



SADHANA

EDUCATION

SOCIETY'S

**L. S. RAHEJA COLLEGE OF
ARTS AND COMMERCE**

Relief Road, Santacruz (W), Mumbai – 400054

**INHOUSE DEPARTMENT
PUBLICATION
JULY 2017**

SES'S

L.S.RAHEJA COLLEGE OF ARTS AND COMMERCE



ISSUE NO. 4
JULY 2017

Sadhana Education Society's
L.S. Raheja College of Arts & Commerce

Inhouse Departmental Publication



Department of Economics

SES'S

L.S. RAHEJA COLLEGE OF ARTS AND COMMERCE

INHOUSE DEPARTMENT PUBLICATION

NAME: ARTHGYAN

DEPARTMENT: ECONOMICS

ISSUE NO.3: JULY 2017

EDITOR Dr. K.VENKATESHWARLU

CONTRIBUTORS: 1. PROF. RAHUL DANDEKAR

BOOK REVIEW

ISSUES AND VIEWS - DR. KIRAN BEDI

Rahul Dandekar
Assistant Professor,
Department of Economics.

The book reviewed is titled *ISSUES AND VIEWS* by **Dr. Kiran Bedi** published by sterling publishers in the year 2010. Dr. Kiran Bedi is India's first and highest ranking woman officer who joined the Indian Police Service in 1972. Her experience and expertise includes more than 35 years of tough and innovative policing, within India and outside. This book shows an inspiring journey of the first woman in the Indian Police Service.

This book is nothing but the compilation of various first hand experiences by Dr. Kiran Bedi. There are total 372 pages and 110 chapters spread over 6 various dimensions. These dimensions are leadership, governance and corruption; Indian police; empowering women; at the workplace; the overseas perspective; parenting, youth and care for the aged.

In leadership, governance and corruption dimension she mentioned that real leadership is not about prestige, power or status but it is all about responsibility. She also wrote about importance of accountability in police service. While writing about Indian police she says the Indian police force is facing schizophrenic syndrome as for survival they have to depend on politicians and for accountability to law. Under the theme of empowering women, she focuses on the measures that can be used to eliminate gender biases from the society. While writing about workplace she stated that there is a need to change prevailing punitive culture in the government departments, which will ultimately help them to work more efficiently in future. When she was mentioning about overseas experiences she said we don't have to ape the west in all that they do, instead we can let them learn from us. At the end in final dimension of parenting, youth and care for the aged she stated that there is a need for training young parents to become good parents as it is a biggest responsibility in life.

Language of the book is simple, flowing, convincing and very warm as if author is there in every page of the book and you feel her performing exactly in the way she actually handled and tackled the situation. Anyone who is reading will feel her presence. All chapters are written in very lucid language and elegant manner.

This book is of great importance to adolescent children as it deals with recent burning issues and it will also sensitize students to these issues. Now a day only awareness is not sufficient what is more important is an action that we will help them to tackle all these issues.

I completely agree with the views of author as awareness about all these issues is a need of an hour. I think title is very apt for the book because it reflects the very content of the book. The book is very much suitable to present context because there is a need to sensitize students about these issues. I strongly recommend this book should be used as a reference book for Foundation Course I and II at first year and second year level in the graduation. This book will be a motivational and an inspirational dose to all those who want their first choice as IPS, rather intending to be IAS and landing in IPS. This book is not only a book, which shall be read as a mere real life story; need to be adopted in practical life in whatever role we are in society. This book can also be used as a manual by leaders, police department, government, local bodies, panchayats, sarpanchs and government officers.

I consider myself fortunate enough that I got opportunity to read and analyze this book. This book has indeed helped me to get cognizant about various social issues pertaining to India and possible solutions to these problems.

Must read book by everyone!!!



ISSUE NO. 4
JULY 2017

Sadhana Education Society's
L.S. Raheja College of Arts & Commerce

Inhouse Departmental Publication

RUMINATIONS



Department Of Commerce

SES'S

L.S. RAHEJA COLLEGE OF ARTS AND COMMERCE

INHOUSE DEPARTMENT PUBLICATION

NAME: RUMINATIONS

DEPARTMENT: COMMERCE

ISSUE NO.3: JUNE 2017

EDITOR Dr. ANUPAMA NERURKAR

CONTRIBUTORS:

- 1. Dr. SATISH NARINGREKAR**
- 2. Dr. PREETI VASWANI**
- 3. Dr. AKSHATA KULKARNI**

GIST OF GST (PART-II)

-DR.SATISH NARINGREKAR

Goods and Services Tax (GST) is an indirect tax applicable throughout India which replaced multiple cascading taxes levied by the central and state governments. It was introduced as The Constitution (One Hundred and First Amendment) Act 2017,^[1] following the passage of Constitution 122nd Amendment Bill. The GST is governed by a GST Council and its Chairman is the Finance Minister of India. Under GST, goods and services are taxed at the following rates, 0%, 5%, 12% and 18%. There is a special rate of 0.25% on rough precious and semi-precious stones and 3% on gold.^[2] In addition a cess of 15% or other rates on top of 28% GST applies on few items like aerated drinks, luxury cars and tobacco products.^[3]

Touted by the government to be India's biggest tax reform in 70 years of independence, the Goods and Services Tax (GST) was finally launched on the midnight of 30 June 2017, though the process of forming the legislation took 17 years (since 2000 when it was first proposed). The launch was marked by a historic midnight (30 June - 1 July 2017) session of both the houses of parliament convened at the Central Hall of the Parliament, but which was immediately boycotted by the opposition by staging a walk out to show their disapproval of the same.^[4]

Members of the Congress boycotted the GST launch altogether. They were joined by members of the Trinamool Congress, Communist Parties of India and the DMK, who reportedly found virtually no difference between the existing taxation system, and therefore claimed that the government was trying to merely rebrand the current taxation system but made it worse for common people by increasing existing rates on common items and reducing rates on luxury items. Many critics pointed out that the GST would increase costs of daily goods and affect many Indians adversely, especially the middle, lower middle and poorer classes^[5] GST was initially proposed to replace a slew of indirect taxes with a unified tax and was therefore set to dramatically reshape the country's 2 trillion dollar economy.^[6] The rate of GST in India is between double to four times that levied in other countries like Singapore.^[7]

4 GST Tax Slab Rates List for Different Goods

5% GST Tax Slab Items	12% GST Tax Slab Items	18% GST Tax Slab Items	28% GST Tax Slab Items
Sugar	Ghee	Biscuits	
Tea	Butter	Flavoured refined sugar	
Skimmed milk	Fruit juice	Cakes,	
Milk food for babies	Almonds	Pastries	
Edible oils	Packed coconut water	Preserved vegetables	
	Preparations of		

Roasted coffee beans	vegetables	Soups	
Packed paneer	Fruits	Ice cream	
Frozen vegetables	Nuts	Pasta	
Cashew nuts	Pickle	Instant food mixes	
Spices	Murabba	Corn flakes	
Pizza bread	Chutney	Curry paste	
Rusk	Jjam	Mayonnaise	
Sabudana	Jelly	Salad dressings	
Fish fillet	Namkeen	Mixed condiments	
Packaged food items	Bhujia,	Mixed seasonings	
Fertilizers	Frozen meat products,	Branded garments	
Footwear upto ₹500	Packaged dry fruits	Footwear priced above ₹500	
Apparels upto ₹1,000	Animal fat sausage,	Headgear	
Agarbatti	Non-AC restaurants	Soap	
Domestic LPG	State-run lotteries	Hair oil	
Floor covering	Exercise books	toothpaste	
	Notebooks	tampons	
	Work contracts,		

Coir mats		toiletries	
	Apparel above ₹1000		
Matting		kajal pencil sticks	
	Tooth powder		
Insulin		tissues	
	Spoons		
Medicines		computers	
	Umbrella		
Stent		printed	
	Cake servers		
Braille watches		circuits	
	Sewing machine		
Braille typewriters		printers	
	Ladles		
Braille paper		monitors	
	Forks		
Hearing aids		camera	
	Tongs		
	Skimmers	speakers	
Postage stamps			
	Fish knives	CCTV	
Revenue stamps		Electrical transformer	
	Mobile		
First day covers		Optical fiber	
	Diagnostic kits & reagents		
Stamp-post marks		Bidi Patta	
	Ayurvedic medicines	Mineral water	
	Glasses for corrective spectacles and flint buttons	Tissues	
	Playing cards	Envelopes	
		Steel products	

	Ludo	Weighing machinery (non-electrical or electronic)	
	Carom board		
	Chess board	Aluminium foil Furniture	
		Bamboo	
		Padding pools Swimming pools	

A Critical Appreciation of Maya Angelou's *Phenomenal Woman*

Dr. Preeti Vaswani

Assistant Professor in English

In the poem *Phenomenal Woman*, Maya Angelou describes the allure she has as a woman. Throughout each stanza, Angelou exposes the attributes she possesses that deem her irresistible to others, particularly to those of the opposite sex, despite the fact that she does not fit into society's definition of what makes a woman beautiful. The first stanza includes the physical traits that make her stand out, from her hips to her smile. As the poem continues, Angelou extols the inner mystery that makes her so attractive to the men around her. At the end of the work, she describes the confidence and pride she has in herself, which radiates from her. In essence, this is Angelou's anthem about her pride in being a woman.

Throughout the poem, we find the spirit of womanhood being highlighted. The poem asserts the theme that 'Beauty is more than skin deep.' It refutes the theory that beautiful women should have well-proportioned physique and vital statistics. It disapproves the distorted view of beauty, which emphasizes more on outer beauty than inner beauty. It argues that true beauty lies within and body language is the medium through which it is expressed.

The use of the first pronoun 'I' indicates that the poet is talking about herself. Being an African-American, the poetess was subjected to various kind of oppression and discrimination based on race and gender. She has experienced racial discrimination, rape and oppression in America. The poem is a reflection of her life which was full of struggle. The majority of her work deals with both the racism and sexism she experienced as an African American woman. Her works are a reflection of the social issues that were prevalent in the second half of the 20th century.

To critically examine Angelou's poem *Phenomenal Woman*, let us first look at the structure. The poem is written in free verse, with an irregular rhyme scheme. It does have a clear rhythmic ebb and flow to it when read aloud. This rhythm, paired with the way the lines of the poem look on the page, is suggestive of the curves of the female form, thus allowing the structure of the poem to emphasize the theme of natural feminine allure.

Angelou uses repetition throughout the poem to bind it together poetically, as well as to emphasize her main point. The rhythm created by the repetitions in lines like:

"The reach of my arms,
The span of my hips,
The stride of my steps,
The curl of my lips" (lines 6-9)

Serve the purpose of listing the narrator's feminine attributes in a predictable way throughout the poem, but also create the rhythm and sway that evokes a curvy woman swinging her hips as she strolls down a street.

Angelou also uses repetition in the final four lines of each stanza:

"I'm a woman
Phenomenally
Phenomenal woman,
That's me."

This chorus acts a repetition of her thesis for the poem: that her power, beauty and grace come from her inherent femininity, rather than an external trait granted by society. Here the word 'phenomenal' can have dual meanings, one that is she is huge and the second, she has a towering personality. Thus, she is huge in both physique and personality.

The use of poetic devices as metaphors, refrain, personification, alliteration, imagery, and irony – all go on to make the poem rich in tone and expression, and to create a lasting effect on the readers.

Prime Minister Mr. Modi and Peaceful Green India

Dr. Akshata Arun Kulkarni.

Department of EVS.

Prime Minister Mr. Narendra Modi has proposed following projects for making India ecofriendly. They are enlisted below.

- 1) Late Prime Minister Mr. Rajeev Gandhi had started Clean Ganga project in 1986 with the help of NEERI (National Environmental Engineering Research Institute, Nagpur). As this good project could not materialize then, Mr. Modi restarted the same project of clening the Ganges under the new title; “Namami Gange” . As per the estimate the project is to be completed by 2018. Madam Uma Bharati is the leader of the project.
 - 2) Mr. Modi believes that if we want to live peacefully, we should have friendly relations with our neighbours. Keeping this view in mind, he invited all the SEVEN leaders of the SAARC countries for his swearing in ceremony.
 - 3) Being himself a technosavy person, he knows the immense power of the communication audio medium – the All India Radio. So he started addressing the masses once a month through his programme “Maan Ki Baat”. Through this programme not only he communicates with the people living in remote areas but also he establishes the bond of national integration with them.
 - 4) He stopped the subsidy given to all those LPG holders whose annual income exceeded 10 lakh rupees. The same fund which was being used as a subsidy was diverted to the poor and the needy. In this way altogether FIVE lakh new LPG connections were made available to all the needy persons. By doing such a small act he directly stopped the poor people from making use of fuelwood and kerosene resulting into less amount of CO₂ and CO gas emissions. A great step towards Green Environment indeed!
 - 5) On 2nd October 2016, Mr. Modi started his great project –“Clean India- Green India”. Not only he announced it, but also took care to see that all his MLA’s and MP’s and Ministers adopt at least one village to make it self-sufficient and self-reliant.
 - 6) The next step was the announcement of free TOILET Scheme for all the villages.
 - 7) Taking into consideration the need of enormous energy, he joined hands with the neighboring Nepal to use their perennial rivers for the generation of Hydroelectricity in our country. Similarly he gave importance for the generation of energy through the waste. He coined the term for energy generation as the Kesaria Revolution.(Kesaria colour means Orange).
 - 8) As per his instructions total 12 major ports have become Eco-friendly in India.
 - 9) He amended all the Environment related acts and made them more eco-friendly.
-



ISSUE NO. 4
JULY 2017

Sadhana Education Society's
L.S. Raheja College of Arts & Commerce

Inhouse Departmental Publication

PSYnalysis



Department Of Psychology

SES'S

L.S. RAHEJA COLLEGE OF ARTS AND COMMERCE

INHOUSE DEPARTMENT PUBLICATION

NAME: PSYnalysis

DEPARTMENT: PSHYCOLOGY

ISSUE NO.3: JUNE 2017

EDITOR Dr. CHITRA MUNSHI

CONTRIBUTORS: 1. Dr. CHITRA MUNSHI



Save for the rainy day

You never know when you will need old books, old magazines or newspapers, self-made notes, some clothing, or old mail, some toys, some accessories. Accumulating these possessions in our houses, yards, vehicles, offices or other workplace settings. We hoard things till it becomes a heap. We put something's aside and keep it as reserve to be used at a later time. The belief is that we keep all this for a "rainy day" so that we keep our head above water

A compulsive urge to acquire unusually large amounts of possessions and an inability to voluntarily get rid of those possessions, even when they have no practical usefulness or monetary value is termed as "Hoarding Disorder". Although some may view object accumulation as a leisurely activity that provides psychological benefit to the participant, clinical psychologists have become more concerned in its ability to hinder normal performances. This excessive form of acquisition, or "hoarding", carries potential to impair one's individual, interpersonal, and occupational functioning. Justification to their behaviour includes a desire to keep items or objects that may be needed in the future, a fear of discarding information that may have use in the future, a sense of emotional attachment with the hoarded items, a sense of self-identification with specific hoarded items, and an artistic or aesthetic attachment to specific features of hoarded items.

According to Diagnostic and statistical manual of mental disorder-5(DSM-5) people with Hoarding Disorder have a conscious, on-going urge to accumulate possessions. They feel anxious or mental anguish whenever those possessions get thrown away. While some people affected by the disorder accumulate valuable items, most affected individuals accumulate things with limited or no real-world value. In addition, in order to qualify for a hoarding disorder diagnosis, affected individuals must experience a disruption in important aspects of their lives e.g. work, home life, social interaction, etc., as a direct result of their hoarding behaviours.

DSM-5 CRITERIA FOR HOARDING DISORDER:

- A. Persistent difficulty discarding or parting with possessions, regardless of their actual value.
- B. This difficulty is due to the perceived need to save the items and distress associated with discarding them.
- C. The difficulty discarding possessions results in the accumulation of possessions that congest and clutter active living areas and substantially compromise their intended use. If living areas are uncluttered, it is only because of the interventions of third parties (e.g. family members, cleaners, authorities).
- D. The hoarding causes clinically significant distress or impairment in social, occupational, or other important areas of functioning (including maintaining a safe environment for self and others)
- E. The hoarding is not attributable to another medical condition (e.g. Brain injury, cerebrovascular disease).
- F. The hoarding is not better explained by the symptoms of another mental disorder (e.g. Obsessions in OCD, decreased energy in MDD, delusions in schizophrenia or another psychotic disorder, cognitive deficits in major neurocognitive disorder, restricted interests in autism spectrum disorder)

Motives for Hoarding

Emotional/sentimental attachment is a central motive for hoarding, said Frost. The person believes that he or she will “hurt the feelings” of the possession by discarding it. Other motives concern the use of possessions (“you never know when it can come in handy”) or worry about information or memory loss (“If I discard this, I will forget its content or the event it represents”).

PREVALENCE:

- Current population estimate of approximately 2-6%.
- Gender prevalence unclear.
- Average age is 50, although age of onset is often prior to 20.
- Functional impairment and clutter get worse with age
- Support for both genetic and environmental factors (Iervolino et al. 2009)

PERSONALITY TRAITS & HOARDING DISORDER:

Perfectionism, Dependency, Anxiety Sensitivity, Paranoia, Neuroticism, Indecisiveness,, Vulnerability, Impulsiveness, Depression, Self-consciousness

STAGES OF TREATMENT

- Psycho-education
- Establish goals
- Skills Training for Organizing and Problem Solving
- Therapy
- Maintenance and Relapse Prevention

With the new diagnostic criteria in place, opportunities and challenges in the care of patients who meet the diagnostic criteria of hoarding will improve in both meaningful and engaging ways and some of us who “hoard” will not misunderstand and justify this behaviour as **“saving for a rainy day”**

- Dr. Chitra Munshi
Head, Department of Psychology



ISSUE NO. 4
JULY 2017

Sadhana Education Society's
L.S. Raheja College of Arts & Commerce

Inhouse Departmental Publication

SOCIAL ISSUES



Department Of Sociology

SES'S

L.S. RAHEJA COLLEGE OF ARTS AND COMMERCE

INHOUSE DEPARTMENT PUBLICATION

NAME: SOCIAL ISSUES

DEPARTMENT: SOCIOLOGY

ISSUE NO.4: JULY 2017

EDITOR Dr. NANDITA SALDANHA

CONTRIBUTORS: 1. PROF. SAMYA SHINDE

Revisiting the debate on Capital Punishment.

Samya Shinde

The upholding of death penalty by the Supreme Court for the Nirbhaya rape convicts has revived the debate on capital punishment. The present article attempts to discuss the arguments put forth by the proponents and critics of capital punishment.

India is one of the few countries to have retained the death penalty while 140 nations have either abolished it in law or in practice. According to Amnesty International 40 countries maintain death penalty in law and practice whereas 100 nations have abolished it. Amnesty India's 2016 report on death penalty revealed that India awarded 136 death sentences.

The advocates propose whether death penalty be abolished or not is a matter of our perception of the convicts. Sociologically, socialisation plays an important role to determine whether an individual is inherently bad or whether one is a product of the circumstances. Though individual agency is significant, one can argue that a reason why one does the crime is also influenced by extraneous variables- social conditions being one of them. Death sentence is a violation of human rights and since it is irrevocable an innocent person could be wrongly executed. It is a little more than judicially sanctioned murder.

The architect of Indian constitution admitted in the constituent assembly that it is proper to abolish the practice of capital punishment.

Miscarriage of justice is one of the biggest concerns about death penalty. The process of deciding who should be on death row is arbitrary. The National Law University report released in 2016 show that 80% of the convicts awarded death penalty are those belonging to the poor, backward castes, class and minorities.

There is no evidence to suggest that death penalty has acted as a deterrent to crime. The Justice Verma committee formed following the Nirbhaya incident to review rape cases submitted in its report that death penalty would be a regressive step in the field of sentencing and reformation.

Leftist argue that the society cannot take away the life of any individual when the same society has contributed to the outcome of the crime. In cases of rape and murder, the society very often sanctions these; wherein sexual violence is normalised; though not directly, but indirectly contributing to the process. It is the society that has normalised sexual violence consolidating the patriarchal mind-set. As Arup Surendranath, National Law University states, 'crimes are as much about social failure as they are about individual responsibility'.

It is fallacious to assume that one killing can be avenged with another. The argument that death penalty is a deterrent is farfetched given the crime record especially in cases of rape and victimization of dalits and minorities. While releasing the report of National Law University research project on death penalty the Supreme court judge, Justice Madan Lohar observed that ' I don't think we have a jurisprudence philosophy on imposing death penalty whether it is a deterrent, reformation or retribution'. There is no place for death in a civilised society.

The socialisation argument does not mean that everyone in the same situation would behave in the similar manner of brutality, but the society in terms of access to legal aid, biased trial process and use of torture in investigation make us ponder on the verdict given. The judiciary's approach to death penalty is not consistent and its use is not governed by consistent criteria.

Those arguing against capital punishment have argued that there is no empirical data to confirm that capital punishment is a deterrent, but there are studies that show that though effects are not immediate, in the long run, they decrease heinous crimes, a claim that is contested by those in favour of abolishing capital punishment. Society suggests with rampant impunity for certain other crimes while seeking harsher punishment for certain crimes. Therefore in meting out justice the social reality should be under consideration.

Advocates of capital punishment argue that death is the severest of punishments and believe that simple punishments will not mitigate the problem. The crimes witnessed in recent times shake the collective conscience with its brutality that there remains no option. The proponents state it is very rare that a person can be wrongly executed as there are enough safety valves in our judicial system. There are legal vehicles for review petition, a curative petition, an appeal to the governor and finally an appeal to the president to ensure travesty of justice. The laws have enough safety valves against the miscarriage of justice therefore in cases where it is impossible to reform criminals and to prevent recurrence of heinous crimes capital punishment is justified. There are views that express that state sanctioned death penalty promotes fear of the law and serves as a deterrent to future offenders and at the same time give justice to the aggrieved. Law enforcement agencies are struggling to meet expectations of civil society. These agencies often cater more to the VIP's at the cost of ordinary citizens. Therefore the legal structures need to send a strong message.

To conclude the death penalty is unjust, inhuman and violates one's human rights. It is a blot on the humanitarian values of the society and therefore deliberations should be done immediately to debate the issue and reach a consensus.

References

Aravind, I. 2016. Three in four death row convicts from vulnerable sections: Report. Economic Times, May 07, 2016.

Bansal, S. 2016. Most on death row in India are first time offenders. The Hindu. New Delhi. May 06, 2016

Biswas, S. 2012. Should India abolish the death penalty? BBC. New Delhi, 29 August 2012

Chibber, M. 2015. End death penalty, keep it for terror only, recommends Law Commission, Indian Express, New Delhi, August 28, 2015.

Economic and Political Weekly Editorials. 2017. Crime and Punishment. [Vol. 52, Issue No. 19, 13 May, 2017.](#)

Guruswamy, A. 2013. Indian rape debate: Why death penalty is no solution. CNN. January 3, 2013

Indian Express. 2016. Law university report on death penalty: 'SC norms are routinely violated'. New Delhi. May 8, 2016.

Madhukalya, A. 2017. Capital punishment to Nirbhaya rapists revives death penalty debate. DNA. 8 May 2017, New Delhi.

SES'S

L.S. RAHEJA COLLEGE OF ARTS AND COMMERCE

INHOUSE DEPARTMENT PUBLICATION

NAME: RAJTARANGINI

DEPARTMENT: HISTORY

ISSUE NO.3: JULY 2017

EDITOR Ms. POOJA YADAV

CONTRIBUTORS: 1. Ms. POOJA YADAV

Higher Education in Ancient India

By

Pooja U. Yadav

The education in India has a rich and interesting history. In the ancient days, the education was imported orally by the sages & the scholars & the information was passed on from one generation to the other.

After the development of letters, it took the form of writing using palm leaves, the barks of trees, stone, wood, metal, water etc. This also helped in spreading the written literature. Ancient Indian civilization is one of the most interesting & important civilizations of the world from the Vedic age, education was regarded as an illumination & power, which transforms & enables our nature by the progressive & harmonious development of our physical, mental, intellectual & spiritual powers & facilities. It thus enables us to live as decent & useful citizens of society & in directing helps us to make progress in the spiritual sphere, both in this life & in the life to come.

Takshashila University

Takshashila, was an early Buddhist centre of learning. According to available references it is dated back to at least the 5th century BC. Some scholars date Takshashila's existence back to the 6th century BC. Takshashila is described in some detail in later Jātaka tales, around the 5th century AD. It became a noted centre of learning at least several centuries before Christ, and continued to attract students until the destruction of the city in the 5th century AD. Takshashila is perhaps best known because of its association with Chanakya. The famous treatise Arthashastra (Sanskrit for The knowledge of Economics) by Chanakya, is said to have been composed in Takshashila itself. Chanakya (or Kautilya), the Maurya Emperor Chandragupta and the Ayurvedic healer Charaka studied at Taxila. Generally, a student entered Takshashila at the age of sixteen. The Vedas and the Eighteen Arts, which included skills such as archery, hunting, and elephant lore, were taught, in addition to its law school, medical school, and school of military science. The ruins of Taxila contain buildings and Buddhist stupas located over a large area. The main ruins of Taxila are divided into three major cities, each belonging to a distinct time period. The oldest of these is the Hathial area, which yielded surface shards similar to burnished red wares (or 'soapy red wares') recovered from early phases at Charsadda, and may date between the 6th century BCE and the late 2nd millennium BCE. Bhir Mound dates from the 6th century BCE. The second city of Taxila is located at Sirkap and was built by Greco-Bactrian kings in the 2nd century BCE. The third and last city of Taxila is at Sirsukh and

relates to the Kushan kings. In addition to the ruins of the city, a number of buddhist monasteries and stupas also belong to the Taxila area. Some of the important ruins of this category include the ruins of the stupa at Dharmarajika, the monastery at Jaulian, the monastery at Mohra Muradu in addition to a number of stupas. Legend has it that Takṣa, an ancient king who ruled a kingdom called Takṣa Khanda the modern (Tashkent) founded the city of Takṣaśilā. However Sanskrit Takṣaśilā, appears to contain the suffix śilā, "stone" with the prefix Takṣa, alluding to Takṣa, the son of Bharata and Mandavi, as related in the Ramayana. In the Mahābhārata, the Kuru heir Parikṣit was enthroned at Takṣaśilā. According to tradition the Mahabharata was first recited at Takṣaśilā by Vaishampayana, a disciple of Vyasa at the behest of the seer Vyasa himself, at the sarpa satra yajna, "Snake Sacrifice ceremony" of Parikṣit's son Janamejaya. According to one theory propounded by Damodar Dharmanand Kosambi, Takṣaśilā is related to Takṣaka, "carpenter" and is an alternative name for the Nāgas of ancient India. According to scattered references which were only fixed a millennium later, it may have dated back to at least the 5th century BCE. There is some disagreement about whether Takshashila can be considered a university. While some consider Taxila to be an early university or centre of higher education, others do not consider it a university in the modern sense, in contrast to the later Nalanda University. Takshashila is described in some detail in later Jātaka tales, written in Sri Lanka around the 5th century CE. Takshashila is considered a place of religious and historical sanctity by Hindus and Buddhists. The former do so not only because, in its time, Takshashila was the seat of Vedic learning, but also because the strategist, Chanakya, who later helped consolidate the empire of Emperor Chandragupta Maurya, was a senior teacher there. The institution is very significant in Buddhist tradition since it is believed that the Mahāyāna sect of Buddhism took shape there. Some scholars date Takshashila's existence back to the 6th century BCE. It became a noted centre of learning at least several centuries BCE, and continued to attract students from around the old world until the destruction of the city in the 5th century CE. Takshashila is perhaps best known because of its association with Chanakya. The famous treatise Arthashastra (Sanskrit for The knowledge of Economics) by Chanakya, is said to have been composed in Takshashila itself. Chanakya (or Kautilya), the Maurya Emperor Chandragupta and the Ayurvedic healer Charaka studied at Taxila. Generally, a student entered Takshashila at the age of sixteen. The Vedas and the Eighteen Arts, which included skills such as archery, hunting, and elephant lore, were taught, in addition to its law school, medical school, and school of military science.

1.9.2 Nalanda University

Nalanda is an ancient center of higher learning in Bihar, India from 427 to 1197. Nalanda was established in the 5th century AD in Bihar, India. Founded in 427 in northeastern India, not far

from what is today the southern border of Nepal, it survived until 1197. It was devoted to Buddhist studies, but it also trained students in fine arts, medicine, mathematics, astronomy, politics and the art of war. The center had eight separate compounds, 10 temples, meditation halls, classrooms, lakes and parks. It had a nine-story library where monks meticulously copied books and documents so that individual scholars could have their own collections. It had dormitories for students, perhaps a first for an educational institution, housing 10,000 students in the university's heyday and providing accommodations for 2,000 professors. Nalanda University attracted pupils and scholars from Korea, Japan, China, Tibet, Indonesia, Persia and Turkey. A half hour bus ride from Rajgir is Nalanda, the site of the world's first University. Although the site was a pilgrimage destination from the 1st Century A.D., it has a link with the Buddha as he often came here and two of his chief disciples, Sariputra and Moggallana, came from this area. The large stupa is known as Sariputra's Stupa, marking the spot not only where his relics are entombed, but where he was supposedly born. The site has a number of small monasteries where the monks lived and studied and many of them were rebuilt over the centuries. We were told that one of the cells belonged to Naropa, who was instrumental in bringing Buddhism to Tibet, along with such Nalanda luminaries as Shantirakshita and Padmasambhava. A small opening in the cell revealed a tiny room where Naropa supposedly meditated. Nalanda's main importance comes from its Buddhist roots as a center of learning. Hsuan Tsang, the famous pilgrim from China came here and studied and taught for 5 years in the 7th Century A.D. Nalanda University at that time had over 10,000 students and 3,000 teachers. For some 700 years, between the 5th and 12th Centuries, Nalanda was the center of scholarship and Buddhist studies in the ancient world. A great fire wiped out the library of over 9 million manuscripts and at the beginning of the 12th Century, the Muslim invader Bakhtiyar Khalji sacked the university. It was in the 1860's that the great archeologist Alexander Cunningham identified the site as the Nalanda University and in 1915-1916 the Archeological Survey of India began excavations of the site. What has been excavated to date is only a small part of the entire site but much of the ruins are beneath existing villages and are unlikely to be revealed. The present site is well-maintained and very pleasant to visit. Across the street is the small museum with some excellent Buddhist statues and about a kilometer away is a temple dedicated to Hsuan Tsang. Nearby are the International Centre for Buddhist Studies and the Nava Nalanda Mahavihara, set up for the research of Buddhism.



Sadhana Education Society's
L.S. Raheja College of Arts & Commerce

Bachelors of Mass Media

"PEP TALK"

cover design courtesy Juhi Shah

IN-HOUSE DEPARTMENT PUBLICATION

ISSUE NO. 4
JULY 2017

SES'S

L.S. RAHEJA COLLEGE OF ARTS AND COMMERCE

INHOUSE DEPARTMENT PUBLICATION

NAME: PEP TALK

DEPARTMENT: B.M.M

ISSUE NO.3: JULY 2017

EDITOR MR. MAYURESH BELSARE

CONTRIBUTORS: 1. MR. MAYURESH BELSARE

Life at L.S. Raheja College of Arts & Commerce

‘Where the head is held high and the heart fearless’- This sentiment as envisaged by the Nobel laureate and poet Shri. Rabindranath Tagore echoes loud and clear through the dynamic premises of this institute as well. As you begin to explore, it’s easy to see why this educational institution that has carved a niche for itself in today’s competitive academic space, is the first choice of students and faculty alike across various courses.

With a completely student centric approach the institution offers ample of scope for the overall development of both the teacher and the taught. This philosophy is evident, first and foremost, in the freedom accorded to the highly experienced and dedicated faculty to help them implement an innovative pedagogy. Secondly, the faculty is encouraged to contribute to the grooming and well-being of students through an array of initiatives as mandated by the UGC. Committees such as the Cultural, Library, Anti-Ragging, Magazine, Lifelong Development and Learning, etc. are a step in that direction.

Thirdly, student mentoring is actively taken up by the respective course coordinators in association with their departmental staff. In the light of recent cases of mental fatigue and depression, such a kind of one-on-one interaction greatly helps in identifying a soft area that needs a more critical understanding and counselling.

The beginning of a new academic year is also marked by a host of inter-collegiate festivals and students eagerly look forward to participating in them. They provide a platform where students can bond with their peers from other institutions and show-off their skills in a healthy competitive environment.

Sports, NCC and NSS are other domains which give impetus to societal learning and channelize the energies of students in the pursuit of true knowledge. All these exercises and activities are an integral part at the L.S. Raheja College of Arts and Commerce. The institution, through such forums, encourages the team spirit among its students required to forge bonds of camaraderie.

A typical day here begins as early as 7 in the morning and stretches up to 5 in the evening. This includes classes for the aided and self-financing courses that are roughly divided into the morning and afternoon sessions. Enthusiasm is evident in every teaching learning module and it is aided by a robust infrastructure such as video projectors in classrooms, a dedicated AV room, a well-stacked library and facilities for sports to list a few.

The highly helpful and cooperative administration staff ensures a smooth coordination between different functions in the day-to-day life. Above all, behind this effortless functioning of the institute lies the support and vision of its leaders who believe in leading by an example.

So, come and witness for yourself the vibrant life at this prestigious hub of academic excellence right in the heart of Mumbai city and aspire to achieve your dream with like-minded educationists.



Sadhana Education Society's
L.S. Raheja College of Arts & Commerce

FINACC

Bachelors of Commerce (Accounting & Finance)

ISSUE NO.4 (JULY 2017)



IN-HOUSE DEPARTMENT PUBLICATION

SES'S

L.S. RAHEJA COLLEGE OF ARTS AND COMMERCE

INHOUSE DEPARTMENT PUBLICATION

NAME: FINACC

**DEPARTMENT: BACHELOR OF COMMERCE (ACCOUNTING
& FINANCE)**

ISSUE NO.3: JULY 2017

EDITOR Ms. VAISHALI PANDYA

CONTRIBUTORS: 1. Ms. PRAJAKTA HEDAU

PLASTIC MONEY – FROM “LESS CASH” TO “CASHLESS” ECONOMY

Plastic money signifies hard plastic cards that are used to facilitate cash-less transactions, without requirement of physical paper currency. In India, banking sector has kept pace with the advent of Liberalization, Privatization and Globalization and has seen many technological advances in the form of innovative products and methods like plastic cards, mobile banking and internet banking. Plastic cards have become a key element of electronic banking. Through plastic money, the barter system which uses money as medium of exchange has been redefined and exchange can be done electronically without requirement of hard currency. Some of the important variants of plastic cards include ATM cards, debit cards, credit cards and other smart cards.

ATMs facilitate withdrawal of money without visiting a bank's branch. With the passage of time, in addition to withdrawal facility, ATMs and cash recyclers also facilitate deposits of cash and cheque, balance enquiry, payment of bills, making donations to charitable institutions.

Plastic money holds importance after the recent debacle of 'Demonetization' in which currency paper of Rs. 500 and Rs. 1000 has been ceased to be a legal tender and in turn a new currency paper of Rs. 500 and Rs. 2000 has been introduced by the government. This move has led to a huge hue and cry amongst the masses as the money which was in circulation has been stopped; certain limits have been imposed on deposit and withdrawal of money into and from the account, old 500 and 1000 notes to be deposited in bank accounts only which further cannot be exchanged after December 31. Long queues can be seen outside banks and ATMs for withdrawal of cash and most of the ATMs and bank branches wear a deserted look due to 'less-cash' being available for circulation.

Taking a dig at the problems being faced by the people due to demonetization or less cash being available, a fact to be highlighted is that the people ignorant of the benefits of 'cashless' transactions have been the worst victims of 'less cash'. The main reason behind the woes of masses is not less availability of cash but ignorance to the digital aspect of banking. Post the draconian step of demonetization, advertisements highlighting the use of mobile banking (m-pay), e-banking, UPI are being broadcast and published in television, radio, social and print media. Various banks are incentivizing their staff and third parties for boosting the usage of cards and educating the masses about online payment gateways. All such tools enable payments without exchanging cash and the amount is directly credited to one's bank account. Hence this is an effective initiative towards making the country digital. In order to achieve this, the primary step is to bring each and every individual of a family into the gamut of banking. The seeds to reap this fruit were sown 2 years ago through 'Pradhan-Mantri Jan-Dhan Yojana (PMJDY)' and many such initiatives that were formulated with the sole motive to achieve financial inclusion and financial literacy. Under the scheme, 'no-frill' accounts were opened and RuPay cards were distributed to all the account holders of PMJDY. The need of the hour is to leverage on the platform by framing policies towards 'Digital Literacy' which would make the masses aware of the merits of cashless economy.

With every favorable impact come certain externalities that pose challenges in implementation of any initiative. Some of the main challenges amidst going Digital are:

- Technological constraints such as providing ATMs, POS machines and cash recyclers especially in remotest parts of the country to include every citizen in the gamut of cashless economy. Providing internet facilities in certain areas like hilly terrains, areas prone to natural calamities is also a major challenge which hinders cent percent achievement of making the economy digital and cashless.
- Though mobile phone companies have followed disruptive innovation which has made smart phones affordable for all, yet a large section of the society is deprived of this technological advancement and many of those who have access to technology lack awareness. Hence framing action plan for Digital Literacy is the need of the hour.

- Banking industry also faces acute threat of cyber security which is indeed a big challenge in the digital era. Plastic money is more prone to cyber attacks in the form of password compromise or sharing of PIN. The recent debacle of thousands of plastic cards being blocked by banks due to security related issues highlights the gravity of the situation.
- Another important aspect to reflect upon is that in our country, still 40% of the population is deprived of access to financial services. Even if this issue is addressed, the problem of spreading awareness about use of plastic cards would be present. The section of the society that is deprived of access to banking services would remain vulnerable to digital aspect of banking.

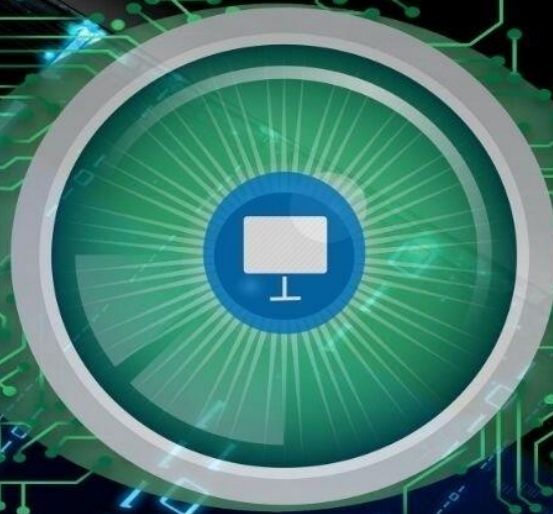
The facts highlighted with regards to the issue signify that the aim of making the country fully digital cannot be achieved overnight. It requires proper planning and strategies to overcome the resistance of people, spreading awareness about the positive impact of digitally induced payments, making the masses digitally literate, and improving the technology to aid digital payments and settlement. The input factor includes time and money- time from all the stakeholders i.e. people to gain digital literacy, banks and telecom companies to provide the necessary tools and technology to aid digital payments. The input cost may be high but the end result would ultimately be cost-effective and would make the payment and settlement system simpler, safer and faster.



ISSUE NO. 4
JULY 2017

Sadhana Education Society's
L.S. Raheja college of Arts & Commerce
Inhouse Departmental Publication

INSIGHT



Department Of B.Sc.(I.T)

SES'S

L.S. RAHEJA COLLEGE OF ARTS AND COMMERCE

INHOUSE DEPARTMENT PUBLICATION

NAME: INSIGHT

DEPARTMENT: B.Sc.(IT)

ISSUE NO.3: JULY 2017

EDITOR Mrs. MONALISHA PATTNAIK

CONTRIBUTORS: 1. Mrs. MONALISHA PATTNAIK

Artificial Intelligence learns to predict if people are criminals from their facial features

Introduction

Crime Analysis Today, collection and analysis of crime-related data are imperative to security agencies. The use of a coherent method to classify these data based on the rate and location of occurrence, detection of the hidden pattern among the committed crimes at different times, and prediction of their future relationship are the most important aspects that have to be addressed.

Police analysts are required to unravel the complexities in data to assist operational personnel in arresting offenders and directing crime prevention strategies. However, the volume of crime that is being committed and the awareness of modern criminals make this a daunting task. The ability to analyze this amount of data with its inherent complexities without using computational support puts a strain on human resources. This paper examines the current techniques that are used to predict crime and criminality.

Crime Pattern Theory This theory is helpful in establishing how people interact with their spatial environment and has three main notions: nodes, paths and edges (Policing and Reducing Crime Unit 1998, Brantingham and Brantingham 1991). 'Nodes' is a term from transportation which relates to where people travel to and from. A node is a base for oneself such as home, school, shopping centre etc. Such places can not only generate crime within but also nearby, for example, tight security at some place (Football ground, bar etc.) may generate more crimes and disorder outside of the enclosure/building. Paths are the travel routes which people take to go to their work, entertainment, and other daily activities; in a nutshell it joins nodes. Most people are creatures of habit; and follow the same route to go to the same place or nodes. These paths are closely related to where they fall victim to crime. The third concept of crime pattern theory, edges refers to the boundaries of areas where people live, work, and shop or seek entertainment. These edges are prone to some crimes such as racial, robberies, shoplifting because people seldom know each other at edges so after committing crime they go back to their haven. Insiders usually commit crimes around their base (home, office etc) whereas outsiders commit crimes at edges.

Statement of problem

Researchers have created a machine that they claim can tell if a person is a convicted criminal simply from their facial features.

The artificial intelligence, created at Shanghai Jiao Tong University, was able to correctly identify criminals from a selection of 186 photos nine out of 10 times by assessing their eyes, nose and mouth.

The findings add support to an often-discredited view that criminals have particular facial features, suggesting that the structure of someone's face, including "lip curvature, eye inner corner distance, and the so-called nose-mouth angle", can identify criminality.

It would be highly controversial if applied, but raises fears that China could add such information to its surveillance capabilities, which already include a dossier on almost everyone called *dang'an*. The files, collected since the Mao era, contain personal and confidential information such as health records and school reports.

Relevant research methodology

As part of the research, it was trained the artificial intelligence with around 1,670 pictures of Chinese men, half of whom were convicted criminals. The pictures analyzed were taken from identification cards in which the men, aged 18 to 55, were clean-shaven and holding neutral poses.

Having taught the system, it was proposed to feed it a further 186 images and asked it to sort them into criminals and non-criminals.

The accuracy of its guesses, which were based on features it associates with criminality, led the researchers to claim that, "despite the historical controversy", people who have committed a crime have certain unique facial features.

"The faces of general law-abiding public have a greater degree of resemblance compared with the faces of criminals, or criminals have a higher degree of dissimilarity in facial appearance than normal people". More research is required to cover different races, genders and facial expressions before the tool could be widely used.

Research Analysis

The bankrupt attempt to infer moral qualities from physiology was a popular pursuit for millennia, particularly among those who wanted to justify the supremacy of one racial group over another. But phrenology, which involved studying the cranium to determine someone's character and intelligence, was debunked around the time of the Industrial Revolution, and few outside of the pseudo-scientific fringe would still claim that the shape of your mouth or size of your eyelids might predict whether you'll become a rapist or thief.

Not so in the modern age of Artificial Intelligence, apparently: In a paper titled "Automated Inference on Criminality using Face Images," two Shanghai Jiao Tong University researchers say they fed "facial images of 1,856 real persons" into computers and found "some discriminating structural features for predicting criminality, such as lip curvature, eye inner corner distance, and the so-called nose-mouth angle." They conclude that "all four classifiers perform consistently well and produce evidence for the validity of automated face-induced inference on criminality, despite the historical controversy surrounding the topic."

In the 1920s and 1930s, the Belgians, in their role as occupying power, put together a national program to try to identify individuals' ethnic identity through phrenology, an abortive attempt to create an ethnicity scale based on measurable physical features such as height, nose width

and weight, with the hope that colonial administrators would not have to rely on identity cards.



(a) Three samples in criminal ID photo set S_c .



(b) Three samples in non-criminal ID photo set S_n

Figure 1. Sample ID photos in our data set.

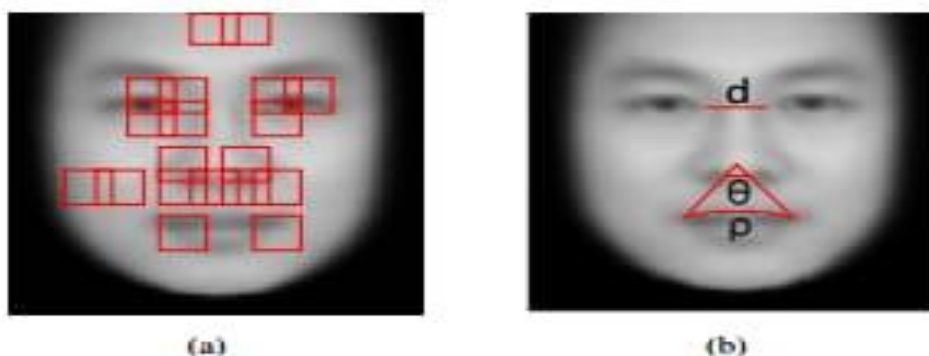


Figure 8. (a) FGM results; (b) Three discriminative features ρ , d and θ .

The study contains virtually no discussion of *why* there is a “historical controversy” over this kind of analysis — namely, that it was debunked hundreds of years ago. Rather, the authors trot out another discredited argument to support their main claims; that computers can’t be racist, because they’re computers:

Unlike a human examiner/judge, a computer vision algorithm or classifier has absolutely no subjective baggages, having no emotions, no biases whatsoever due to past experience, race, religion, political doctrine, gender, age, etc., no mental fatigue, no preconditioning of a bad sleep or meal. The automated inference on criminality eliminates the variable of meta-accuracy (the competence of the human judge/examiner) all together. Besides the advantage of objectivity, sophisticated algorithms based on machine learning may discover very delicate and elusive nuances in facial characteristics and structures that correlate to innate personal traits and yet hide below the cognitive threshold of most untrained nonexperts.

This misses the fact that no computer or software is created in a vacuum. Software is designed by people, and people who set out to infer criminality from facial features are not free from inherent bias.

Absent, too, is any discussion of the incredible potential for abuse of this software by law enforcement. Kate Crawford, an AI researcher with Microsoft Research New York, MIT, and NYU, told The Intercept, “I’d call this paper literal phrenology, it’s just using modern tools of supervised machine learning instead of calipers. It’s dangerous pseudoscience.”

Crawford cautioned that “as we move further into an era of police body cameras and predictive policing, it’s important to critically assess the problematic and unethical uses of machine learning to make spurious correlations,” adding that it’s clear the authors “know it’s ethically and scientifically problematic, but their ‘curiosity’ was more important.”

Given the explosive, excited growth of AI as a field of study and a hot commodity, don’t be surprised if this curiosity is contagious.

The world’s biggest defence budgets

United States	China	United Kingdom	Russia	France	India
\$569.3bn	\$190.9bn	\$66.5bn	\$53.2bn	\$52.7bn	\$49.7bn

Future Studies

The research could add to County's vast security apparatus, which already includes AI-based "predictive policing".

Earlier this year, Beijing hired the China Electronics Technology Group, the country's largest defence contractor, to create an AI that can analyse the behaviour of people in CCTV footage for signs that they're about to commit an act of terror.

Digital rights experts warned that using AI in this way could be dangerous and that "reaching generalised conclusions from such small data poses huge problems for innocent people".

Dr Richard Tynan, technologist at Privacy International, said: "This is no different than Craniometry from the 1800s, which has been debunked. In fact, the problem runs much deeper because it can be impossible to know why a machine has made a certain decision about you.

Conclusion

It demonstrates the arbitrary and absurd correlations that algorithms, AI, and machine learning can find in tiny datasets. This is not the fault of these technologies but rather the danger of applying complex systems in inappropriate contexts.

Once complete, the system will be used to predict "security events" so that police or the military can be deployed in advance.

SES'S

L.S. RAHEJA COLLEGE OF ARTS AND COMMERCE

INHOUSE DEPARTMENT PUBLICATION

NAME: BANCOMANIA

DEPARTMENT: BBI

ISSUE NO.3: JULY 2017

EDITOR MR. KAPIL THAKORE

CONTRIBUTORS: 1. MR. KAPIL THAKORE

Power of Money and Education

Money! Oh yeah! The most powerful thing in the world. Money is what money does. Money can buy Rs. 251 Crore Corporate Jet by Mr. Mukesh Ambani for his wife on her birthday. It is money which makes rich and famous. Carlos Slim, Warren Buffet and Bill Gates are all famous because they are world's richest people. Dhirubhai Ambani was famous because he brought equity cult to India and that made investors rich. Jeff Bezos owner of Amazon is now world's richest person.

I am into teaching profession from 1996 and that is 21 years. My students who are either CA or are becoming CA ask me only one question? Sir, Mukesh Ambani is a MBA drop out from abroad and still is making headlines and we as CA cannot make headlines? Where is that gap? In one of the seminars one student had asked me, Sir, is it not that stock market that has lot of money? They are and will remain community which say are hum to sirf tick marte hein aur kya? Dekho yeh log bina padhe kitna paisa kamate hein? All these factors will divert your attention and not help you. Warren Buffet had said once, "Stock Market is a beautiful place. It gives lot of good shares on the floor. You just have to bend and pick it up." A young girl asked, "Sir what is the problem then why everybody is not rich?" Warren Buffet replied, "The problem is that while you bend down, your wallet should not slip out of your own pocket". Thus Professional Degree does not allow our wallet to slip out of your own pocket. It helps you to remember that you are professional and the partner in the Nation Building. You have to be active and maintain high standards. Remember the following in life:

**“First 25 years of your life you learn,
Next 35 years of your life you earn,
Rest of the life you return.”**

There is that immense sense of satisfaction. Jio is an example. Today in India Data is cheaper than Atta. Power of money is with education. Not without education. Any profession which is a white collar profession and reputation at the highest level will need ethics also. I remember once when I had approached a Bank for loan before few years to buy AC for the home. They told me qualification? I said CA. The loan was sanctioned in 2 minutes. No questions were asked. The loan is paid and the AC is working fine! I know people who have to bribe the authorities for getting the loan. They finally come to whom? CA. I do not hold any disrespect for any profession but I hold the highest respect for CA Profession because it gives you

**Character,
Honesty,
Attitude,
Respect,
Tact,
Ethics,
Resources,
Enterprise,
Development.**

Hey, that is chartered!

**CHARACTER HONESTY ATTITUDE RESPECT TACT ETHICS RESOURCES
ENTERPRISE DEVELOPMENT** So, with due respect to all people in the world and highest respect to CA PROFESSION if anybody tells you what do you have in life? Tell them "Mere pass CA hein"! What is Dhirubhai Ambani and Bill gates biggest regret in life? Not taken proper Education Thus one CA can make 10 projects but 10 projects cannot make 1 CA.

Do not ever regret that you do not have more money. You can make money. Man can make money but money cannot make a man.

Wants are unlimited. Resources are limited. We learn this in Economics. We need to keep this

in heart. I never say money is not needed. Money is needed but with dignity, pride and respect.
Power of money lies in power of education.

CA. Kapil G. Thakore
Assistant Professor and BBI Coordinator
Sadhana Education Society's
L S Raheja College of Arts and Commerce
Relief Road, Mumbai