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Department of Computer Science & Engineering

Topic: Telecommunications service of BTCL



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Introduction

The Telegraph branch under the Posts and Telegraph Department was created in 1853 in the then British India and was regulated afterwards under the Telegraph Act-1885. The Telegraph branch was reconstructed in 1962 in the then East Pakistan as Pakistan Telegraph and Telephone Department. In 1971, after the independence of Bangladesh, Bangladesh Telegraph and Telephone Department was set up under the Ministry of Posts and Telecommunications. This was converted into a corporate body named 'Telegraph and Telephone Board' by promulgation of Telegraph and Telephone Board Ordinance, 1975. In pursuance of an ordinance of 1979, Telegraph and Telephone Board was converted into Bangladesh Telegraph and Telephone Board (BTTB), as a Government Board. From 1st July, 2008, as per the Telecommunication policy, 1998, BTTB was converted into a public limited company - Bangladesh Telecommunication Company Limited through another ordinance. BTCL has a mandate to provide basic telecommunication services throughout the country. At present, BTCL is providing telephone service to about 1 million telephone subscribers down to upzilla (thana) and growth centre level. Most of them can also use dial-up internet service. BTCL has the largest telecom infrastructure comprising of copper cabling, microwave links, satellite links, optical fibre networks etc. The call rates and internet rates are cheaper than those of other operators. ADSL Broadband internet service is available now with present capacity of 33 thousand. BTCL earned 15653 million taka revenue in 2007-08 and 20813 million taka revenue in 2008-09 year. Number of Sanctioned posts is 19066. Working manpower on 30th June 2009 was 10325 (regular). In addition to this, about 5000 employees have been working as work-charged and casual. The organogram of the company is approved along with 8703 posts in 28th Board of Directors' meeting held on 27th December 2009.

BTCL SERVICES :

1.Telephone service:

BTCL provides land telephone (PSTN-Digital) throughout the country. Apply to your nearby BTCL (Divisional Engineer) office in prescribed form. Form is available in [form section](#) on this website and also at BTCL office. BTCL office will issue a demand note (if line is available) to pay connection charge etc at a specified bank. After that, BTCL will send advice note to your local camp to provide connection.

Area	Connection Charge	Security Deposit	Total
Dhaka Multi-Exchange, Narayanganj Proper, Gazipur Proper	Tk 1000	Tk 1000	Tk 2000
Chittagong Multi-Exchange	Tk 500	Tk 500	Tk 1000
Other Zilla, Upazilla, Growth Center	Tk 300	Tk 300	Tk 600

Optional telephone set (Alaponi-21, model-8112) is available at price Tk 1200/=. (Ref: RS 2-5/(part-3)40, Date: 29/07/2012). Customers may also buy it from TSS sales center or from local market.

Most lines have caller-ID option, use a set with caller-ID display to see the incoming number.

For Govt. Service Telephone Connections, BTCL will provide Telephone set (available model).

Please apply to BTCL Divisional Engineer (DE)'s Office in your area in prescribed form for new connection, name and address change/ correction etc.

For telephone shifting, please apply to Divisional Engineer's office in your new address area attaching your original demand note and Bill Clearance Certificate (obtainable from revenue office). Telephone number will be changed if shifting is not within same exchange area.

Call details are available at some exchanges on payment. Please contact local DE if you require this.

To lock all outgoing call: *34*password*01#, to lock only ISD call: *34*password*04#, to unlock: #34*password#. Password= any four digit like 1234, 7819 etc. You have to apply to local Divisional Engineer with copy of demand note to reset the password if you forget it.

Apply to local DE to provide ISD facility on your phone line. You may also book ISD call here:
152, 154, 162, 8312359, 8312369, 9332199

Code: Zilla/Upazilla area code

ISD country code

ISD Call Rate: BTCL to Landline (PSTN)

BTCL to Cellphone

Monthly line rent for Multi-Exchange is Tk 160 for Zilla proper is Tk 120 and for Upazilla & Growth Centre is Tk 80.

Call charge per minute: BTCL to BTCL is Tk 0.30 (8AM-8PM) & Tk 0.10 (8PM-8AM). BTCL to other operator is Tk 0.80.

Bill payment status and duplicate copies are [available here](#). To login, enter your area code and phone number together for both ID and Password. For example, ID & PW for a number in Dhaka is 029320243. You can change password later. If you can't login, then please call Director (Technical Development & Research)-9140007 or System Analyst-9131161, 9120244, Computer Centre, BTCL, Manik Mia Avenue, Dhaka.

If your line is temporarily disconnected (TD), pay dues and show the paid copies to BTCL revenue office. After 3 months, you'll need to pay reconnection charge. Please contact local revenue office or Director (Revenue-1) phone: 02-9146338 for area other than Dhaka and Director (Revenue-2) phone: 02-9138541 for Dhaka.

15% VAT will be added to all charges and bills.

Fax can be used on telephone line without extra permission. All charges are same as telephone charges.

PABX can be used on telephone lines. Auto-hunting facility (upto 8 numbers) is available.

Virtual Telephone Numbers are available at some exchanges. Connection charge is Tk 2000 per line for upto 10 lines, Tk 1000 per each extra line. Line rent is Tk 160/month for each of first 100 lines and Tk 80/month for each extra line.

Triple Play: GPON (Gigabit Passive Optical Network) in Dhaka and Chittagong (currently at Mirpur DOHS, Gulshan & Banani) service provides internet and telephone over optical fiber. Video, TV, Gaming etc may be incorporated later.

Connection Charge	Tk 2000/= per ONT or per port of MDU	
Testing & Configuration	Tk 500/= per ONT or per port of MDU	
FTTH (Fiber To The Home)	ONT (Optical Network Terminal)	Tk 4300/=
	ONT with Battery and Charger for backup power	Tk 5900/=
FTTB (Fiber To The Building)	MDU (Multiple Dwelling Unit), 24 Port	Tk 4200/= per port
	MDU with UPS for backup power	Tk 5700/= per port
Internet (Unlimited) <i>[no 'Fair Usage Policy']</i>	1 MBPS	Tk 1000/= per month
	2 Mbps	Tk 1500/= per month

	4 Mbps	Tk 2800/= per month
Voice: Telephone [Regular Telephone call-rate applies]	Line Rent	Tk 160/= per month
BTube (IPTV, VoD, Games etc)	Service not yet ready	Rate not yet fixed

Notes:

ONT/ MDU devices has ports for Telephone and Internet.

ONT is for single home user, MDU is for 16 or 24 users in an apartment building or office complex.

Local Area Network/ Wi-Fi Network in a house or apartment building or office complex is customers responsibility.

15% VAT to be added to all charges.

Apply to Divisional Engineer (Manpower), Mirpur, Dhaka on prescribed form for connectivity in Mirpur DOHS area, Dhaka.

Form is available online in 'form' item on left menu of this website.

Other areas will be covered later.

Contact: SDE, BTCL, Mirpur DOHS, Dhaka, Phone: 58070000 E-mail: sdepmpmir@gmail.com

and DE, Gulshan, Dhaka.

BCube (ADSL) service: Internet is provided through your copper based telephone line. You need a ADSL2+ supported modem and you may use wired or wireless (wifi) router to share it in home or office. Your telephone service is not obstructed by ADSL service. ADSL is available in 53 zilla and will cover other 11 zilla soon.

Contact local Divisional Engineer for new connection. Form is available in [form section](#). We also have agreement with 3 outsourcing companies who will help you to get this service. They are:

(i) Emem Systems Ltd, Phone: 09666707070, 9850280, 01978810408 Email:

adsl@ememsystems.net Web: www.bcube.net.bd

(ii) Systems Services Ltd. (SSL), Phone: 01517754636, 01554636775 Email: bcube@ssl.com.bd

Web: <http://bcube.ssl.com.bd>

(iii) Sisview technologies Telecom Ltd, Phone: 9339000, 9338884 Email: adsl@sisview.net.bd

Web: www.sisview.net.bd

Bill is included within telephone bill. To view usage details and to change password, [click here](#).

ADSL Customer Care, Mogbazar, Dhaka: 9351616

You can purchase ADSL2+ modem from outsourcing companies or from local computer shops.

For new connection, registration fee is Tk 100, Setup-Configuration charge (BTCL end) is Tk 300, Upgrade charge- Nil, Downgrade charge- Tk 150, Shifting charge- Tk 150.

15% VAT applicable to all charges and rates.

Comte's social theories culminated in his "*Religion of Humanity*", which presaged the development of religious humanist and secular humanist organizations in the 19th century.

Comte may have coined the word *altruisme*. He believed that the major goal of sociology was to understand society as it actually operates. He favored positivism—a way of understanding based on science.

Comte saw sociology as the product of a three-stage historical development:

- ❖ The theological stage, in which thought was guided by religion.
- ❖ The metaphysical stage, a transitional phase.
- ❖ The scientific stage

What Is Positivism?

Positivism is the term used to describe an approach to the study of society that relies specifically on scientific evidence, such as experiments and statistics, to reveal a true nature of how society operates. In general it refers to philosophical positions that emphasize empirical data and scientific methods. This tradition holds that the world consists of regularities, that these regularities are detectable, and, thus, that the researcher can infer knowledge about the real world by observing it. The researcher should be more concerned with general rules than with

explaining the particular. The term originated in the 19th century, when Auguste Comte described his ideas in his books *The Course in Positive Philosophy* and *A General View of Positivism*.

First and foremost, Comte was interested in establishing theories that could be tested with the ultimate goal of improving our world once these theories were clearly laid out. He was eager to discover natural laws that applied to society. He viewed the natural sciences, such as biology and physics, as a necessary step in the development of a social science. Just as gravity is a universal truth we all experience in the physical world, Comte believed sociologists could uncover similar laws operating on the social level of people's lives.

Two influential positivists include Comte, who coined the term '**positivism**,' and Emile Durkheim, who established the **academic discipline of sociology**. These early thinkers laid the groundwork for a social science to develop that they believed would have a unique place among the sciences. This new field would be distinct and have its own set of scientific facts. Comte hoped sociology would become the '**queen science**' that held more importance than the other natural sciences that had come before it.

Theories of Positivism

Imagine you are a researcher living in France during Comte's time, in the mid-1800s, interested in studying the choices and structures of your society. European culture around you has dramatically shifted in the past hundred years, with the Enlightenment bringing new focus on the scientific method and logic.

You're convinced that you and your colleagues live in a time of great promise, having departed in many ways from the more superstitious views of the past. You thirst for the search for knowledge and universal truths. You believe a new era is dawning, one in which a logical approach to the study of society can bring dramatic insights never before explored or understood. You believe you have the potential to play a role in changing the course of human history.

If you felt this way, you would share much in common with the views of Comte, who was excited about the possibility of entering what he saw as the third and final of three key cultural stages. Society had already experienced the first two stages. First, the theological-military stage had been dominant, in which a belief in supernatural beings, slavery, and the military were key elements. Secondly, human culture experienced the metaphysical-judicial stage, in which a great focus on political and legal structures developed as society became more scientific. The final stage would be the scientific-industrial society with a positive philosophy of science emerging due to advances in logical ways of thinking and scientific inquiry. Comte's epistemological argument was consistent with that of his naturalist predecessors, that is, scientific knowledge about the real world comes from empirical observation. He also drew a distinction between empirical and normative knowledge. Information or knowledge that was not empirical was not considered by Comte to be knowledge about the real world, and thus fell outside the scope of science.

While positivism formed the basis for sociology, the idea that there is one true set of natural laws governing how society operates is no longer part of mainstream theories. Instead, sociologists recognize that the study of culture is complex and a variety of methods can be used to understand it. For instance, using fieldwork, a researcher can spend time in another culture to learn about it.

Modern day sociologists do not see the development of one 'true' vision of society as a goal for sociology as Comte did.

Positivism and Computer Science

Computer Science fully depends on logics and mathematics. The philosophy of logic and foundations of mathematics were of central moment in the development of logical positivism. This common wisdom is, of course, correct. It is also commonly held that there was a single logical-positivist doctrine on the nature of logic and mathematics. Here the common wisdom oversimplifies. For although the major positivist writers were in agreement on the general shape of such a doctrine, differences in their views emerge on closer inspection. A look at the evolution of their views and the differences among them can shed light on the positions at which mature positivism arrived. It is natural to divide developments into three periods. The first lies prior to the formulation of classical logical positivism, that is, before 1928 or so. Although the roots of many positivist concerns can be seen in the writings of both Schlick and Carnap in this period, it is surprising to note how small a role is played by considerations in philosophy of mathematics. The second period centers on 1930: the main event here is the assimilation and appropriation of the views of Wittgenstein's *Tractatus*. Despite Schlick, Hahn, and Carnap's unanimity (against Wittgenstein) that mathematics as well as logic are tautologous, there are subtle disparities — obscured by the common terminology — in their positions. Finally, the third period is marked by the emergence of Carnap's distinctive position given in *The Logical Syntax of Language*. To my mind, that position marks a profoundly original shift in the conception of the philosophy of mathematics

Law of Three Stages

The Law of Three Stages is an idea developed by Auguste Comte . Comte's ideas relating to the law of three stages reveal that man is becoming more and more rational and scientific in his approach by gradually giving up speculations, imagination etc. It states that society as a whole, and each particular science, develops through three mentally conceived stages: **(1) the theological stage, (2) the metaphysical stage, and (3) the positive stage**

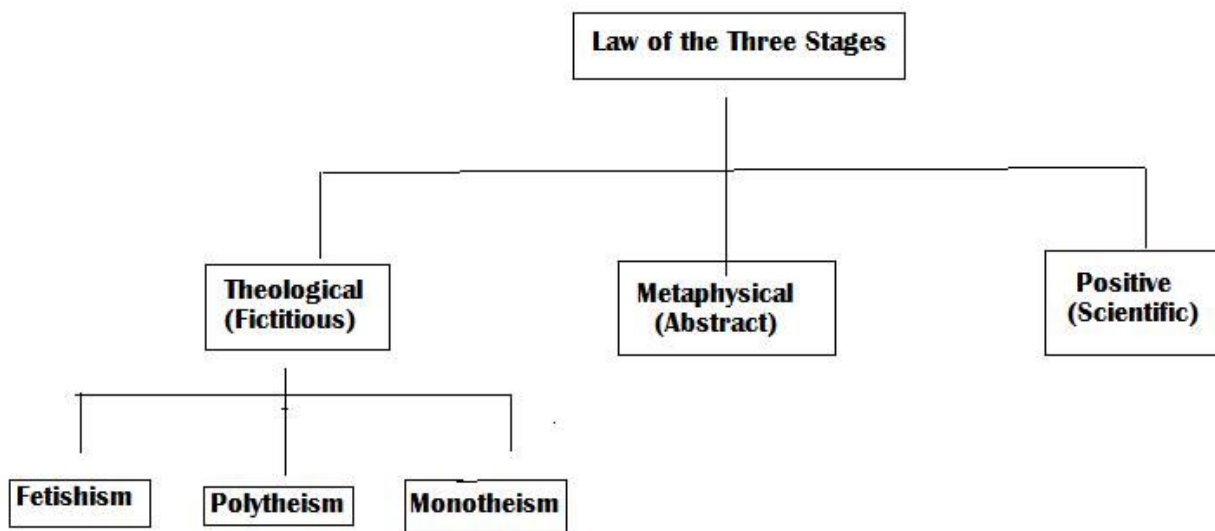
(1) **The theological stage** is the first and it characterised the world prior to 1300. Here all theoretical conceptions, whether general or special bear a supernatural impress. At this level of thinking there is a marked lack of logical and orderly thinking. Overall the theological thinking implies belief in supernatural power. Comte broke this stage into 3 sub-stages:

A. *Fetishism* - Fetishism was the primary stage of the theological stage of thinking. Throughout this stage, primitive people believe that inanimate objects have living spirit in them, also known as animism. People worship inanimate objects like trees, stones, a piece of wood, volcanic eruptions, etc.

B. *Polytheism* - The explanation of things through the use of many Gods. Primitive people believe that all natural forces are controlled by different Gods; a few examples would be God of water, God of rain, God of fire, God of air, God of earth, etc.

C. *Monotheism* - Monotheism means believing in one God or God in one; attributing all to a single, supreme deity. Primitive people believe a single theistic entity is responsible for the

existence of the universe.



(2) **The Metaphysical stage** is the extension of the theological stage. Metaphysical stage refers to explanation by impersonal abstract concepts. People often tried to believe that God is an abstract being. They believe that an abstract power or force guides and determines events in the world. Metaphysical thinking discards belief in a concrete God. The nature of inquiry was legal and rational in nature. For example: In Classical Hindu Indian society the principle of the transmigration of the soul, the conception of rebirth, notions of pursuit were largely governed by metaphysical uphill.

(3) **The Positivity stage**, also known as the scientific stage, refers to scientific explanation based on observation, experiment, and comparison. Positive explanations rely upon a distinct method, the scientific method, for their justification. Today people attempt to establish cause and effect

relationships. Positivism is a purely intellectual way of looking at the world; as well, it emphasizes observation and classification of data and facts. This is the highest, most evolved behavior according to Comte.

Comte considered his law of Three stages based upon belief in social evolution to be the most important. There has been an evolution in the human thinking, so that each succeeding stage is superior to and more evolved than the preceding stage. It can hardly be questioned that Comte's law of three stages has a strong mentalist or idealistic bias. He correlated each mental age of mankind with its characteristic accompanying social organisation and type of political dominance

Karl Marx(1818-1883)

Karl Marx(5 May 1818 – 14 March 1883) was a German philosopher, economist, sociologist, journalist, and revolutionary socialist. Born in Trier to a middle-class family, he later studied political economy and Hegelian philosophy. As an adult, Marx became stateless and spent much of his life in London, England, where he continued to develop his thought in collaboration with German thinker Friedrich Engels and published various works, the most well-known being the 1848 pamphlet *The Communist Manifesto*. His work has since influenced subsequent intellectual, economic, and political history.

Development of Sociology

Marx perceived societal progress in human history through the idea of class struggle. The notion of dialectical materialism focuses, in some sense, on the societal struggle between the ruling economic class and the subjugated working class. Marx saw this system as untenable and predicted that the economic apparatus of capitalism would eventually collapse on itself, leading to socialism.

Marx was among the first thinkers to recognize the sociological impact of economics and class stratification. He investigated the effects of the capitalist system on the lives of workers as well the deep relationship between class inequality and culture.

Marx wrote extensively about the problem of alienation, in which laborers essentially give up their labor to the market, seeing little in return – small profits and no sense of accomplishment at having actually made something. Marx argued that this alienation from labor, as well as the alienation of being trapped in a social class with little control over economic circumstances, amounted to a fundamental disconnection between humans and their humanity.

Social Struggle

It is important to recognize that Marx viewed the structure of society in relation to its major classes, and the struggle between them as the engine of change in this structure. His was no equilibrium or consensus theory. Conflict was not deviational within society's structure, nor were classes functional elements maintaining the system. The structure itself was a derivative of and

ingredient in the struggle of classes. His was a conflict view of modern (nineteenth century) society.

The key to understanding Marx is his class definition.¹ A class is defined by the ownership of property. Such ownership vests a person with the power to exclude others from the property and to use it for personal purposes. In relation to property there are three great classes of society: the bourgeoisie (who own the means of production such as machinery and factory buildings, and whose source of income is profit), landowners (whose income is rent), and the proletariat (who own their labor and sell it for a wage).

Class thus is determined by property, not by income or status. These are determined by distribution and consumption, which itself ultimately reflects the production and power relations of classes. The social conditions of bourgeois production are defined by bourgeois property. Class is therefore a theoretical and formal relationship among individuals.

The force transforming latent class membership into a struggle of classes is class interest. Out of similar class situations, individuals come to act similarly. They develop a mutual dependence, a community, a shared interest interrelated with a common income of profit or of wages. From this common interest classes are formed, and for Marx, individuals form classes to the extent that their interests engage them in a struggle with the opposite class.

At first, the interests associated with land ownership and rent are different from those of the bourgeoisie. But as society matures, capital (i.e., the property of production) and land ownership merge, as do the interests of landowners and bourgeoisie. Finally the relation of production, the natural opposition between proletariat and bourgeoisie, determines all other activities.

As Marx saw the development of class conflict, the struggle between classes was initially confined to individual factories. Eventually, given the maturing of capitalism, the growing disparity between life conditions of bourgeoisie and proletariat, and the increasing homogenization within each class, individual struggles become generalized to coalitions across factories. Increasingly class conflict is manifested at the societal level. Class consciousness is increased, common interests and policies are organized, and the use of and struggle for political power occurs. Classes become political forces.

The distribution of political power is determined by power over production (i.e., capital). Capital confers political power, which the bourgeois class uses to legitimize and protect their property and consequent social relations. Class relations are political, and in the mature capitalist society, the state's business is that of the bourgeoisie. Moreover, the intellectual basis of state rule, the ideas justifying the use of state power and its distribution, are those of the ruling class. The intellectual-social culture is merely a superstructure resting on the relation of production, on ownership of the means of production.

Finally, the division between classes will widen and the condition of the exploited worker will deteriorate so badly that social structure collapses: the class struggle is transformed into a proletarian revolution. The workers' triumph will eliminate the basis of class division in property through public ownership of the means of production. With the basis of classes thus wiped away, a classless society will ensue (by definition), and since political power to protect the bourgeoisie against the workers is unnecessary, political authority and the state will wither away.

Overall, there are six elements in Marx's view of class conflict.

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- Classes are authority relationships based on property ownership.
 - A class defines groupings of individuals with shared life situations, thus interests.
 - Classes are naturally antagonistic by virtue of their interests.
 - Imminent within modern society is the growth of two antagonistic classes and their struggle, which eventually absorbs all social relations.
 - Political organization and Power is an instrumentality of class struggle, and reigning ideas are its reflection.
 - Structural change is a consequence of the class struggle.

Marx's emphasis on class conflict as constituting the dynamics of social change, his awareness that change was not random but the outcome of a conflict of interests, and his view of social relations as based on power were contributions of the first magnitude. However, time and history have invalidated many of his assumptions and predictions. Capitalist ownership and control of production have been separated. Joint stock companies forming most of the industrial sector are now almost wholly operated by non-capital-owning managers. Workers have not grown homogeneous but are divided and subdivided into different skill groups. Class stability has been undercut by the development of a large middle class and considerable social mobility. Rather than increasing extremes of wealth and poverty, there has been a social leveling and an increasing emphasis on social justice. And finally, bourgeois political power has progressively weakened with growth in worker oriented legislation and of labor-oriented parties, and with a narrowing of the rights and privileges of capital ownership. Most important, the severest

manifestation of conflict between workers and capitalist--the strike--has been institutionalized through collective bargaining legislation and the legalization of strikes.

These historical events and trends notwithstanding, the sociological outlines of Marx's approach have much value. His emphasis on conflict, on classes, on their relations to the state, and on social change was a powerful perspective that should not be discarded. The spirit, if not the substance, of his theory is worth developing.

Capitalism

Capitalism has been the subject of criticism from many perspectives during its history. Criticisms range from people who disagree with the principles of capitalism in its entirety, to those who disagree with particular outcomes of capitalism. Among those wishing to replace capitalism with a different method of production and social organization, a distinction can be made between those believing that capitalism can only be overcome with revolution (e.g., revolutionary socialism) and those believing that structural change can come slowly through political reforms to capitalism (e.g., classic social democracy).

Karl Marx saw capitalism as a progressive historical stage that would eventually stagnate due to internal contradictions and be followed by socialism. Marxists define capital as "a social, economic relation" between people (rather than between people and things). In this sense they

seek to abolish capital. They believe that private ownership of the means of production enriches capitalists (owners of capital) at the expense of workers. In brief, they argue that the owners of the means of production exploit the workforce.

In Karl Marx's view, the dynamic of capital would eventually impoverish the working class and thereby create the social conditions for a revolution. Private ownership over the means of production and distribution is seen as creating a dependence of non-owning classes on the ruling class, and ultimately as a source of restriction of human freedom.

Marxists have offered various related lines of argument claiming that capitalism is a contradiction-laden system characterized by recurring crises that have a tendency towards increasing severity. They have argued that this tendency of the system to unravel, combined with a socialization process that links workers in a worldwide market, create the objective conditions for revolutionary change. Capitalism is seen as just one stage in the evolution of the economic system.

Normative Marxism advocates for a revolutionary overthrow of capitalism that would lead to socialism, before eventually transforming into communism after class antagonisms and the state cease to exist. Marxism influenced social democratic and labor parties as well as some moderate democratic socialists, who seek change through existing democratic channels instead of revolution, and believe that capitalism should be regulated rather than abolished.

Emile Durkheim (1858-1917)

Emile Durkheim was a French sociologist, social psychologist and philosopher. He was born in April 15, 1858. Much of Durkheim's work was concerned with how societies could maintain their integrity and coherence in modernity; an era in which traditional social and religious ties are no longer assumed, and in which new social institutions have come into being.

In his view, social science should be purely holistic, that is, sociology should study phenomena attributed to society at large, rather than being limited to the specific actions of individuals.

He remained a dominant force in French intellectual life until his death in 1917, presenting numerous lectures and published works on a variety of topics, including the sociology of knowledge, morality, social stratification, religion, law, education and deviance.

Social Facts

Emile Durkheim was a well-known sociologist famous for his views on the structure of society. His work focused on how traditional and modern societies evolved and function. Durkheim's theories were founded on the concept of social facts, defined as the norms, values and structures of a society.

Social facts are primarily social practices, rules, institutions, or sanctions. Social facts are not psychological or biological facts. They exist separate from the individual. In 'The Rules of the Sociological Method' (1982), Durkheim defines social facts in great detail. Social facts are:

- * Different from psychological and biological facts;
- * A law or custom external to the individual;
- * Deontological in that they require and obligation or duty;
- * Of varying levels;
- * General;
- * Isolated using statistics;
- * Parts of a whole.

If something happens to disrupt the order and the flow of the system, society must adjust to achieve a stable state. According to Durkheim, society should be analyzed and described in terms of functions. Society is a system of interrelated parts where no one part can function without the other. These parts make up the whole of society. If one part changes, it has an impact on society as a whole.

Division of Labor

Durkheim's concept of the division of labor focused on the shift in societies from a simple society to one that is more complex. He argued that traditional societies were made up of homogenous people that were more or less the same in terms of values, religious beliefs, and backgrounds. Modern societies, in contrast, are made up of complex division of labor, beliefs, and backgrounds.

In traditional societies, the collective consciousness ruled, social norms were strong, and social behavior was well regulated. In modern societies, common consciousness was less obvious and the regulation of social behavior was less punitive and more damaged, aiming to restore normal activity to society.

Solidarity

Emile Durkheim's major contribution to society was his thinking about how society is held together. He said there were two different kinds of solidarity among people in a society. They are

1. Mechanical solidarity
2. Organic solidarity

Mechanical solidarity:

The first type of solidarity appeared in more traditional societies. In these societies, all of the people are of the same ethnic group, the same religion, and the same culture. They are all similar to one another and that similarity holds them together as a society. Durkheim called this “mechanical solidarity.” Traditional societies are united by social similarities.

Organic solidarity:

In more modern societies very different kinds of people are thrown together and expected to live together. It is not at all clear what holds them together when they are so different. Durkheim says that “organic solidarity” holds them together. By this, he means that people need each other in an economic sense. They depend on one another to keep their economy functioning. This binds them together even though they do not hold all of their values in common. Modern societies are united by interdependence.

Anomie:

The concept of anomie refers to a condition or state in which there is a breakdown of social norms and guidance for the citizens of a society. Anomie occurs when society has a little influence on individual's propensity to follow rules and norms, and individuals are, therefore, left without moral guidance. Individuals do not feel attached to the collected society.

According to Durkheim, anomie is caused by the division of labor and rapid social change from traditional to modern society. Anomie causes the feelings of alienation among individuals because they feel like their only attachment is to the system in which they don't believe or they don't feel a part of it. It also causes feelings of frustration and a sense of deprivation.

Suicide:

Durkheim's most important reason for studying suicide was to prove the power of the new science of Sociology. Suicide is generally considered to be one of the most private and personal acts.

According to Durkheim suicide is neither an individual nor a personal act. It is a social fact. It should be studied by acquiring data from outside of our own minds through observation and experimentation. He was interested in explaining differences in suicide rates but not in the study why any specific individual committed suicide. Simultaneously he was interested in why are group had a higher rate of suicide than another. So he assumed that only social facts could explain it. He proceeded to give sociological classification of suicides by showing all the principal types of suicide which are due entirely of social causes.

Durkheim had explained four major forms of Suicide. They are

- (a) Egoistic suicide
- (b) Altruistic suicide
- (c) Anomic suicide
- (d) Fatalistic suicide

Max Weber(1864-1920)

Karl Emil Maximilian "Max" Weber (German: [ˈmaks ˈveːbɐ]; 21 April 1864 – 14 June 1920) was a German sociologist, philosopher, jurist, and political economist whose ideas profoundly influenced social theory and social research. Weber is often cited, with Émile Durkheim and Karl Marx, as among the three founders of sociology. Weber was a key proponent of methodological anti positivism, arguing for the study of social action through interpretive (rather than purely empiricist) means, based on understanding the purpose and meaning that individuals attach to their own actions. Unlike Durkheim, he did not believe in monocausality and rather proposed that for any outcome there can be multiple causes.

Ideal Type

The ‘Ideal Type’ is one of Weber’s best known contributions to contemporary sociology. It occupies a very important place in his methodology. Weber believed, it was the responsibility of

sociologists to develop conceptual tools. The most important of such conceptual tool is the ideal type.

The word Ideal means a concept of something in its standard form. It refers to a mental image or conception rather than a physical object.

Weber used Ideal type in a specific sense. To him Ideal type is a mental construct, like a model, for the examination and characterization of a concrete situation. Indeed he used Ideal type as a methodological tool to understand and analyze social reality.

Max Weber was particularly concerned with the problem of objectivity in social sciences. Hence he used Ideal type as a tool that looks at reality objectively. It examines and defines social reality without any bias. The Ideal types are nothing to do with values. Its function as a research tool is for grouping and differentiating. To quote **Max Weber**-

“The Ideal typical concept will develop our skill in imputation in research. It is not a description of reality but it aims to give unambiguous means of expression to such a description.”

According to Weber, the Science of sociology could be developed basing on the concept of Ideal type. Weber says, sociology is concerned with social action and social behaviour. Every social action has an ideal. The ‘Ideal type’ of social action is in our mind. For example, we say that a particular man is ‘idealist’.

Julien Freund writes, “by the ideal type the sociologist is able to measure the gap between the ideal typical objectively possible action and the empirical action and ascertain the part played by irrationality and chance or by the intrusion of accidental, emotional and other elements.”

If we wish to study the state of democracy in Our country, we should start by defining the concept of democracy with the help of its essential and typical characteristics. Here we can mention some of the essential characteristics of democracy. That is existence of multi-party system, formation of Govt. by people's representatives, people's participation in the decision making, and equality before law as well. This formation of an ideal type concept of democracy will help us by working as a tool in our analysis and guide us. Any deviation from it will unfold reality. Therefore it can be said that ideal types focuses on the essential characteristics, not the common ones.

Max Weber cautions that the ideal types is to be constructed and used with great care.

He stated that-

- ❑ The ideal types are not hypotheses.
- ❑ Ideal types do not imply or state any ethical ideal.
- ❑ They do not exhaust reality which means they do not correspond to any empirical instances.

Rationalization

In sociology, rationalization means the replacement of traditions,,values and emotions as motivators for behaviors in society with more rational ones. For example, the increasing construction of high-efficiency living spaces in architecture and urban planning, the increase of online banking etc.

Max Weber's works deal with rationalization in sociology of religion, government, organizational theory, and behavior. The process of rationalization affects economic life, law, administration, and religion.

Rationalization was the process through which magic, supernatural and religious ideas lose cultural importance in a society and ideas based on science and practical calculation become dominant. For example, in modern societies science has rationalized our understanding of weather patterns. Science explains weather patterns as a result of interaction between physical elements like wind-speed and direction, air and water temperatures, humidity, etc.

In many a culture, weather is thought to express the pleasure or displeasure of gods, or spirits of ancestors. One explanation is rationalized and scientific, the other mysterious and magical.

Rationalization also involves the development of forms of social organization devoted to the achievement of precise goals by efficient means. It is this type of rationalization that we see in the development of modern business corporations and of bureaucracy. These are organizations dedicated to the pursuit of defined goals by calculated, systematically administered means.

Rationalization is used more in the everyday sense of the word to refer to providing justifications or excuses for one's actions. But this is inaccurate. If one accepts such a model where the benefit of everyone is assumed optimal, then selfish behaviors are deemed irrational. It is thus meaningless and unwise to assume rationality without knowing the characteristics of the model.

The advantage of Weber's interpretation of rationality is that it avoids biased assessments. For example certain kinds of beliefs are irrational.

Weber believed that a move towards rational-legal authority was inevitable. In charismatic authority, the death of a leader effectively ends the power of that authority, and only through a rationalized and bureaucratic base can this authority be passed on. Traditional authorities in rationalized societies also tend to develop a rational-legal base to better ensure a stable accession.

What Weber depicted was not only the secularization of Western culture, but also and especially the development of modern societies from the viewpoint of rationalization. The new structures of society were marked by the differentiation of the two functionally intermeshing systems that had taken shape around the organizational cores of the capitalist enterprise and the bureaucratic state apparatus. Weber understood this process as the institutionalization of purposive-rational economic and administrative action. To the degree that everyday life was affected by this cultural and societal rationalization, traditional forms of life - which in the early modern period were differentiated primarily according to one's trade - were dissolved.

— **Jürgen Habermas**

Religion

Max Weber's work in the field of sociology of religion started with the essay *The Protestant Ethic and the Spirit of Capitalism* and continued with the analysis of *The Religion of China: Confucianism and Taoism*, *The Religion of India: The Sociology of Hinduism and Buddhism* and *Ancient Judaism*. His work on other religions was interrupted by his sudden death in 1920, which prevented him from following *Ancient Judaism* with studies of early Christianity and Islam. His

three main themes in the essays were the effect of religious ideas on economic activities, the relation between social stratification and religious ideas and the distinguishable characteristics of Western civilization.

Weber saw religion as one of the core forces in society. His goal was to find reasons for the different development paths of the cultures of the Occident and the Orient, although without judging or valuing them, like some of the contemporary thinkers who followed the social Darwinist paradigm; Weber wanted primarily to explain the distinctive elements of the Western civilization. In the analysis of his findings, Weber maintained that Calvinist (and more widely, Protestant) religious ideas had had a major impact on the social innovation and development of the economic system of the West, but noted that they were not the only factors in this development. Other notable factors mentioned by Weber included the rationalism of scientific pursuit, merging observation with mathematics, science of scholarship and jurisprudence, rational systematization and bureaucratization of government administration and economic enterprise. In the end, the study of the sociology of religion, according to Weber, focused on one distinguishing part of the Western culture, the decline of beliefs in magic, or what he referred to as "disenchantment of the world".

During the course of the change in religion and belief, computer science made a huge impact on the overall shift. Due to social medias, the religious beliefs are mostly biased now a days. Motivation for doing prayers is slowly decreasing. People stay busy with their own virtual life. False news spread so easily and people are becoming victim to it. Most importantly religion

belief is now a days dependent on the popular social media sites where spreading of false news is quite easy. Overall computer science in the society heavily affects the religion beliefs of people.

Development of a Society Along with The Integration of Computer Science

A number of Western political theorists and philosophers, including Plato, Polybius, Machiavelli, Vico, Hobbes, Locke, Montesquieu, and Rousseau, have treated political problems in a broader social context. Thus Montesquieu regarded the political forms of different states as a consequence of the working of deep underlying climatic, geographic, economic, and psychological factors. In the 18th cent., Scottish thinkers made inquiries into the nature of society; scholars like Adam Smith explored the economic causes of social organization and social change, while Adam Ferguson considered the non economic causes of social cohesion.

It was not until the 19th century, however, when the concept of society was finally separated from that of the state, that sociology developed into an independent study. The term sociology was coined (1838) by Auguste Comte. He attempted to analyze all aspects of cultural, political, and economic life and to identify the unifying principles of society at each stage of human social development. Herbert Spencer applied the principles of Darwinian evolution to the development

of human society in his popular and controversial *Principles of Sociology* (1876–96). An important stimulus to sociological thought came from the work of Karl Marx, who emphasized the economic basis of the organization of society and its division into classes and saw in the class struggle the main agent of social progress.

The founders of the modern study of sociology were Émile Durkheim and Max Weber.

Durkheim pioneered in the use of empirical evidence and statistical material in the study of society. Weber's major contribution was as a theorist, and his generalizations about social organization and the relation of belief systems, including religion, to social action are still influential. He developed the use of the ideal type—a working model, based on the selective combination of certain elements of historical fact or current reality—as a tool of sociological analysis. In the United States the study of sociology was pioneered and developed by Lester Frank Ward and William Graham Sumner.

The most important theoretical sociology in the 20th cent. has moved in three directions: conflict theory, structural-functional theory, and symbolic interaction theory. Conflict theory draws heavily on the work of Karl Marx and emphasizes the role of conflict in explaining social change; prominent conflict theorists include Ralf Dahrendorf and C. Wright Mills.

Structural-functional theory, developed by Talcott Parsons and advanced by Robert Merton, assumes that large social systems are characterized by homeostasis, or "steady states." The theory is now often called "conservative" in its orientation. Symbolic interaction, begun by George Herbert Mead and further developed by Herbert Blumer and others, focuses on subjective perceptions or other symbolic processes of communication.

All those theories lead to one simple conclusion, and that is development of a society. And with that, the use of computer science is growing as well. The current generation depends heavily on the computerized society. So each phase in the society evolves along with the increase use of the computers. Computer science is paving the way to upgrading the workforce of the society, and that is why the modern society can not stay idle without mentioning the credits of the blessings of computer science.

Conclusion

The discussion in this paper highlights the origin and the evolution of sociology as well as the increasing inherent complexity of social movements due to technologies. It has also been noted that a change in technology inevitably leads to a change in culture, a people's way of life. To some, such changes are threatening, for example, the industrial revolution and its technological impetus (automation) affected the livelihood of many manual workers and rendered them redundant. Consequently, while some welcome new technology, others resist it. It has also been observed that the phenomenon of social change is inevitable for society owing to such processes as culture contact and its resultant effects, cultural diffusion, cultural leveling, globalization and the information superhighway views. For instance, except in rare instances, humans have some contact with other groups, during which culture contact occurs. In this process, cultural diffusion (the spread of invention or discovery from one area to another) occurs. This leads to cultural leveling, a state of affairs whereby many groups adopt western culture in place of their own customs. With today's technology, for example, in travel and communications, cultural diffusion is certainly occurring rapidly. Air travel has made it possible for people to journey around the

globe in a matter of hours. In the not-so-distant past, a trip from the United States to Africa was so unusual that only a few hardy people made it, and newspapers would herald their feat. Today, hundreds of thousands make the trip each year. The changes in communication are no less vast. Communication used to be limited to face-to-face speech and visual signals such as smoke, light reflected from mirrors, and written messages passed from hand to hand. Today's electronic communications transmit messages across the globe in a matter of seconds, and we learn almost instantaneously what is happening on the other side of the world. In fact, travel and communication unite to such an extent that there almost is no other side of the world any more. The result is cultural leveling, a process in which cultures become almost similar as the globalization of capitalism brings not only technology but also western culture to the rest of the world. On another note, social movements have been found to be another source of social change as the case with temperance movements, civil rights movements, women's movements; the animal rights crusades and environmental movements. At the heart of social movements lie grievances and dissatisfactions as people find the current thesis of society unbearable and work towards promoting social change. A relationship exists in the concepts mass media, propaganda and social movements. The mass media are gatekeepers for social movements.

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