claimed that there were two major forces that ensure full employment in a market economy: interest rate adjustments and wage/price flexibility^{[10] [11]}.

John Maynard Keynes^[f] rejected the classical economics' belief of full employment condition in the long run and 'laissez faire'^[17]. His time was the time of technological and institutional changes which led to increase in economic development. The world became more complex and the simple models of classical economists were not enough to address the problems. Firstly, he saw that many product markets were monopolistic or oligopolistic (unlike the assumption of classical economics of the market being perfectly competitive). So when sellers in these markets noted that demand was declining, they often chose to reduce

output^[21] rather than lower prices. And secondly, in labor markets, due to the domination of strong labor unions, workers tended to resist wage cuts. As a consequence, wages and prices did not adjust quickly; they tended to be rigid or “sticky” especially downwards. Keynes also opposed the assumption of interest rate adjustment by saying that, firstly, interest rate has a negligible effect on the savers and the investors in the economy because the main motivation for the savers to increase savings is increase in income and that for the investors to increase investments is hike in profitability. Secondly, since not all the savers and investors are the same people, there is no point in finding equilibrium in savings and investments.

Keynes was in favor of government intervention (as against laissez faire belief of classical economists). Now how exactly the government was supposed to correct unemployment? Here comes the role of fiscal policy and monetary policy. Keynes emphasized on the role of money supply (monetary policy) and the role of taxation and government expenditure (fiscal policy). He emphasized on the use of fiscal policy with monetary policy acting like a mere subsidiary. The Keynesian economics prevailed and was widely accepted till 1960s. Even today most of the economists remain Keynesian.

Another theory that supports the Keynesian economics was coined by William Phillips [8]; He observed the British economy for the period of 1861-1957 and came up with the Phillips curve. According to Phillip’s curve, there is a short run trade-off between unemployment and inflation, i.e. increased levels of employment will result in high rates of inflation. Later on many other economists around the world (like Paul Samuelson and Robert Solow) observed the same scenario, and this theory was widely accepted. The major implication of this finding was for the government policy, i.e. the governments could tolerate a reasonably high inflation, with the help of policy remedies given by Keynes, as this would lead to lower unemployment. Many economies followed the trade-off between inflation and employment. This theory was put to test when the economies that applied Phillips curve faced stagflation in 1970s, which the Keynesian economics failed to explain.

Meanwhile, around 1947, Friedrich Von Hayek expressed that, “as if Keynes had been raised to sainthood after his death with economists refusing to allow his work to be questioned” (“interview: Friedrich Hayek on John Maynard Keynes – part 2”). He gathered around 40 intellectuals along with Milton Friedman to form Mont Pelerin Society^[13]. Milton Friedman was an American Economist who received Nobel Prize in 1976 for his research on consumption analysis, monetary history, and theory and complexity of stabilization policy. In 1960s he took a lead role in opposing Keynesian economics. He described his approach as using Keynesian language and apparatus yet rejecting its initial conclusion (Mark Skousen – *The Making of Modern Economics: the lives and ideas of the great thinkers* ISBN 0-7656-2227-0).

So coming back to the Phillip’s curve, Milton Friedman argued that Phillips curve did not exist in the long run. According to him in the long run the employees will notice the inflation, resulting in employment contracts that increase pay at rates near anticipated inflation. So in my view, practically there was no trade-off between inflation and unemployment, infact both of them will move in the same

direction if the inflation rises beyond the tolerance level of the economy. In order to correct this situation, Friedman stressed the importance of monetary policy (unlike Keynes) because in his view inflation was a monetary phenomenon.

Finally the new theories such as rational expectations and NAIRU (non-accelerating inflation rate of unemployment) explained the stagflation. Rational expectations came as a response to the critic of the assumption of "perfect information"^[14] found in most neoclassical models up until around the 70s and 80s, largely spearheaded by the Nobel-Prize winning economist, Robert Lucas.

Rational expectations theory defines expectations as being identical to the *best guess of the future* that uses all available information. Thus, it is assumed that outcomes that are being forecast do not differ from the market equilibrium results. It assumes that people do not make systematic errors when predicting the future, and deviations from *perfect foresight* are only random. In my view, this theory simply states that people observe the history and make the best implications of this information. Their observation is so strong or 'rational' that the expectations align with the actual situation in the future. For example, people take into account all the policies of the government in the past and notice a pattern and form expectations. If the people interpret that there will be inflation in the near future, they demand for wage rise which ultimately results into rise in inflation. So this means that people have complete information about the economy because what they predicted has actually happened. This theory supports the assumption of 'perfect information' in most of the economic models. It was soon challenged by Akerlof when he released his work on asymmetric information.

Along came the information economics, a major breakthrough in economics, in 1975 given by Stiglitz. In simple sense information economics is a branch of microeconomic theory that studies how information and information systems^[15] affect economic decisions. Information has characteristics which make it an important issue: it is easy to create but hard to trust, it is easy to spread but hard to control. It plays a vital role in decision making. An individual who has information can make better decisions than an individual without information. It affects consumption, employment, contracts and many other important areas of economics. Joseph E Stiglitz carried forward the work of Akerlof and Spence in analyzing the effects of information on various areas of economy. He shared with them a Nobel Prize for his 'analysis on markets with asymmetric information'. He showed that asymmetric information can provide the key to understanding many market phenomena, including unemployment and credit rationing.

Joseph E. Stiglitz witnessed inequality at a very young age and that influenced his thinking to a great extent. It can be noticed even in his work on information economics. He wanted the buyers and the sellers to be on the same page about the product when they transact. It wasn't necessary for them to have complete information, but have symmetric information. He always compared the economic models with the situations of the real world and noticed that there were way too many assumptions to regard those models as close to reality. "I have already noted in the introduction that *something* was wrong – seriously wrong – with the competitive equilibrium models which represented the prevailing paradigm when we went to graduate school"^[8]. One of the assumptions bothered Stiglitz the

most, which was of perfect information in the market. "The perfect information assumption was so ingrained it did not have to be explicitly stated" expressed Stiglitz. According to him it wasn't the case that nobody noticed the effects of information economics, but there was no way to address this problem because there were numerous ways that the information is asymmetric but there was only one way of perfect information.

It all began in 1970 when George A. Akerlof first introduced the concept of asymmetric information in his 1970 paper *The Market for "Lemons": Quality Uncertainty and the Market Mechanism*. His basic argument is that in many markets the buyer uses some market statistic to measure the value of a class of goods, thus the buyers have a specialized and wider view of the whole market while the seller usually has limited knowledge about a limited basket of commodities. Akerlof argues that this *information asymmetry* gives the seller an incentive to sell goods of less than the average market quality. Such differences in social and private returns can be solved by a number of different market institutions. For example, Brand-names, chains and franchising are a few of such market mechanisms that guarantee the buyer at least some level of quality. They also allow the owners of better than average goods to get the full value of their product when sold. He said that there are two solutions to this problem, **signaling** and **screening**.

Michael Spence continues the ideas of George A. Akerlof in his 1973 paper *Job Market Signaling*. Signaling was originally Michael Spence's idea. He studied labor or job market and came up with the theory. In his signaling model, (potential) employees send a signal about their ability to the employer by acquiring education credentials. The informational value of the credential comes from the fact that the employer believes the credential is directly related with having greater ability. Thus the credential enables the employer to reliably distinguish low ability workers from high ability workers.

Stiglitz focused on **Screening** as the solution to market asymmetry. In his 1975 paper *The Theory of 'Screening,' Education, and the Distribution of Income* He explored the incentives that the seller can give to the buyer to extract the information required. Examples of situations where the buyer usually has better information than the seller include life insurance, or sales of second hand goods without prior professional assessment of their value. It was observed by Akerlof that the average value of goods goes down because of the unscrupulous sellers who can lie to the buyers by selling replica goods. This will discourage the buyers to enter such markets, the prices will go down and ultimately the market will decay and diminish to nonexistence.

From my perspective, in order to understand the importance of information economics we will have to understand the severity of information asymmetry. With rapid developments in technology, the sources of information are growing in numbers and reach. Especially the media outlets and the influence of political parties or huge MNCs on them forces media to transmit selected information or mutilate the original information. The growing role of internet in providing information is another important reason why we should have information economics. With changing times, internet is becoming a cheap source of information which is easily accessible. As stated earlier, information is easy to

create but difficult to trust; internet is a perfect example of this situation. There are a large number of websites providing information on almost everything on and around the world and it is difficult for the users to distinguish between true information and false information. This makes the role of information institutions and other mechanisms more important to protect the interests of consumers, producers and other economic agents.

Another breakthrough in economics was the use of game theory. In 1950, John Nash demonstrated that finite games have always had equilibrium point, at which all players choose actions which are best for them given their opponents' choices. Since the 1970s, game theory has driven a revolution in economic theory to understand a large collection of economic behaviors of firms, markets and consumers. Economists have used it to predict and explain auctions, bargaining, merger pricing, oligopolies and much else. Game theory is widely used in economics because: it allows the possibility of more than one outcome (or multiple equilibriums), it facilitates decision-making under uncertainty and it can understand gains from trade (i.e. where all the participants may gain from trading with each other).

Lloyd Stowell Shapely ^[1] studied 'matching markets' in 1960s where not only the buyers choose the product to buy but are also chosen by the sellers to complete the transaction, i.e. this sort of market has a selection procedure for the buyers as well as the sellers. Alvin Roth ^[2] continued the work of Shapely and contributed towards market design (i.e. changing the rules of market in order to attain efficiency in their working). Game theory helps in solving the problem of allocation of resources. It also helps to correct and regulate monopolies resulting from information asymmetry. For example, if a seller convinces a buyer that he is the exclusive supplier of the product he is selling, he creates a false monopoly, and due to asymmetric information the buyer believes the seller. This kind of situations can be addressed through the applications of the game theory.

Conclusion:

I think that the basic reason behind these new findings in the field of economics is the rapidly changing times due to technological changes. I would like to justify the emphasis on technological changes by stating that technological advancements cause: change in selling and buying techniques, consumption habits and size of consumption basket ^[14]. So the growth is not only vertical but horizontal as well because not only the quantity of consumption of the products is increasing but also the number of products being consumed is rising. This whole cycle goes on and increases complexity in the way the society chooses to use its resources and people choose the means to acquire money in order to fulfill their needs. Due to these new complexities the old economic theories become invalid in the new world as they were based on the experiences of the past or on hypothetical situations with numerous assumptions. Now this failure of old concepts stimulates the present economists to come up with explanation for the new economic problems and give solutions. However the roots of practical application of the subject still lies in classical and Keynesian economics.

A shift in the methodology can also be observed. At the time of Keynes there was an extensive use of mathematics either to prove the validity of their theories or

to come up with the theory all together. In the words of Keynes, "The increase of technical efficiency has been taking place faster than we can deal with the problem of labor absorption; the improvement in the standard of life has been a little too quick; the banking and monetary system of the world has been preventing the rate of interest from falling as fast as equilibrium requires". However now the trend is changing, economists are using psychological or behavioral tools to come up with their theories. The use of mathematics is not phasing out but the research methodology now doesn't emphasize use of mathematics, it has become a mere tool now unlike at the time of Keynes when it was of immense importance to use mathematics as a base for all the theories. This, in my view, is shaping economics as more behavioral and less mathematical. Another shift in the research methodology can be observed i.e. use of technology and computers. The technological advancements are not only the stimulus for new theories but are also assisting the economists to come up with new concepts for the new world.

Keywords:

1. Classical thought/economics: Classical economics refers to work done by a group of economists in the eighteenth and nineteenth centuries. They developed theories about the way markets and market economies work. The study was primarily concerned with the dynamics of economic growth.
2. Keynesian thought/economics: An economic theory of total spending in the economy and its effects on output and inflation. Keynesian economics was developed by the British economist John Maynard Keynes during the 1930s in an attempt to understand the Great Depression.
3. Great depression: a long and severe recession in an economy or market. Or the financial and industrial slump of 1929 and subsequent years.
4. Phillips curve: In economics, it is a historical inverse relationship between rates of unemployment and corresponding rates of inflation that result within an economy.
5. Stagflation: persistent high inflation combined with high unemployment and stagnant demand in a country's economy.
6. Asymmetric information: it is a situation in which one party in a transaction has more or superior information compared to another. This often happens in transactions where the seller knows more than the buyer, although the reverse can happen as well.
7. Information economics: or the economics of information is a branch of microeconomic theory that studies how information and information systems affect an economy and economic decisions. Information has special characteristics: It is easy to create but hard to trust. It is easy to spread but hard to control.
8. Game theory: it is "the study of mathematical models of conflict and cooperation between intelligent rational decision-makers."
 - Game theory in economics: Game theory is a major method used in mathematical economics and business for modeling competing behaviors of interacting agents. Applications include a wide array of economic phenomena and approaches, such as auctions, bargaining, mergers & acquisitions pricing, fair division, duopolies, oligopolies,

social network formation, agent-based computational economics, general equilibrium, mechanism design, and voting systems; and across such broad areas as experimental economics, behavioral economics, information economics, industrial organization, and political economy.

9. Say's law: The Say's law of markets is an economic rule that says that production is the source of demand. According to Say's Law, when an individual produces a product or service, he or she gets paid for that work, and is then able to use that pay to demand other goods and services.
10. Price flexibility: it is one of the assumptions of classical economists which state that supply will be equal to demand. If there is any difference between the two, it will be short-lived because the prices will adjust (increase or decrease) and establish equilibrium.
11. Wage flexibility: it is one of the assumptions of classical economists which state that the economy will always be on full-employment level (i.e. all those who want to work at the existing wage rate will find employment). Any deviations from the full employment will be short-lived because the wage rate will adjust (increase or decrease) and establish equilibrium.
12. Laissez faire: is an economic system in which transactions between private parties are free from government interference such as regulations, privileges, tariffs, and subsidies.
13. Mont Pelerin Society: is an international organization composed of economists (including eight winners of the Nobel Memorial Prize in Economic Sciences), philosophers, historians, intellectuals, business leaders, and others. Its foundations and emphasis lie in classical liberalism.
14. Perfect information: it is one of the assumptions of classical economics which state that all consumers and producers are assumed to have perfect knowledge of price, utility, quality and production methods of products.
15. Information systems: Information system is an academic study of systems with a specific reference to information and the complementary networks of hardware and software that people and organizations use to collect, filter, process, create and also distribute data.
16. Consumption basket: the most common type of market basket is the basket of consumer goods to

Economists:

- a) Milton Friedman: Milton Friedman was an American economist who received the 1976 Nobel Memorial Prize in Economic Sciences for his research on consumption analysis, monetary history and theory and the complexity of stabilization policy.
- b) George A. Akerlof: (born June 17, 1940) is an American economist and University Professor at the McCourt School of Public Policy at Georgetown University. He won the 2001 Nobel Memorial Prize in Economic Sciences (shared with Michael Spence and Joseph E. Stiglitz).
- c) Michael Spence: (born November 7, 1943, Montclair, New Jersey) is an American economist and recipient of the 2001 Nobel Memorial Prize in Economic Sciences, along with George Akerlof and Joseph E. Stiglitz, for their work on the dynamics of information flows and market development.

- d) Joseph E Stiglitz: (born February 9, 1943) is an American economist and a professor at Columbia University. He is a recipient of the Nobel Memorial Prize in Economic Sciences (2001) and the John Bates Clark Medal (1979). He is a former senior vice president and chief economist of the World Bank and is a former member and chairman of the (US president's) Council of Economic Advisers. He is known for his critical view of the management of globalization, *laissez-faire* economists (whom he calls "free market fundamentalists"), and some international institutions like the International Monetary Fund and the World Bank.
- e) Jean Baptiste Say: (5 January 1767 – 15 November 1832) was a French economist and businessman. He had classically liberal views and argued in favor of competition, free trade, and lifting restraints on business. He is best known for Say's Law.
- f) John Maynard Keynes: (5 June 1883 – 21 April 1946), was an English economist whose ideas fundamentally changed the theory and practice of modern macroeconomics and the economic policies of governments. He built on and greatly refined earlier work on the causes of business cycles, and is widely considered to be one of the most influential economists of the 20th century and the founder of modern macroeconomics. His ideas are the basis for the school of thought known as Keynesian economics. He was a major critique of classical economics. His work, entitled *The General Theory of Employment, Interest, and Money*, was first published in 1936 in which he criticized the assumption of 'laissez faire' and many other basic assumptions of the classical thought.
- g) William Phillips: New Zealand born economist, who wrote a paper in 1958 titled *the relation between unemployment and the rate of change of money wage rates in the United Kingdom, 1861-1957*. It was published in the quarterly journal *Economica*.
- h) Robert Lucas: (born September 15, 1937) is an American economist who received the Nobel Memorial Prize in Economics Sciences in 1995 for his work on 'rational expectations'.
- i) Lloyd Stowell Shapley: (born June 2, 1923) is a distinguished American mathematician and Nobel Prize-winning economist. He is a Professor Emeritus at University of California, Los Angeles (UCLA), affiliated with departments of Mathematics and Economics. He has contributed to the fields of mathematical economics and especially game theory.
- j) Alvin Roth: (born December 18, 1951) is the Craig and Susan McCaw professor of economics at Stanford University and the professor of economics and business administration emeritus at Harvard University. Roth have made significant contributions to the fields of game theory, market design and experimental economics, and is known for his emphasis on applying economic theory to solutions for "real-world" problems. In 2012, he won the Nobel Memorial Prize in Economic Sciences jointly with Lloyd Shapley "for the theory of stable allocations and the practice of market design"

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EXTENDED WINGS OF PSYCHOLOGY

Dhanashri Nakhe (M.A. II Psy.)

Ketaki Mhaskar (M.A. II Psy.)

Neha Pendse (M.A. II Psy.)

Shalmalee Vedpathak (M.A. II Psy.)

The field of psychology started in middle of 18th century by defining itself as “the science of consciousness”. By 1920’s, psychologists were more likely to define their fields as “the science of behavior”.

The mind is highly complex and enigmatic. Many wonder how psychologists can study such an intricate, seemingly abstract and extremely sophisticated thing. Even if scientists look inside the brain, as in an autopsy or during a surgical operation, all they see is gray matter; the brain. Thoughts, cognition and emotions, memories, dreams perceptions etc cannot be seen physically, like a skin rash or heart defect.

There are a number of unique and distinctive branches of psychology. Each branch looks at questions and problems from a different perspective. While each branch has its own focus on psychological problems or concerns, all areas share a common goal of studying and explaining human thoughts and behavior.

Clinical Psychology, Behavioral Psychology, Cognitive Psychology, Developmental Psychology, Industrial Psychology, etc are the major known branches of Psychology. But there are several new and upcoming branches of Psychology within the field today.

Positive Psychology :

The traditional psychology focuses only on the negative and considered to be the “repair shops” for broken lives. The new emerging perspective of Positive psychology, instead, came up with the thought of more realistic and balanced view of human nature that includes human strengths and virtues without denying human weaknesses and capacity for evil.

Positive Psychology is the scientific study of the factors which make life worth living, be it a normal life or the life of people receiving healthcare or people who are into any kind of therapy. Positive Psychologists study the characteristics, conditions and processes which lead to flourishing of people.

Positive Psychology has its roots in humanistic psychology. Humanistic Psychology typically told that people are inherently good. However, Positive Psychology has drifted away from the humanistic approach and instead focuses on discovering empirical evidence for thriving and flourishing. It is not merely focused on evidence but on applications which can help people thrive and be happy. In fact, Positive Psychology is being referred to as, “Science of happiness”.

Brief History:

Positive Psychology has its origins credited to the University of Pennsylvania in the US, where there exists a Positive Psychology Center. **Professor Martin Seligman**, professor of Psychology in the University effectively started the first

debate on this new philosophy when he stated this in his inaugural address as a President of the American Psychological Association. Henceforth, Professor Mihaly Csikszentmihalyi also joined the movement and both Martin and Mihaly collaborated in a lot of studies. Interestingly, the starting of Positive Psychology has an anecdote related to the life of Seligman in 1995.

The Concept of “Flow”:

In positive psychology, flow, also known as the zone, is the mental state of operation in which a person performing an activity is fully immersed in a feeling of energized focus, full involvement, and enjoyment in the process of the activity. In essence, flow is characterized by complete absorption in what one does. Named by **Mihály Csikszentmihályi**, the concept has been widely referenced across a variety of fields (and has an especially big recognition in occupational therapy), though has existed for thousands of years under other guises, notably in some Eastern religions. Achieving flow is often colloquially referred to as being in the zone.

According to Csikszentmihályi, flow is completely focused motivation. It is a single-minded immersion and represents perhaps the ultimate experience in harnessing the emotions in the service of performing and learning. In flow, the emotions are not just contained and channeled, but positive, energized, and aligned with the task at hand. The hallmark of flow is a feeling of spontaneous joy, even rapture, while performing a task.

Health Psychology :

Health psychology is a relatively recent yet fast growing sub-discipline of psychology. Human beings are complex systems and ill-ness can be caused by a multitude of factors, not just a single factor such as a virus or bacterium.

Health psychology attempts to move away from a simple linear model of health and looks at the combination of factors involved in illness biological (e.g. a virus), psychological (e.g. behaviors, beliefs) and social (e.g. employment).

According to health psychology, the whole person should be treated, not just the physical changes that occur due to ill health. This can include behavior change, encouraging changes in beliefs and coping strategies, and compliance with medical recommendations. Because the whole person is treated, the patient becomes partly responsible for their treatment. For example, she may have a responsibility to take medication, and to change beliefs and behavior. No longer is the patient seen as a victim.

Health Psychologists are also involved in designing public prevention programs designed to educate people about risky behaviors and adopt healthier ones.

Sports Psychology :

Sport psychology is an interdisciplinary science that draws on knowledge from many related fields including biomechanics, physiology, kinesiology and psychology. It involves the study of how psychological factors affect performance and how participation in sport and exercise affect psychological and physical factors.

Coleman Griffith was the "America's First Sport Psychologist". He performed casual studies on vision and attention of basketball and soccer players, and was interested in their reaction times, muscular tension and relaxation, and mental awareness.

The birth of sports psychology in Europe happened largely in Germany. The first sports psychology laboratory was founded by Dr. Carl Diem in Berlin, in the early 1920s.

Major topics within contemporary sports psychology are visualizing wishful imagery, intrinsic and extrinsic motivations and attentional focus.

Some sports psychologists work with professional athletes and coaches to improve performance and increase motivation. Other professionals utilize exercise and sports to enhance people's lives and wellbeing throughout the entire lifespan. They not only work with elite and professional athletes but help regular people learn how to enjoy sports and learn to stick to an exercise program.

Engineering Psychology :

The field of engineering psychology is receiving more attentions these days because of the ever increasing advancement in the field of Engineering and technology. This is a combination of two independently popular fields i.e. engineering and psychology.

This field deals with the relation between the humans and the machinery used by the humans in their day to day life. Engineering psychology also involves study of how individuals relate with, recognize, and are influenced by certain goods and technologies on the market. These studies are essential for adapting technology, products, machinery, or work environments to improve human behavior and capabilities.

Engineering psychology came to existence in 1940s in the era of World War 2. The technology used in the weapons in the world war was very advance for those days. And it was not error free. Many of these errors were Man made errors and some of them resulted into huge problems. The reason behind the malfunctioning of the weapons and the machinery at that time was its design, which did not consider the needs and abilities of the users at the time. Psychologists were called to help engineers make the designs more user-friendly in order to overcome these problems.

Engineering psychologists make use of Psychological theories and principles to find the optimal solutions to the everyday problems that affect the humans. This reduces the chances of accidents and fatal errors and makes the gadgets and machinery safer for the users. In order to recognize the possible problems and safety issues and improve the future designs, the job of engineering psychologist also involves conducting research based on the user feedbacks and surveys. Demographics and user abilities are also a big part of engineering psychology. Engineering psychologists can do specialization in many areas such as aerospace, human performance, education, virtual reality, healthcare systems, technology, workplace safety, usability, environmental safety, etc. And they are found working in different industries suitable for their specializations. Health care field of research is one example of most suitable areas of employment for the engineering

psychologist considering the fact that the products related to this field are directly associated with the life of the patients.

The continuous growth in the fields related to engineering & technology and the ever increasing competition for making the products more and safer and user friendly is ensuring that the field of engineering psychology will also continuously thrive, resulting into creation of more and more job opportunities in the field. So future is bright for the sincere and dedicated candidates hoping to enter the field of engineering psychology.

Criminal Psychology :

Criminal psychology, also referred to as criminological psychology, is the study of the wills, thoughts, intentions, and reactions of criminals and all that partakes in the criminal behavior. It is related to the field of criminal anthropology. The study goes deeply into what makes someone commit a crime, but also the reactions after the crime, on the run or in court. Criminal psychologists are often called up as witnesses in court cases to help the jury understand the mind of the criminal. Some types of Psychiatry also deal with aspects of criminal behavior.

The four roles of criminal psychologist :

In 1981, one of the fathers of UK's criminal psychology Professor Lionel Haward described four ways that psychologist may perform upon being professionally involved in criminal proceedings. These are the following:

Clinical : In this situation the psychologist is involved in assessment of individual in order to provide a clinical judgment. These assessments can help police or other competitive organs determine how to process the individual in question.

Experimental : In this case the task of psychologist is to perform a research in order to inform a case. This can involve executing experimental tests for the purposes of illustrating a point or providing further information to courts.

Actuarial : This role involves usage of statistics in order to inform a case. For example, a psychologist may be asked to provide probability of an event occurring. Therefore, the courts may ask how likely a person will reoffend if a sentence is declined.

Advisory : Here a psychologist may advice police about how to proceed with the investigation. For example, which is the best way to interview the individual, how best cross-examine a vulnerable or another expert witness, how an offender will act after committing the offence.

Forensic Psychology :

A field of psychology that deals with all aspects of human behavior as it relates to the law or legal system.

Forensic psychology has grown significantly in recent years. Increasing numbers of graduate programs offer dual degrees in psychology and law, with others providing specialization in forensic psychology. While forensic psychology was only recently officially recognized as a distinct specialization by the American Psychological Association, the origins of the field date back to Wilhelm Wundt's founding of the first psychology lab in Germany.

History :The history of forensic medicine i.e. applying medical science to legal questions has a long and intriguing past. A few notable examples include the following:

1. In 44BC following the assassination of Julius Caesar the attending physician proclaimed that of the 23 wounds found on the body 'only one' was fatal. In the 5th century Germanic and Slavic societies were believed to be the first to put down in statute that medical experts should be employed to determine cause of death.
2. In 1247 the first textbook on forensic medicine was published in China which among others things documents the procedures to be followed when investigating a suspicious death. These examples tell us is that the legal system embraces medical expertise.

Role of Forensic Psychologist

Forensic psychologists are trained to apply the principles of psychology to the justice system. Predominantly, forensic psychologists are used in criminal trials to ascertain whether the defendant's mental state meets requisite legal standards. Forensic psychologists must obtain a bachelor's degree in psychology, followed by a master's degree -- although many continue on to obtain a doctorate degree. Forensic psychology is a highly specialized field that requires a thorough understanding of the philosophy and standards of the judicial system.

Military Psychology :

Military Psychology is defined by the application of psychological principles and theories to the military context (Mangelsdorff & Gal, 1991). It is a broad, complex, and specified field where knowledge gained from various other branches of psychology (for example, experimental, social, clinical, organizational, and personality) converge. Military Psychology includes a vast array of activities in psychological research, assessment, and treatment.

Military psychology is the research, design and application of psychological theories and empirical data towards understanding, predicting, and countering behaviors either in friendly or enemy forces or civilian population that may be undesirable, threatening or potentially dangerous to the conduct of military operations.

Military psychology transforms from sub-branch groups of different psychology disciplines into a tool used by the military, as will all tools of the military, to enable the troops to better survive the stresses of war while using psychological principles to unbalance the enemy forces for easier wins. Mangelsdorff and Gal (1991) and more recently Kennedy and McNeil (2006) have traced the growth of Military Psychology in the U.S.A., and the significant contributions it has made to the various other fields of Psychology.

Role of military psychologist :

The military is a group of individuals who are usually trained and equipped to perform national security tasks in unique and often chaotic and trauma filled situations. These situations can include the front-lines of battle, national

emergencies, allied assistance, or the disaster response scenes where they are providing relief-aid for the host populations of both friendly and enemy nations. Though many psychologists may have a general understanding with regards to a humans response to traumatic situations, military psychologists are uniquely trained and experienced specialists in applied science and practice among this special population. While the soldiers may be providing direct aid to the victims of events, the military psychologists are providing specialized aid to soldiers, their families, and the victims of the events as they cope with the often "normal" response or reaction to uncommon and abnormal circumstances.

Military Psychology in India :

Military Psychology is a relatively recent development in the context of India. Psychology as a modern scientific discipline began in India with the establishment of the department of psychology in Calcutta University in the year 1915, closely followed by Mysore (1924) and Patna (1946) (see Pandey, 2001). It was around the time of the Second World War that Military Psychology found its beginnings in India, though on a very low key basis, it was mainly concerned with the selection of personnel for the military.

Media and Consumer's Psychology :

Media psychology is the branch of psychology that focuses on the relationships between human behavior and the media. This branch is a relatively new field of study because of advancement in technology. It uses various methods of critical analysis and investigation to develop a working model of a user's perception on media experience. These methods are used for society as a whole and on an individual basis. Media psychologists are able to perform activities that include consulting, design, and production in various media like television, video games, films, and news broadcasting.

The field of media psychology started in the 1950s when television was becoming popular in American households. The psychologists were concerned about the children and their television viewing. Today's media psychologists are concerned with the new media forms that have risen in recent years such as cellular phone technology, the internet, and new genres of television. Media psychology will always be around due to media continuously evolving and adapting. Major contributors like Marshall McLuhan and David Giles provided a foundation for the definition and application of media psychology on society. Media is an important part of society that appeals and will continue to appeal to the emotional aspect of human beings.

Consumer psychology is a specialty area that studies how our thoughts, beliefs, feelings and perceptions influence how people buy and relate to goods and services.

Consumer behavior is influenced by internal conditions such as demographics, psychographics (lifestyle), personality, motivation, knowledge, attitudes, beliefs, and feelings. Psychological factors include an individual's motivation, perception, attitude and belief, while personal factors include income level, personality, age, occupation and lifestyle.

Consumer Psychology and Media Psychology are inter-related as media itself has an influence on consumers and it plays important role in determining the consumer behavior.

Animal Psychology :

Psychology studies human behavior, those who are evolved from the apes. Then why not study the behavior of animals instead. The study of animal behavior is a cornerstone of experimental psychology, shedding light on complex human emotions. The similarities and differences between human and animal behaviors can also be useful for gaining insights into developmental and evolutionary processes.

Animal psychology is concerned with the study of animal behavior. The comparative method can also be used to compare modern species of animals to ancient species, hence also called as comparative psychology. A student of Charles Darwin became the first to use the term in his book *Comparative Psychology (Psychologie Comparée)*, which was published in 1864. Pavlov and Skinner were the psychologists who proposed their theories experimenting on animals itself. Pavlov's conditioning studies with dogs demonstrated that animals could be trained to salivate at the sound of a bell. This work was then taken and applied to training situations with humans as well. B.F. Skinner's research with rats and pigeons yielded valuable insights on the operant conditioning processes that could then be applied to situations with humans. Generalizing the observations to human population is the purpose to study animal psychology.

Historically, animal studies have been used to suggest whether certain medications might be safe and appropriate for humans, whether certain surgical procedures might work in humans. Comparative psychology has also famously been used to study developmental processes. In 1950s, psychologist Harry Harlow conducted a series of disturbing experiments on maternal deprivation of monkeys. Harlow found that this early maternal deprivation led to serious and irreversible emotional damage. These deprived monkeys became unable to integrate socially, unable to form attachments, and were severely emotionally disturbed.

Harlow's work has been used to suggest that human children also have a critical window in which to form attachments. When these attachments are not formed during the early years of childhood, psychologists suggest, long-term emotional damage can result.

Comparative psychologists sometimes focus on individual behaviors of certain animal species including topics such as personal grooming, play, nesting, hoarding, eating, and movement behaviors. Other topics that comparative psychologists might study include reproductive behaviors, imprinting, social behaviors, learning, consciousness, communication, instincts, and motivations.

Political Psychology :

Politics and Psychology are the two very popular fields in the world today. But has anyone thought of the linkage between these two fields? Yes! These two fields are immensely inter-related. The famous politicians and leaders have been

seen using the techniques to attract and gather people through touching their core psychologies.

Political psychology is an interdisciplinary academic field dedicated to understanding politics, politicians and political behavior from a psychological perspective. The relationship between politics and psychology is considered bi-directional, with psychology being used as a lens for understanding politics and politics being used as a lens for understanding psychology.

Political psychology aims to understand interdependent relationships between individuals and contexts that are influenced by beliefs, motivation, perception, cognition, information processing, learning strategies, socialization and attitude formation. Political psychological theory and approaches have been applied in many contexts such as: leadership role; domestic and foreign policy making; behavior in ethnic violence, war and genocide; group dynamics and conflict; racist behavior; voting attitudes and motivation; voting and the role of the media; nationalism; and political extremism.

The study of personality in political psychology focuses on the effects of leadership personality on decision-making, and the consequences of mass personality on leadership boundaries.

The important of political psychology is group psychology. Group behavior is a key in understanding the structure, stability, popularity and ability to make successful decisions of political parties.

Using psychology in the understanding of certain political behaviors is the key function of this branch. It is immensely rising now days in India too.

The study and practice of psychology encompasses a vast range of topics and a large number of sub-fields and specialty areas have developed as a result. Because human behavior is so varied, the number of sub fields in psychology is constantly growing and evolving. Above mentioned are the rapidly developing fields in the contemporary world of 21st century.



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POST-MODERNIST APPROACH

Sanika Kulkarni (T.Y.B.A. Sociology), **Shruti Chitale** (T.Y.B.A. Sociology)

Social theories are frameworks of empirical evidence used to study and interpret social phenomena. To validate historical debates, scientists used tools of social theories that made methodologies more reliable. Social theory as a distinct discipline emerged in the 20th century and was largely matched with an attitude of critical thinking, based on rationality, logic and objectivity.

During the 20th century, Sociology needed to be shaped according to the ideals of the modern world view. This perspective believed in progress and certainty of scientific method. A growing number of theorists began to question the fundamental assumptions of modern era. These post-modern theorists have had a significant influence on the study of society.

The objective of this article is to give an overview of the POST-MODERN APPROACH TO SOCIAL THEORY, and how ideas from different theorists have influenced this approach. It presents the concept of post-modernism and its applied theories.

POST-MODERNIST APPROACH

Sociology embraces a set of inter-related definitions and relationships that organizes our concepts and understanding of the world. (A Dictionary of Sociology, Gordon Marshall, 1998) Early social theorists founded the new discipline of Sociology in the dominant principle of modernity. They held post-modernism to be a moment of ideas arising from elements of modernism. Their main aim was to expand sociology as a discipline and develop its methodologies to substantiate its being a social science.

The term 'POST-MODERNISM' was bought into social theory in 1971 by the Arab American theorist 'Ihab Hassan' in his book 'The Dismemberment of Orpheus: Toward a Post-Modern Literature'.

Hassan's Table of Differences between Modernism and Postmodernism

Modernism	Postmodernism
Romanticism	Dadaism
Closed	Open
Purpose	Play
Hierarchy	Anarchy
Distance	Participation
Creation	Deconstruction
Synthesis	Antithesis

Modernism	Postmodernism
Presence	Absence
Semantics	Rhetoric
Metaphor	Metonymy
Signified	Signifier
Reader	Writer
Narrative	Anti-narrative
Symptom	Desire
Paranoia	Schizophrenia
Origin / Cause	Trace
God the Father	The Holy Ghost
Determinacy	Indeterminacy
Transcendence	Immanence

Hassan's Table ends with a statement "Yet the dichotomies (division) this table represents, remains insecure. For differences shift as well as collapse, in both modernism and post-modernism abound."

This table draws on the ideas how these two approaches deal with aspects of nature and society differently. Where modernism deals with science with 'Universal Optimism' postmodernism has 'Limitations of Realism'. For modernists 'Part comprises the Whole' , but for postmodernists 'the Whole is more than the Parts'. They even referred to God differently. Where Modernist maintain that 'God acts by violating Natural Laws' ; Postmodernist believes in 'a downward casual effectiveness of divine power and in surpassing the creations'.

What is Postmodernism?

Postmodernism is a wide sweeping reaction to the modern. Initially, it was a reaction to modernism in art and architecture; now it has spread to every department in academia. The theorists of postmodernism have focused their critique on modernity, its assumptions, institutions, economic order and culture. They believe that modernity has ended and that we are in the era of post-modernity. (Giddens, 1990) Postmodernism has a very fragmented nature, so it is not possible to address all the elements of the critique. However, three postmodern themes can be identified, that have made a significant influence on sociological theory:

- A critique of positivism.
- The theme of institutions and domination.
- The critique of meta- narratives and language.

Positivism is that approach which maintains knowledge can be acquired only through the use of proper scientific or mathematical methodologies. The

postmodern critique claims that there is no such thing as “applied science” in the society and that knowledge arises from other sources than observation and analysis.

Postmodern writers address the power of institutions, their ability to control, how they advantage few while silencing many, and how they separate people from their needs.

Meta-narratives are grand theories that claim to capture universal principles, explain experience and order of things. Language is heavy and supreme, it carries with it a history and yet is contextually coordinated in the moment, and perhaps the most famous postmodern critique is that meaning in language cannot be known, but must be agreed upon.

These postmodern critiques attack many of the fundamental paradigms that formed the basis of dominant sociological theory today. They also have provided new approaches to sociological theory and the basis for greater diversification research.

POSTMODERNISM APPLICATIONS

1) Critical Theory- Critical Theory is a school of thought that stresses on the deep critique of society and culture by applying knowledge from the social sciences and humanity. Critical social theory is a form of self-reflective knowledge involving both understanding and theoretical explanation which aims to reduce setup in dominant social system. It was first defined by Max Horkheimer of the Frankfurt school of Sociology in his 1937 essay: Traditional and Critical Theory where he claimed that critical theory is a social theory oriented towards changing society as a whole, in contrast to traditional theory oriented only to understanding or explaining it.

Postmodern critical theory studies the social problems with a political point of view “by situating them in historical and cultural contexts, to associate themselves in the process of collecting and analyzing data, and to relate their findings”. Many postmodern scholars have adopted “alternatives that encourage reflection about the ‘policies and poetics’ of their work. In these accounts, aspects of qualitative research are clarified”.

The term "critical theory" is often appropriated when an author works within sociological terms, yet attacks the social or human sciences. Critical theory as a postmodern critique has influenced a new generation of sociologists that work to combine the methods and theory of sociology with an understanding of the biases the observer brings to a project and the context of people being studied.

2) Sociology and Institutions- Michel Foucault (1926 - 1984) is one of the few postmodern theorists that have enjoyed a considerable following among sociologists. Although Foucault rejected the postmodernist label, his contributions to the postmodern critiques are considerable. Perhaps his most challenging and influential work centred on the dynamics between institutions and other forms of power and knowledge that create new forms of authority. Foucault dismisses the idea of progress and replaces it with a history of one type of power, such as uncivilized humanity, being replaced by groups of rules that create new institutions

of violence and domination. These rules are not universal or absolute. Rather they are unique to their history, context, and domain. Though they are specific they are also always changing. These rules determine social order and practices (Foucault, 1972).

3) Deconstruction-One of the most well-known postmodernist concerns is "deconstruction," a theory for philosophy, literary criticism, and textual analysis developed by Jacques Derrida, a French philosopher known for his postmodern philosophy. According to him, language as a system of signs and words only has a meaning because of the distinction in the signs. The notion of a "deconstructive" approach studies the already evident understanding of a text in terms of ideologies, hierarchical values, and basic images of social systems. A deconstructive approach further depends on the techniques of close reading without reference to cultural, ideological, moral opinions or information rather than author's authority. Derrida's method frequently involves recognizing and spelling out the different, yet similar interpretations of the meaning of a given text. Derrida's philosophy inspired a postmodern movement called de-constructivism among architects about the architectural elements in designing a building.

4) Structuralism- As summarized by philosopher Simon Blackburn; structuralism is "the belief that phenomena of human life are not understandable except through their interrelations. These relations constitute a structure, and behind limited variations in the surface phenomena there are constant laws of conceptual culture".

Structuralism was a philosophical movement developed by French academics in the 1950s. These were the thinkers who moved away from the strict interpretations and applications of structuralism ideas. Many American academics consider post-structuralism to be part of the broader, less well-defined postmodernist movement, even though many insisted it was not.

Post-structuralism is not defined by a set of shared methodologies, but by the everyday material details and abstract theories and beliefs of a particular culture. Like structuralism thinkers, postmodernists start from the assumption that people's identities, values and economic conditions determine each other. They intended to explore the existence of any distinction between the nature of a thing and its relationship to other things.

Using the example of an apple, a person practicing structuralism can only describe it in terms of their most basic perceptions it invokes. They cannot simply describe it as an apple because structuralism believes that it is the total sum of the parts that have been broken down into the simplest elements that make up the whole of something.

5) Post Postmodernism- Post-postmodernism is a wide-ranging set of developments in critical theory, philosophy, architecture, art, literature, and culture which are emerging from and reacting to postmodernism. Postmodernism began to compete with modernism in the late 1950s and gained ascendancy over it in the 1960s. Since then, postmodernism has been a dominant,

though not undoubted, force in art, literature, film, music, drama, architecture, history, and continental philosophy.

Since the late 1990s there has been a small but growing feeling both in popular culture and in academia that postmodernism "has gone out of fashion." However, there have been few formal attempts to define and name the era succeeding postmodernism, and none of the proposed designations has yet become part of mainstream usage. However, a common positive theme of current attempts to define post-postmodernism is that faith, trust, dialogue, performance and sincerity can work to surpass postmodern irony.

The post-postmodern viewpoint seems to be taking the "postmodern condition" as a given theme and creating new remixed works disassociated from the modern-postmodern arguments and oppositions. The post-postmodern takes the "always already" mixed condition of sources, identities, and new works as a given problem. The comparison of "network" and "convergence" in creative subcultures (e.g., musicians, artists, designers, writers) are not only re-performed as abstractions but also as live operations. From this more recent perspective, living in remixed hybridists is not a choice but an obligation, since it is the foundation for participating in a living, networked, globally connected culture.

We could also argue that the study of postmodern approach is not useful because of the change in dominant intellectual framework and culture. With the emergence of new philosophical environment, the culture of postmodernism is now a history.

POSTMODERN SOCIETY

There are some unique points of emphasis in postmodern theory: the influence of emerging technologies, the prominence of advertising, the truly global world system built on high-speed markets and meta-markets, the expansion of capitalist practice and ideology to virtual total domination of the world economy, and the ironic effects of globalization on individualistic values and culture. Thus postmodern theory clearly moves beyond modernist theory. For while all theorists of modernity worried about the loss of cultural unity and the fate of the individual and community under conditions of capitalist modes of production, high-volume and high-speed markets, none of the theorists took these ideas as far as postmodernists, nor could they visualize the effects of rapid communication, travel, and the production of technologies.

CRITICISM OF POSTMODERNISM

Criticism includes the belief that postmodernism can be meaningless, promotes irrationality and uses relativism to the extent that it cripples most judgment calls.

- Vagueness- Postmodernism adds nothing to the analytical or empirical knowledge. The theories in postmodernism are not evidence-based and they state everything which is already obvious. Postmodernists defend the existence of the varied meanings assigned to the term "postmodernism", claiming they only contradict one another on the surface and that a postmodernist analysis

can offer insight into contemporary culture. A clear and meaningful answer is always missing and wanting in a postmodern theory.

- **Moral Relativism-** Moralrelativism may be any of several philosophical positions concerned with the differences in moral judgments across different people and cultures. Some critics interpret postmodernism as being synonymous to moral relativism and thus generating a deviant behaviour. Postmodernism is characterized by the belief that truth doesn't exist in any objective sense but is created rather than discovered; it is created in a culture and exists only in that culture. Therefore its belief is that truth is dominated by the different cultures in the systems. Post-modernity rejects basic spiritual or natural truths and emphasizes on material and physical pleasure resulting in cultural and religious conservatism.
- **Marxian Criticisms-** Postmodernism can be seen reflecting the disappointed revolutionary generation of 1968 incorporating a managerial "new middle class". It can be called as political frustration and social mobility rather than as a significant intellectual phenomenon. It is claimed as the cultural logic of late capitalism, for its refusal to critically engage with the meta-narratives of capitalization and globalization.

Conclusion:

The argument for the necessity of the postmodernism approach states that economic and technological conditions of our age have given rise to a decentralized, media-dominated society. These ideas are the representations and copies of each other, with no real original, stable or objective source for communication and meaning. Globalization itself is often cited as one force which has driven the decentralized modern life, creating a culturally pluralistic and interconnected global society, lacking any single dominant centre of political power, communication, or intellectual production. The postmodern view is that inter-subjective knowledge, and not objective knowledge is the dominant form of communication under such conditions, and it fundamentally alters the relationship between reader and what is read, between observer and the observed, between those who consume and those who produce. Not all people who use the term postmodern or postmodernism see these developments as positive. Users of the term often argue that their ideals have arisen as the result of particular economic and social conditions, including what is described as late capitalism and the growth of broadcast media, and that such conditions have pushed society into a new historical period.

The impact of Post-modern theory is clearly seen in cultural perceptions regarding truth and morality. Postmodern theory has saturated the mainstream and religious culture of the 21st century. Postmodern approaches may be a fad and may be unable to contribute positively to the development of sociology. However, the arguments of postmodern writers have been important in challenging earlier perspectives and has led to questioning some of the traditional sociological concepts such as subject and object, social reality, meaning, and function. Out of the sociological ruins, perhaps new sociological views can be constructed which will provide an improved understanding of our social world.

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CARE ETHICS : A JUSTICE PERSPECTIVE

Ishwari Pendse (T.Y.B.A. Politics)

Justice has always been of immense importance in the field of political science, philosophy, sociology and economics. Moral orientation given to the concept of justice also attracts students and researchers studying psychology. Justice has always been related to rationalism. This concept of rational justice was never challenged till 1792 when Mary Wollstonecraft wrote her book 'A Vindication of the Rights of Woman'. Though she did not directly challenge this thought, she surely led the groundwork for future feminist writers. In the writings of Simone de Beauvoir, we clearly see that she attacked rationalism and even defined 'femininity' and 'feminism'. She stated 'One is not born, but rather becomes a woman'. No biological, psychological, or economic fate determines the figure that the human female presents in society; it is civilization as a whole that produces this creature, intermediate between male and eunuch, which is described as feminine. Only the intervention of someone else can establish an individual as an other.'

In the works of Simone de Beauvoir we can see a staunch feminist explaining femininity as well as feminism. Here we will also find the attack on rationality as a male-centric view. While we analyze further it is better to have a clarification that here, feminists criticise male-centric rationality and instrumental rationality. They criticise these concepts which are forced objectively on everyone. This is the basic framework for understanding Care Ethics.

While analysing care ethics, it is better to understand a few basic premises of it.

- 1) Care ethics is a moral orientation.
- 2) It provides distinction between justice and care.
- 3) Care ethics is feminist theory which also describes femininity. It should not be viewed as an ideology.

According to me, care ethics provides a mid-way in analysing or studying the daily life of the people.

Carol Gilligan, who puts forward this perspective, provides us with various examples. She states that while analysing an ambiguous image of the vase and the faces, one initially sees it in only one way. Even though it is pointed out that this image has both vase as well as face, there is one right or better way of seeing it. The same happens in a moral conflict. Unfortunately, in a moral conflict, we have influence of populist morality or our biases itself. So, our moral orientation and development is nothing but conditioning of the norms set by the society. Hence moral judgements are basically adoption of a single perspective which may facilitate clarity of decision. But this need for clarity may give rise to dogmatic norms for it will be supposed that one way of thinking is better way to justify a moral problem.

Carol Gilligan in her essay 'Moral Orientation and Moral Development' states, 'theoretically, the distinction between justice and care cuts across the familiar divisions between thinking and feeling, egoism and altruism, theoretical and practical reasoning.' The peculiar feature of care ethics is that it gives importance not only to equality but also to attachment. It may be perceived that equality acts

as a means to achieve freedom of attachment. This freedom of attachment can be associated with human relationships, with the society or even with the ideals of society.

Gilligan defends her perspective of care based on feminine psychology on grounds of inadequacy of mainstream ethics. She criticises Kohlberg who puts forth six stage process of psychological development on the classification of moral judgement. He was influenced by Kant's categorical imperative. Gilligan criticises Kohlberg's views by stating that:

- 1) His study reflects a bias towards male perspective.
- 2) The samples which he collected were only male samples.
- 3) According to him these six stages of moral judgements are universal.

Kohlberg maintains that there is a correlation between rights and duties whereby the rights of every individual are safeguarded by the duties of the others. Gilligan observed that when confronted with a moral dilemma, Kohlberg's male subjects prized their own freedom and its non-interference with those of others. In contrast, her female subjects took the responsibility of collective responsibility towards themselves and their family members in a moral conflict. The most important part in care ethics is that instead of finding reasons and conditions because of which co-operative and preserving qualities are acquired by women, Gilligan considers these to be their distinguishing traits. In this sense she tends to naturalize care as a feminine virtue without historicizing it.¹

Carol Gilligan stresses on one peculiar trait of care-ethics. She states that instead of defining human relationship in terms of equality, we should take cognizance of attachment. Hence images or metaphors of relationship shift from hierarchy or balance to network or web. This gives us a different way of imagining the self as a moral agent. Woman's moral judgements are based on the criteria of relationships, responsibility or nurture. Hence, for women, morality is not based on the logic of fairness, as much as that of inclusion or relationships. The simple questions of moral conflict are answered differently by men and women. This she puts in differently by reiterating that a 'different voice' guides women for moral judgement. The important aspect to note here is that Carol Gilligan's views about different voice are gender-neutral. She believes that there is no absolute relation between gender and the moral perspective of care. In fact, she argues for a 'dialectical mixture' of autonomy and care where women and men both change their position.¹¹

While we all get attracted by radical feminism, Carol Gilligan's theory of care ethics helps us to find a middle ground between ego-centricity and self-sacrifice, helping us to find the relationship between the self and its other as the basis of moral thinking. Care ethics is away from the glorification of motherhood but still brings the culturally prevalent feminine aspect of nurture to the forefront as a theoretical virtue. Gilligan's work also finds relevance in various colonial and under-developed countries also. Now, we will try to establish the relation between justice and care.

¹'Between Femininity and Feminism: Colonial and Postcolonial Perspectives on Care' by Kanchana Mahadevan.

Justice has always been held as a virtue in all social sciences. (The other conceptions of justice came up later.) Unfortunately, something 'virtuous' is always associated with a man. And care as virtue is a major blow to this conception. In today's life justice is always glorified. In a patriarchal society the core of justice has always been dominated by men. Care ethics does not wish to reach that core for it analyses the whole core and periphery of justice by being in the periphery itself.

We have already seen that care ethics analyses or considers the whole network or web. Gilligan has emphasised this point with an example of a short story, 'A Jury of her Peers' by Susan Glaspell in 1917. The story centres on the murder; Mini Foster is suspected of killing her husband who is considered as a good man. The women neighbours of Mini Foster are able to understand why she might have killed her husband by being attached to her and discussing from the law. It is described by the metaphor of a quilt created by joining the pieces of a quilt. From a justice perspective, the self as moral agent is detached from social relationships while judging the conflicting claims of self and others against a standard of equality or equal respect. From a care perspective the relationship becomes the figure, defining self and others. This is manifested by a change in moral question from 'what is just?' to 'how to respond?'

The quality of care in political life is not given any importance. This political life was always administered by men. Hence feminine quality of care was mocked. Within a justice construction, care becomes the mercy that hampers justice. Care is based on non-violence which also leads us to question the three theories of punishment. Gilligan also refers equality as an element in justice but not the sole element.

Justice can be defined as refraining from 'detachment'. Detachment is morally problematic since it breeds moral blindness or indifference- a failure to discern or respond to need. Justice in this context becomes understood as respect for people in their own terms. The focus on care in moral reasoning by women draws attention to the limitations of justice focused moral theory. This does not mean that men do not have care perspective. Care has been given secondary or no position in the patriarchal society. Even accepting this perspective was difficult as care is regarded as a weakness which kept women away from public life. Justice hence also has a hegemonic belief system in itself. Thus in purview of justice, this different voice guides us towards attachment more than fairness. The strength of woman's moral perception in justice lies in the refusal of detachment and depersonalization.

Care ethics do not believe in glorification. So it also refuses the glorified statue of the Goddess of Justice. Just by a blindfold and weighing scale we might have fairness or equality but not justice as this Goddess is away from attachment. She also cannot see any kind of web, network or relationship which is the basis of justice from care ethics perspective.

The care ethics perspective should be applied in both public and private life. The liberal distinction between public and private has failed to give answers for moral dilemma of justice. This cannot be merely achieved by political participation, for the recent occurring in Indian Politics and its impact on social life refutes the relation between care ethics and political participation. The care perspective in

justice can only be achieved by regarding it a primary element in justice along with equality.

Justice is often equated with fairness alone. Gilligan criticises this view by stating that fairness will not give us a holistic view of human relationships. The ideal of justice cannot be separated from human relationships. The ideal of justice cannot be separated from it which are guided by feelings and attachment. Detachment is unmoral as we may have a biased judgement. So while applying justice in human relation, men tend to be detached which gives us a fractured mandate of the justice. The rules of fairness are applied objectively and are rigid thus giving no scope for applying care perspective. This is criticised by many feminists and dealt more deeply by care ethics. Thus, justice consists of equality and attachment.

Carol Gilligan through her care ethics surely points out the various lacunae in the concept of rationalist justice. The best part of this theory is that it does not idealize care. It is a critical concept that can replace patriarchal individualism. What we get from Carol Gilligan is freedom of mind. In Buddhism, we speak of this ultimate freedom. But Gilligan puts a strong statement by stating that this 'Ultimate Freedom of Mind' can be achieved by attachment and not detachment.

Gilligan touches the core of human relationship by analysing the periphery. Care ethics is more of a filter. When we put something in the filter, the whole part comes through the filter and its intrinsic quality is then changed. Gilligan is criticised because of lack of political element in care ethics. But politics is a part of the whole. Gilligan was never interested in establishing an ideology for that leads to glorification. She was merely challenging the concept of justice in male dominated rationalism which has moulded all the concepts and ideas. Care can transcend the personal spheres to acquire political voice as it acknowledges that different voice of women and even stating that this might be found in men also.

Care ethics is the future as we speak about humanity with more affection. These humanitarian grounds in the whole world can be achieved only through attachment which is the basic premise of care ethics. According to me care ethics takes feminism to a next level. It gives importance to the network of human relationships while safeguarding autonomy. It does not glorify motherhood but rather provides us with a theorization wherein the so-called weakness of women is turned as their strength. Thus care ethics encompasses the basic traits of every individual and particularly woman.

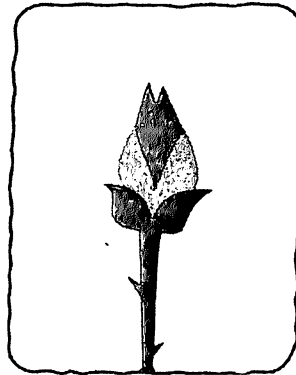
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Calyx n. tech. (pl. calyxes or calyces) a ring of leaves (sepals) which protects a flower before it opens and later supports the opened flower.

Calyx will always remain a base upon which beautiful thoughts and ideas blossom.



Calyx

A study Circle (2015-16)



**1 Row : L-R : Nidhi Bellay, Dr. V. M. Sholapurkar (Vice-Principal),
Dr. D. N. Sheth (Principal), Prof. Abhijit Chavan,
Sanika Kulkarni**

**2 Row : L-R : Aishwarya Subhedar, Renuka Tikare, Shruti Chitale,
Pranali Gogate, Sanghamitra Thakur,
Shalmalee Vedpathak, Neha Pendse,
Dhanashree Nakhe, Ketaki Mhaskar, T.P.V. Ratnashri.**

3 Row : L-R : Ashwin Chitale, Aniruddha Killedar, Amey Khare

Absent in the photo : Bhakti Damle, Ravina Yeole, Ishwari Pendse

शिक्षण प्रसारक मंडळीचे
सर परशुरामभाऊ महाविद्यालय, पुणे

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