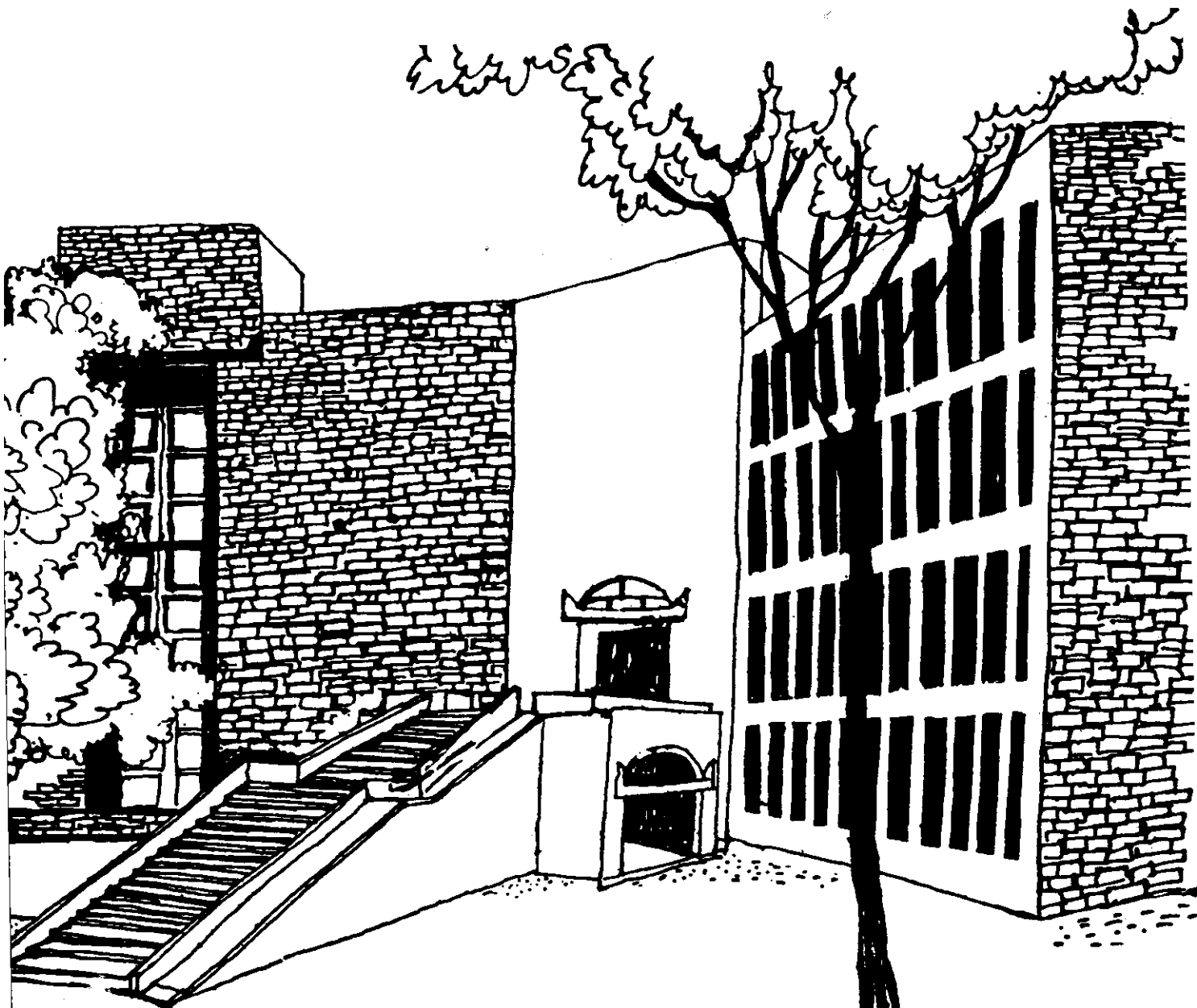




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Working Paper



**In Praise of Caste :
A Tribute to Manu - The Law Giver
An Enquiry Into the Philosophy of
Work and Stratification**

Part 1

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**In Praise of Caste: A Tribute to Manu - The Law Giver:
An Enquiry into the Philosophy of work and Stratification**

Part I

Abstract

This paper analyses the question: 'How is one work different from the other?', and proposes the following seven basic propositions:

1. Greater the degree of mental component in a work, higher will be the rating of that work in the hierarchy of work.
2. Greater the unknown a human mind has to cope with or manipulate or deal with, higher will be the rating of mental work.
3. Greater the hurt caused to the senses by the manual component in the work, lower is the rating of that work in the hierarchy of work.
4. Greater the capacity of the technology to reduce the unpleasant quality of manual work, higher will be the rating of that technology, and consequently the work it is used for.
5. Greater the contribution of work, whether mental or manual, to the survival of members of the society and society at large, higher will be the rating of that work.
6. Higher the rating of work, higher will be the status of person doing that work.
7. Greater the difference between the inherent, rating associated status (ascribed status) and the status actually enjoyed (achieved or imposed), higher will be the tension in an organisation, group, community, society.

In addition, there are thirteen other propositions which are a corollary of these or are derived from the explanations of contradictions or exceptions to the seven basic propositions.

All these propositions indicate that as long as the Rating-Status Equity Law operates, there is harmony.

In Praise of Caste: A Tribute to Manu--The Law Giver

An Enquiry into the Philosophy of Work and Stratification

Part I

This is not an essay in praise of the prevailing caste system or casteism. Nor is it an essay in praise of some unknown author or authors of extant *Manusmriti*. In fact, when I first started working on this essay some years back, the title I gave was "On Theory of Work, Organization and Technology".* These were the three topics among others in the course on Organization Structure I was teaching to a class of post-graduate students then. In that course for a session the discussion material was a note by Earnest Dale entitled, "Determining the Objectives and Dividing the Work Accordingly."¹

Dale's note was straight forward following the principles of scientific management and based on his rich practical experience. He began his note with the statement, "The Organization Structure is a mechanism designed to help in the goals of the enterprise. However small an organization, it must start by determining its objectives. For the resources of any organization are limited and must be properly utilized if the company is to survive and to prosper. This requires a formulation of objectives and an assessment of responsibilities... The allocation of responsibilities become even more important when there is more than one person in the organization." This was followed by a discussion on alternative methods for dividing the work towards the accomplishment of the objectives, and the criteria for determining the division of basic activities, namely economic efficiency, non-economic factors and size. Based on the Work Table which the great French industrialist, Henri Fayol² drew up, he concluded that "the larger the size of the business the greater the emphasis on broad managerial functions, such as planning, forecasting, organizing, commanding, co-ordinating and controlling". He also emphasized that "the most important criterion for the division of work is that of economic efficiency. This should lead to specializations, full utilization of abilities and homogeneity between groups".

Dale's note was easy to understand and easy to explain to the students. But when you have a class of bright, young students and a culture of free discussion even the simplest ideas

* See Note 1

sometimes lead to complex, difficult-to-answer questions. That is what happened that day in the two sections of the class I was teaching.

Sometime towards the end of the session, the discussion on the note went somewhat on these lines. In the first section a student asked, "If all kinds of work are necessary to achieve the organization's objectives, then all kinds of work would be of equal importance. Then why is there a hierarchy in the organization. Why, for example, the top persons like chairman, managing director or general manager have higher status than, say, the shop-floor supervisor, or office clerk, or typist or salesman or machine operator or sweeper?" Prompt came the answers from other students. One said, "the job performed by MD or GM is different and more important than those performed by other categories of personnel, and hence they have higher status". The other said, "MD and GM have to do a lot of thinking on many issues before taking decisions. Other categories of personnel merely implement the decisions. If MD and GM take wrong decisions then the organization will not be able to achieve its objectives inspite of good work done by other categories of personnel. Hence, work done by MD and GM are more important and so they have higher status in the organization." However, another student said, "This is not correct. Even if the MD and GM have taken the right decisions, yet if others have not done the job efficiently, then the objectives will not be achieved. So every work is important like all links in a chain have to be ----- strong for the chain to be strong". The second student retorted, "Yes, and that is why in addition to planning, forecasting and organizing the MD and GM have to do the work of commanding and controlling. Hence, they have to have higher status".

So far the discussion was still within the limits of Dale's article. But one student raised the discussion to an altogether different plane. He asked, "MD's and GM's work involved lot of thinking on which organization's survival depends and hence they have higher status. Is this also applicable to the society? We have social stratification based on caste and there is caste hierarchy associated with status hierarchy." For the moment there was silence. One can sense the uncomfortable feeling. Then the reactions of the type--'Caste system is breaking down'; 'caste is only in rural areas'; 'we are not discussing caste system here but business organization, so let us not waste time'; and so on. Unfortunately, the bell rang.

In the second section which followed about fifteen minutes later, the same note was discussed. Here also towards the end of the session, questions on hierarchy and status in the organization were raised by some students. Perhaps it was spontaneous; or perhaps during the interval some students from the first section passed on the ideas to their friends in the second

section. However, the question on caste hierarchy and social status was not raised here. But a different type of question was raised.

One student asked, "If a particular kind of work or function has a particular status, will this be true in all the cases wherever that particular work or function is performed?" Another student asked him for an illustration which he could not readily provide. A third student, however, came out with an interesting example. In the class there was a beautiful student, proficient in Indian classical dancing. Perhaps inspired by her the student gave this example. "In dancing the nature of work involved is the same whether the dance is performed in a temple courtyard by a *devdasi* (temple dancer) before a rustic rural audience and devotees, or by an artist in a cultural show in a five-star hotel or cultural centre before sophisticated gentry and foreign tourists, or by an actress as a part of a scene on a movie stage, or by a professional dancing girl at her business premise in a locality of ill-repute. In all cases the nature of work is the same: movement of body and limbs in a coordinated manner in tune with music to express emotions and feelings about something. Also, the purpose is the same, namely, give pleasure to the audience. Yet, even though the *devdasi*, the artist, the actress, the dancing girl perform the same work, their status in the society is very different. Why?" Once again discussion followed. A student made a point: "In ancient times, a *devdasi* enjoyed higher status because of her own choice she offered herself to be the escort of her Lord and danced for her Lord and not for others. Nowadays she does it for livelihood. So also the professional dancing girl. But an artist dances to present her art, her skill, and not merely for livelihood. So she enjoys higher status. An actress's position is, somewhat, in between; she has art, and while she dances for livelihood, her livelihood does not entirely depend on dancing. So one should not merely go by the external aspects of the work but must consider the other most important aspect namely the real purpose or objective underlying that work because this would ultimately determine the status of work and consequently the status of the person performing that work".

Discussion did not stop here. Another student came out with a different illustration. "A porter at a railway station and a porter at the airport both do the same kind of job, that is carrying a load from one place to another. But they have different status and public treat them differently. At the station he is addressed as *coolie*, at airport as porter. Why?" Spontaneous answer by a student was: "Because the way they do the work, the way they look, and the type of public they mostly deal with, that is why. The coolie carries the load on his head and shoulders, and when there are many pieces of baggage to carry, even between his trunk and upper arms, some on his lower arms and some in his hands. Due to sweating and dust his dress is dirty and his face and

body are dirty. On the other hand, the airport porter uses a trolley to carry the load. So he does not sweat much, and since the airports are airconditioned and clean his dress and face and body do not get as dirty as the coolie's. Coolie mostly deals with common people, but the porter deals with upper class, sophisticated passengers in a clean environment. Due to all this the porter at the airport has higher status than the coolie even though both perform the same function. It is the technology of trolley and airconditioning and the surrounding environment including the class of people that makes all the difference." A number of such examples were presented till the end of the class.

Since questions and discussions were interesting, after the class I jotted down the gist of these for future use. On and off little hints of ideas got added to the case file. Students must have forgotten the questions, but the basic question remained: **How is one work different from the other? Or on what basis can work be classified?** Is it that each work has an inherent, intrinsic quality and this determines the status of a person doing a particular work in an organization, and at the societal level in a social organization? If so, what is the basis for rating this quality i.e., hierarchy of work? Is this rating of hierarchy of work affected by the purpose or objective of the person doing the work, and the environment in which it is done? Or that the rating of work remains the same but the status of person alone affected by the purpose and environment? How does technology affect the rating of work and consequently the status of person doing a particular work?

I had a hunch that the spontaneous answers of the students contained some clues to these questions. So initially I thought of writing a technical note on the subject with a title, "On theory of work, organization and technology". But the way the subject developed perhaps the present title is more appropriate.^b

II

On the first question of work classification the students provided an interesting clue. "MD's and GM's work involved lot of **thinking** that is why they have higher status;" that is what the students said. This provides a basis for work classification, i.e., the **thinking or mental** component of work. Obviously, at the other end would be the **physical or manual** component of work. Both have to be in terms of degrees. How much is the mental component in the work

^b See Note 2

and how much manual component. Theoretically, at one end we may have a work which is hundred per cent or purely mental, and at the other end a work which is zero per cent mental and hundred per cent manual. These two are only analytical possibilities. In between will be distributed all kinds of work with varying degrees (different mixes) of mental and manual components.

The work with higher mental component is always rated high as compared to other work in all organizations and in all societies. This is a general universal experience of all organizations and societies. This must be so from the beginning when human species on the path of evolution first became conscious of self, and of the capacity to think, i.e., existence of mind. From this grew the ever expanding *sankalpa*--the imaginative faculty that makes plans for the future, the power of reasoning, of abstract thought and conceptualization, and of invention. Due to these humans could conceive the future (ends and purposes) and plan present means to achieve these. It is this characteristic that distinguishes him from all other creatures. The abstract thought, conceptualization and inventions could be in relation to solving the mysteries of life, of cosmos through religio-philosophical route, or through physical sciences. These could be in regard to man's relation with nature and super-natural, in relation to ethics, morality and values. These could also be in relation to sorting out mundane problems of day-to-day life. There were prophets, philosophers, scientists, inventors, authors and artists whose work commanded respect. In all ages and in all societies, it is the search for the unknown and the ideas that emerged from this search that counted, persons were mere instruments. It is this intrinsic mental component of the work that determines the rating of the work and consequently, the status of person doing that work. In other words, while Work has 'intrinsic' rating, person doing that work has 'transferred' rating i.e., status.

Thus, the intrinsic quality of work determines the rating of work. To start with we now have our **First** proposition: In each work there is a mental component and a manual component. **Greater the degree of mental component in a work, higher will be the rating of that work in the hierarchy of work. As a corollary, greater the degree of physical or manual component in a work, lower will be the rating of that work in the hierarchy of work.** This association of intrinsic quality of work and its rating is diagrammatically presented below:

	Intrinsic Quality of Work		Universal Rating of Work	Expected Status of Person doing the work
	Mental(Me)	Manual(Ma)		
(Purely mental)	100%	0%	Highest	Highest
	Degree of Me and Ma		Hierarchy of Work	Hierarchy of status
(Purely manual)	0%	100%	Lowest	Lowest

Following this, we can now analyse the mental and manual components separately. The obvious question would be: How is one mental work different from another? Is there hierarchy of mental work in which some mental work would be rated higher than other mental work? This is a difficult proposition. How can one say one abstract thought is superior to another abstract thought? We know there is a hierarchy otherwise we will not be holding in high esteem the seekers of wisdom and knowledge, the great philosophers, prophets, noble prize winning scientists, inventors, painters, musicians, sculptors, poets and authors. It is on the basis of the degree of creativity, conceptualization, innovativeness i.e., contribution to the advancement of knowledge in relation to matter or spirit the mental work is rated. It is the thought that counts whether it is based on creative intuitions or critical intelligence.^c Such mental work need not get recognition during the life time of the person. Thus at one end we have highest degree of abstract thoughts contributing to advancement of knowledge (about the 'unknown') and moral values. On the other hand, we have application of mind to solve day-to-day problems. The mental work, perhaps, would then be rated according to the importance of work in a given setting. But the difference exists; something similar to the difference between a mathematician and a mechanic. The work that needs the faculty of imagination and reasoning and does not depend upon the use of senses rates the highest among all forms of mental work. Thus, we can say that ***the greater the unknown human mind has to cope with or manipulate or deal with, higher will be the rating of mental work.*** This is our **Second** proposition.

As regards the manual component, the question would be: How is one manual work different from other? Is there hierarchy of manual work in which one manual work would be rated

^c See Note 3

higher or lower than other manual work? For this, we have a clue from the students' answers. A coolie has a lower status because the nature of work is such that it makes him look dirty and smell bad. It **tortures** his body due to the weight he carries. In short, the work is unpleasant.^d

What the student said was that that particular work **hurts the senses** of the worker. It also hurts the senses of the onlookers, and all the manifestations of that work also hurt the aesthetic sense in general as evolved in the society at a particular stage of development.^e

There are five genetically transferred senses--the **Panchendria**. Every manual work involves use of combination of these senses, and the senses are stimulated by the work itself. While, purely mental work is done without the use of these senses, no manual work can be done without their use. Three of these, namely, the senses of hearing, smell and sight, are stimulated by external objects without direct physical contacts. (The first two without even visual contact.) The sense of taste is partly stimulated by perceived nature of external objects and partly when the object is tasted. The sense of touch is stimulated partly by perceived nature of the object, (through visual and sound effects) but mainly by direct physical contact. Every manual work involves stimulation of one or more of these senses leading to a positive or negative reaction towards the object of work. Going by student's logic, manual work hurts the senses.^f To take a few examples: The work of washing dirty clothes or washing dirty plates in the kitchen hurts the sense of hearing, sight, smell, and touch. The work of prolonged sitting and/or standing and/or walking while working with a machine making harsh, repeated pattern of noise and in a smelly, smoking, dusty environment hurts the senses. Digging trenches in the hot sun, breaking stones, cutting wood and hauling them, mowing of lawns, all hurt the senses. The work of weaving cloth involving prolonged sitting in a cramped manner, mechanical, repetitive movements of hands and legs, hearing of repetitive mechanical sound of the working loom in a humid, dark, dirty setting hurts the senses. The work of extracting coal in dark, dusty mines using heavy machines and tools making all sorts of noise hurts the sense of hearing, sight, smell and touch. The work of prolonged sitting or standing in front of hot furnace surrounded by flying sparks and smoke and dust and ashes, heating iron and hammering the hot metal with heavy hammer hurts the senses. To take a few extreme examples: the work of removing human excreta and carrying it on one's

^d See Note 4

^e See Note 5

^f See Note 6

head from one place to another hurts the sense of sight, smell and touch. The work of removing hide from a filthy, rotting, infested carcass, oozing with body liquids and stinking with horrible odour, and carrying the still oozing raw hide on head and shoulders and working on it further in dirty, stinking ponds to remove the stinking dead tissues and flesh hurts the sense of sight, smell, and touch. The work of repair of old shoes carrying particles of all sorts of dirty, filthy objects hurts the senses. Thus, if we look around and observe and analyse carefully we do find that every kind of manual work in one way or the other hurts the human senses. The degree to which different manual works hurt the senses varies from work to work.

We now have our **Third** proposition: **Greater the hurt caused to the senses by the manual component of the work, lower is the rating of that work in the work hierarchy.** As a corollary, the less the manual component of the work hurts the senses, higher is its rating in the hierarchy of work.

Manual work involved in, say, stone dressing when associated with mental work as in case of a sculptor, then that combined mental-manual work has higher rating than the purely manual work of dressing stones by a mason. Another example could be of a painter of bill-boards or signboards or furniture vis-a-vis an artist whose work involves use of the creative faculty. Any work of high creation/achievement (e.g. a masterpiece of art, world champion in any sport) requires very high coordination of senses and control of mind over the senses, i.e., mental efforts. Thus, we obtain the **Fourth** proposition by combining the Second and Third propositions. **Greater the association of mental and manual components in a work, higher will be the rating of that work compared to purely manual work of the same kind.** The clue for this was already in the student's answer when he said that one should not go merely by the external and mechanical aspects of the work but must consider the purpose or objective and creativity underlying that work.

There could be a situation when a work requires completion of various sub-tasks, and unless all the sub-tasks are completed the work would not be considered completed. Since each sub-task will have different rating based on mental-manual component the rating of that sub-task would be the highest which has the highest mental component. Thus, we have the **Fifth** proposition: **In a multi-task work, greater the mental component in a sub-task, higher will be the rating of that sub-task in the total work.**

Let us compare two works, A and B, each involving various sub-tasks, namely, $A_1, A_2, A_3 \dots A_n$, and $B_1, B_2, B_3 \dots B_n$ respectively. Let us assume that the degree of mental component in these sub-tasks to be $a_1, a_2, a_3 \dots a_n$, and $b_1, b_2, b_3 \dots b_n$, respectively, arranged in descending order of degrees of mental component in sub-tasks in each work. If the highest rated sub-tasks in these two works have different ratings, then the work having the sub-task with higher rating will be rated higher than the other. In this case, if $a_1 > b_1$ then work A will be rated higher than B. If the highest rated sub-tasks in these two works have same ratings, then comparison of the second highest rated sub-tasks will determine the comparative rating of these two works. For example, if $a_1 = b_1$ and $a_2 < b_2$, then work B will be rated higher than A. One would be tempted to total the mental components of all the sub-tasks in each work (i.e., $a_1 + a_2 + a_3 \dots a_n$ and $b_1 + b_2 + b_3 \dots b_n$) and then compare these totals to decide the relative ratings of these two workers. However, it is not the simple arithmetic total of the mental components in various sub-tasks, but the single highest degree (level) of mental component that determines the rating of work. To illustrate: total knowledge of mathematics of say ten primary school students will not be equal to that of one high school student, though their collective physical strength may be greater than that of one high school student. We thus have our **Sixth** proposition: **When two or more multi-tasks works are compared, then the work having the highest rated sub-task will be rated higher than other works.**

Since the single highest rated sub-task affects the comparative rating of the total work, it indirectly affects the perception about the ratings of each of the sub-tasks of the work. For example, the perceived rating of the work of a laboratory assistant working in a high-tech laboratory will be higher than that of the work of his counterparts in not-so-high-tech laboratories, even when the nature of work remains the same. This also happens within an organization. For example, a secretary or peon attached to the office of the head of the institute enjoys higher status amongst his colleagues.

So far we have considered the mental component of sub-tasks in two works. If two works have same degree of mental component but their manual components hurt the senses differently then the work having lesser degree of 'unpleasantness' component will have the higher rating.[‡]

Another clue given by the students was how intervention of technology changes the rating of work. At the airport it is the trolley that carries the load and the porter merely pushes the

[‡] See Note 7

trolley, unlike at the railway station where the coolie himself carries the load on his head and shoulders. Thus, product of technology (tools and machines) takes away or reduces the dirty or unpleasant part of manual work, and by doing so reduces the 'hurt' to the senses and consequently improves the rating of work. Hence, our **Seventh** proposition: ***Greater the capacity of the technology to reduce the 'unpleasant' quality of manual work, higher will the rating of that technology, and consequently of the work it is used for.***

There are numerous examples from all walks of life illustrating this phenomenon. An electric oven for cooking, a dish-washer for cleaning and drying plates and utensils, a washing machine for laundry, a vacuum cleaner instead of broom and swab, a pair of washable, impervious hand gloves, all reduce the dirty, unpleasant part of work at home. So also the design of the commode, flush system and other fittings in the toilet room and chemical cleaners for toilet cleaning. Automatic machines in factories and other work places reduce the distasteful or unpleasant toil associated with manual work. All these machines change the rating of work.

While technology takes away or reduces the 'dirty', 'unpleasant' quality of manual work thus reducing the 'hurt' to the senses, it does not enhance pleasure to the senses. There is only subtraction or withdrawal of unpleasantness--a relief from pain, not addition of pleasure in absolute terms. For example, let us assume that a crudely made product with rough surface hurts the senses of sight and touch, while in finished form with smooth, shining surface it pleases the senses. The finished form could be achieved by additional manual work or by using a technology, say a polishing machine. The technology does not add to 'pleasure' of senses. It merely reduces the additional 'pain' that otherwise would have been caused to the senses due to additional manual work required towards refinement.

As a corollary, technology does not enhance pain to senses. It only subtracts or withdraws pleasure, and does not add pain in absolute terms. For example, when use of technology results in say, noise or air or water pollution, or destruction of forests and buildings (say by acid rain) it hurts the senses. The hurt is caused by the withdrawal or sacrifice of pleasure already enjoyed or could be enjoyed before the pollution/destruction caused by use of technology. The quality of pleasure or pain resides in the senses itself, and destruction of object and consequent withdrawal of senses from the object sacrifices the pleasure. We thus have the **Eighth** proposition: ***Greater the potential of technology to subtract pleasure, lower will be the status of technology, and consequently the work it is used for.***

There is also another explanation for this phenomenon. Technology itself is a product of mental work, i.e., application of mind in manipulating matter (materials) by use of various forces of nature (physical, chemical and nuclear) to achieve certain results. Thus, in the production of tools and machines mental work is already involved at two stages: one associated with the development of the basic idea, and the other associated with operationalising the basic idea in the form of a tool or machine.^b

In other words, a tool or machine already contains a certain degree of mental and manual efforts. When a work which otherwise requires manual efforts is performed with the help of a tool or machine, then the nature of work (efforts needed) changes due to (a) addition of mental and manual efforts already incorporated in the machine, and (b) the mental work involved in the use of that machine. Thus, now in the work the mental component increases and following the First proposition, the rating of work improves. We can also say that the greater the mental work involved in the evolution of a technology greater will be the reduction of those components of manual work that hurt the senses most and, following the Second proposition, greater will be the rating of such work in the work hierarchy. In short, technology merely replaces manual work by mental work.

One can think of technology in terms of opportunity cost. If a work can be done manually or by use of a machine, when done manually it loses the gain in rating which otherwise would have been if it was done by machine. Thus, the cost of doing the work manually is the loss of status a person would have gained by doing that work with a machine.

The art and science of designing play an important role in the development and application of technology. While designing, say, a machine, the designer not only tries to minimise the cost of materials (including those needed during operations) but also tries to (a) minimise the manual work involved during operations, and (b) maximize pleasure to the senses, i.e., the aesthetic value. Both these improve the rating of the work. Hence, designing work carries higher rating, so also well-designed products.

Thus, technologies are rated on the basis of (a) degree of mental component involved in the evolution of a particular technology, (b) its contribution to reduction of manual work during operations i.e., while performing various task towards achievements of a given object (end result),

^b See Note 8

and (c) contribution of the object itself in minimising the manual work when the object is used.

A technology related to chemical operations is generally rated higher than the technology related to mechanical operations¹ (e.g. a trolley) due to higher degree of uncertainties (unknowns) involved in the chemical processes.¹ Its rating will also depend upon the extent its products directly or indirectly reduce the drudgery of work.

Automatic and mass production machines reduce the drudgery of work and hence should get higher rating. However, these machines also introduce another kind of drudgery--the mental drudgery--enforced on worker due to the repetitive nature of work. Thus, while manual component of work is reduced, simultaneously mental component is also reduced thereby reducing the rating of the work. Hence, the work of producing by hand a product of similar utility and design rates higher than the mass produced item since the former involves relatively higher mental component in the production of the item. For example, the work of producing a hand crafted Japanese porcelain product is always rated higher than mass produced item.

From the above discussion we derive the *Ninth* proposition: ***Greater the mental component in the technology (i.e. in the development of the technology and the tools and machines based on that technology) greater is the rating of the technology and consequently the rating of work it is used for.*** In other words, use of more complex technology (evolved through more complex mental work) improves the rating of work. For example, the work of ploughing a field using a wooden plough has a lower rating as compared to the rating of the same work done by using a tractor; or harvesting with a sickle compared to that by a combine-harvester, or transporting goods by bullock cart as compared to that by a truck, or writing a letter by hand or typing it on a mechanical, or electronic typewriter or on a personal computer.

By combining the Seventh and Ninth propositions we derive the *Tenth* proposition: ***Greater the mental component in the technology, greater will be its capacity to reduce the 'unpleasant' quality of manual work, and consequently higher will be its rating and consequently, the rating of the work it is used for.***

¹ See Note 9

² See Note 10

Even when a technology (machine) is complex (that is, in its evolution high mental work is involved), its use may or may not involve higher mental efforts. If in a work the use of complex technology requires higher mental efforts the rating of that work will be higher as compared to the rating of work requiring lower mental efforts in the use of a technology of equal complexity. Thus we have the **Eleventh** proposition: **Greater the mental effort required in the use of a technology in a work, higher would be the rating of that work.** For example, in an automated plant (using the most complex technology) the only work at the shopfloor may be simply pressing red or green buttons as indicated on a dial or a computer screen. In this work of pressing the buttons, the mental component of work will be of a very low order. As such, the rating of this work will also be low. However, if pressing these two buttons also involves decisions and a wrong decision is likely to damage the plant and production, then the rating of the work of pressing the two buttons will increase in relation to the potential damage a wrong decision may cause, that is, the responsibility involved.^k All technologies tamper with and use natural forces. All natural forces have potential destructive power. A wrong decision releases this potential, causing damage not only to material objects (and in the process destroying all the mental and manual work already gone in), but also to the humans--those who operate the technology and also those who are in the vicinity of its destructive power. For example, the work of flying a plane, driving a racing car, driving a conventional car, and driving a bullock cart, is fundamentally same i.e. the work of carrying load from one place to other. Yet each work has different rating due to two reasons: one, following the sixth and seventh propositions discussed above, and two, the potential damage each can cause to humans--the operator and the others in the vicinity (passengers, onlookers). In other words, potential danger to human survival. Thus, we have the **Twelfth** proposition: **Greater the potential danger to human survival a technology carries, higher will be its rating, and consequently, higher will be the rating of the work it is used for.** We have many examples. Bigger the gun, higher is the status of the gunner; greater the destructive capabilities of the warship, higher is the status of the captain; a pilot carrying a nuclear bomb on board have higher status than the one carrying conventional bombs; workers in a nuclear power plant have higher status than workers in a conventional power plant; workers operating power-driven machines have higher status than those operating hand-driven machines.

Theoretically, if technologies are involved to such an extent that all work could be done by machines (robots) including production and operation of the machines, then no manual work would be done by humans and hence no human senses would be hurt. Even under such

^k See Note 11

situations work will have ratings and there will be hierarchy of work depending upon the degree of mental efforts required in development of different technologies.¹ Only when technologies are involved independently by robots (i.e. without any further association of human mind) work will have no rating and there will be no hierarchy of work so far as human beings are concerned.

Contact with certain organic wastes such as cattle or human excreta, caracas or corpse, flesh, blood, bones, raw hide and skin etc., hurts the senses. Hence any work involving contact with such organic wastes has low rating and person doing that work has low status.^m (In the Indian context such works are considered polluting.) And yet, a mother removes her child's excreta; a nurse does all the dirty work of collecting stool, dressing wounds oozing with pus and blood; a pathologist analyses stool, urine, blood, pus, sputum, etc.; a surgeon comes in regular contact with flesh and blood; an autopsy surgeon works on corpses, a warrior or soldier on the frontline is all the time in touch with flesh and blood; a butcher kills animals and deals in flesh and blood, -- all without loss of status. All these works are rated higher than the work done by sweeper, or leather worker, or a person who provides services at the burial ground. If the mother, the nurse, the pathologist, the surgeon, or the soldier does not do the work mentioned above, then the very survival of the child, the patient, the tribe or community will be in danger. Same is the case with butcher who provides food to the members of the society and this contributes to its survival.ⁿ Thus, we have our *Thirteenth* proposition, ***Greater the contribution of work, whether mental or manual, to the survival of members of the society and society at large, higher is the rating of that work, and consequently, higher is the status of person performing that work.*** As a corollary, lesser the contribution of the manual work to the survival of the members of the society and society at large, lower is the rating of that work, and consequently lower is the status of person performing that work.

As discussed earlier, here also intervention of technology affects the rating of work. In all the above examples technologies and its products reduce the dirty part of work that hurts the senses, e.g., diapers and tissue paper, dressing material, rubber gloves, covered commode and other hospital equipment and instruments; complex weapon systems used by soldiers to destroy enemy from a distance; the automated slaughter house and deep freeze and packed meat.

¹ See Note 12

^m See Note 13

ⁿ See Note 14

The rating of 'dirty' work, unpleasant to senses is also affected by other considerations. For example, the work of removing the hide from a caracas, scrapping the dead flesh, tanning hide and skin. It is rated low when done by a person for making shoes and other leather products, and rated high when done by a taxidermist for mounting the skin of a wild animal. Even though the nature of work is the same in both cases, the work done by taxidermist is rated higher than that of a leather worker because the end product (even though of less utility than those produced by the leather worker) is rated high due to three reasons: one, it symbolises valour (in killing a wild animal) associated with survival; two, the beauty of wild animal appeals to the aesthetic sense and gives pleasure; and three, work of preparation and mounting of a particular skin has higher mental component due to technology and skill involved in preparation of skin, and knowledge of anatomy of the animal. All these together enhance the rating of the taxidermist's work. We thus have our *Fourteenth* proposition: **Greater the contribution of work to human survival and to aesthetics (pleasure to senses from the surrounding environment), and greater the mental component in technology required to do that work, higher will be the rating of that work.**

To recapitulate these Fourteen propositions:

1. Greater the degree of mental component in a work, higher will be the rating of that work in the hierarchy of work. **As a corollary**, greater the degree of physical or manual component in a work, lower will be rating of that work in the hierarchy of work.
2. Greater the unknown a human mind has to cope with or manipulate or deal with, higher will be the rating of mental work.
3. Greater the hurt caused to the senses by the manual component of the work, lower is the rating of that work in the hierarchy of work. **As a corollary**, lesser the manual component of the work hurts the senses, higher is the rating of that work in the hierarchy of work.
4. Greater the association of mental and manual components in a work, higher will be the rating of that work compared to purely manual work of the same kind.
5. In a multi-task work, greater the mental component in a sub-task, higher will be the rating of that sub-task in the total work.
6. When two or more multi-task works are compared, then the work having the highest rated sub-task will be rated higher than other works.
7. Greater the capacity of the technology to reduce the unpleasant quality of manual work, higher will be the rating of that technology, and consequently of the work it is used for.
8. Greater the potential of technology to subtract pleasure, lower will be the status of technology, and consequently the work it is used for.
9. Greater the mental component in the technology (i.e., in the development of the technology and the tools and machines based on that technology), greater is the rating of the technology, and consequently the rating of the work it is used for.
10. Greater the mental component in the technology, greater will be its capacity to reduce the 'unpleasant' quality of manual work, and consequently higher will be its rating, and consequently, the rating of the work it is used for.

11. Greater the mental effort required in the use of a technology, higher would be the rating of that work.
As a corollary. lesser the mental efforts required in the use of a technology, lesser would be the rating of that work.
12. Greater the potential danger to human survival a technology carries, higher will be its rating, and consequently, higher will be the rating of the work it is used for.
13. Greater the contribution of work, whether mental or manual, to the survival of members of the society and society at large, higher is the rating of that work.
14. Greater the contribution of work to human survival and to aesthetics (pleasure to senses from the surrounding environment), and greater the mental component in technology required to do that work, higher will be the rating of that work.

It could be seen that in these fourteen propositions, the First, Second, Third, Seventh and Thirteenth are the basic propositions. The First, Second and Third deal with the basic ingredients of work, namely, mental and manual. The Seventh pertains to the effect of technology on work rating. The Thirteenth pertains to the basic purpose of work, namely, the survival of the human species. Others are a corollary of these or are derived from the explanations of contradictions or exceptions to the five basic propositions.

III

So far we have concentrated on classification and rating of work primarily based on mental-manual components of work. In doing so our fundamental assumption is that each work has an inherent or intrinsic quality and that determines its rating. We also assume that respect for mental work or power of mind is universal and an intrinsic aspect of human psyche. While the respect for power of mind is a learned behaviour, faculty of learning itself is evolved through the evolutionary, genetically transferred process of development of mind. This attribute exists in all the cultures and societies of all the races of human species, though its manifestation differs from culture to culture. Hence, we assume that the higher rating of mental work is an intrinsic aspect of the evolutionary process, i.e., it is genetically transferred; it is inherited, and has potential for further evolution.

Due to this inherent respect for mental faculty, when a person does a work, his status is linked with the rating of work. In other words rating of work ascribes the status. Hence, our *Fifteenth* proposition: **Higher the rating of work, higher will be the status of person doing that work.** It is necessary to emphasise here that the ascribed status is only in relation to the rating of work, i.e., mental and manual efforts demanded by a work, and has no relation to actual and potential intellectual capabilities of the person doing that work.

Since each work (or group of work) has a unique quality, each work is unique and each rating-status equity is unique and independent. It is like the threads of a fabric where each thread is independent, and yet all arranged in a particular order form the fabric, or like the musical notes, each independent, and yet when arranged in a particular order by the mind create music, otherwise noise.

So long as there is consonance between the rating of work and status of person doing that work, there is harmony in an organisation, group, community or society. In other words rating-status equity leads to harmonious social relationships, i.e., harmony is inherent in rating-status equity. On the other hand, any deviation from the rating-status equity will lead to dissonance, disharmony. It will impeach upon and disturb the rating-status equity of other works creating tension. For example, if a person doing a work of low rating somehow acquires or enjoys a status higher than the status inherently equated with that work's rating, then there will be dissonance, and tension will be generated. Such dissonance may or may not lead to immediate conflict depending upon how necessary is the deviation for the survival of the organisation and/or achievement of its primary objective at a given time. However, once the necessity for deviation is over, the consonance between rating of work and status must be re-established otherwise conflict will arise. If consonance is not or cannot be re-established voluntarily, exercise of power will be needed to re-establish the consonance. This will be generated and released (exercised) by all those in whose cases the rating-status equity has been disturbed. Any challenge or opposition to bring equilibrium will lead to conflict. Till the rating-status equity is achieved, there will not be harmony and full concentration on development, i.e., achievement of goals.^o

Thus, our **Sixteenth** proposition: ***Greater the difference between the inherent, rating associated status (ascribed status) and the status actually enjoyed (achieved or imposed), higher will be the tension in an organisation, group, community, society.*** As a corollary, ***greater the number of deviations from the rating-status equity rule, higher will be the tension in an organisation.*** This is our **Seventeenth** proposition. Since higher the mental component in a work, higher the respect it commands, it follows that the deviation in rating-status equity of a work of higher rating will create higher tension as compared to that in a work of lower rating. From this follows our **Eighteenth** proposition: ***Higher the rating of a work with deviation in rating-status equity, higher will be the tension in the organisation.***

^o See Note 15

We thus have three factors: the magnitude of deviation, the number of deviations, and the rating of work where deviation has taken place. Combining these, we have our *Nineteenth* proposition: ***Higher the rating of work, higher the magnitude of deviation and higher the number of deviations from the rating-status equity, higher will be the tension in the organisation.*** As regards relative importance of these factors, first is the rating of work, followed by the magnitude and number of deviations in that order. In other words even a single deviation of small magnitude in the rating-status equity of a work of high rating will create more tension than any amount of deviation in any number of cases of lower ratings. This is because such a deviation will have sympathetic vibrations at all the levels where at each level there will be efforts to fill the vacuum at higher or lower levels as the case may be. It is like introducing a defect at the early stage of weaving which gets repeated all along the fabric's length and/or breadth.

We have observed that each rating-status equity is unique and independent, and that harmony is inherent in rating-status equity. The assumption here is that the rating of work and the relationship between this rating and the status associated with that work both are absolute, and hence independent of individual or collective judgement of the members of organisation. In other words, even by a majority vote members of organisation or group can not rate a work involving higher mental efforts below a work involving lower mental efforts, and the same for status associated with these works. Hence, the inherent rating of work and status associated with that work has to be respected by all members of an organisation, groups, community, society. Otherwise, there will be disharmony, tension and conflict. Following this, our *Twentieth* proposition: ***Greater the agreement among members on the inherent rating of each work and status associated with each work, greater will be the harmony in the organisation.***

Deviation from rating-status equity creates disharmony not only in the mind of the person whose status has deviated from the ascribed status, but also in the minds of all other members, and consequently, among the members. The status actually enjoyed may be 'achieved' by the worker, or imposed on him. However, whether achieved or imposed, if this status deviates from the ascribed status, there will be disharmony. Tensions are forces which emerge along with disharmony; their purpose--to re-establish harmony.^p

The disharmony is because the universal, intrinsic, rating-status equity law is broken.

^p For further elaboration, see Appendix 1

This law is the natural law, inherited and propagated by human species through evolutionary, genetically transferred processes. It is this law that has determined in the past, and will continue to determine in the future till infinity, the evolution of human species. It is this law that demands absolute respect for evolution of mental faculty - the mind. This law is dynamic, continuously responding to evolution of mind by creating new ratings for new works and adjusting all ratings accordingly, while always emphasizing the rating-status equity principle.⁹ It is this law that demands supremacy of mind over the senses and matter.

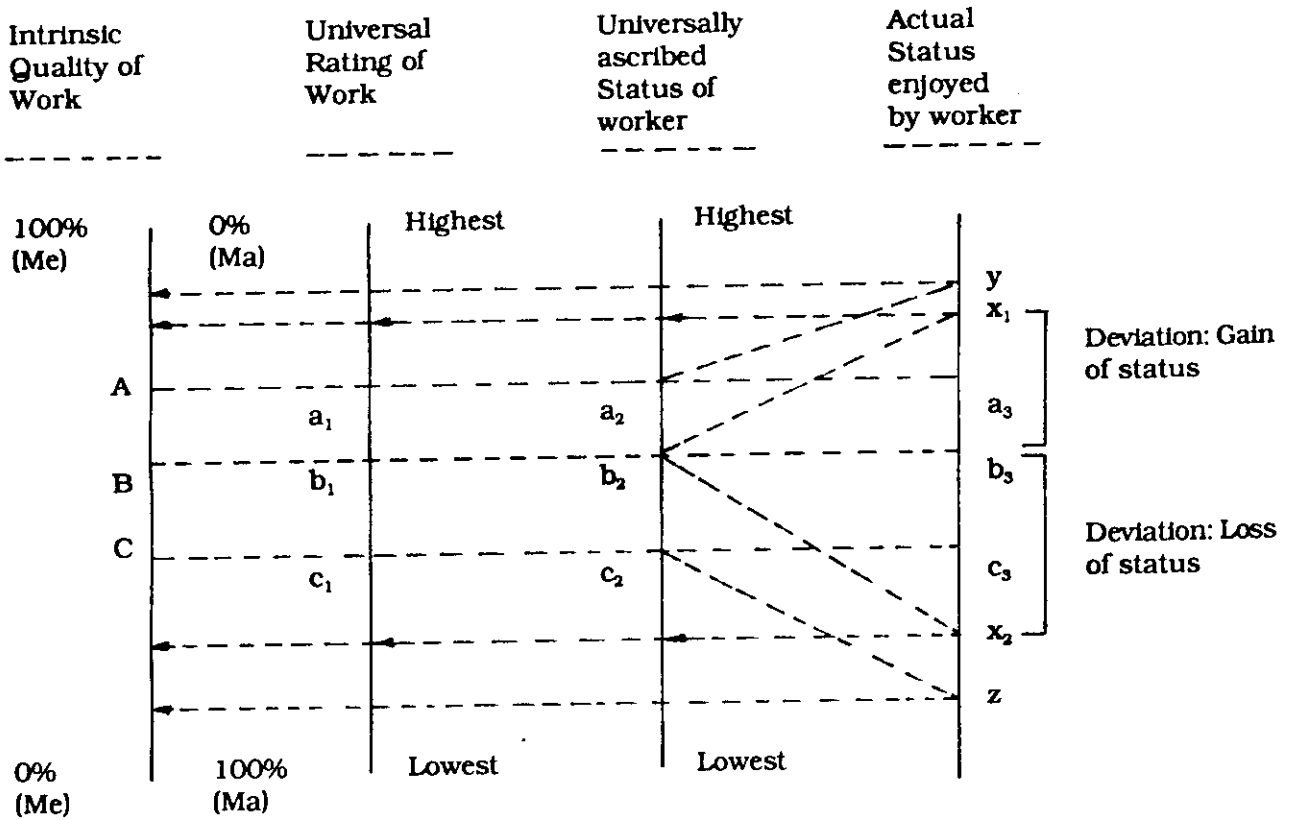
Perhaps, it is this **Law, Manu-the Law Giver** realised as the Supreme Law at the dawn of human consciousness. Perhaps, it is this **Law, Manu - the Law Giver** gave the mankind millenniums ago. Perhaps, it is this **Law, Manu - the Law Giver** wanted us to remember, to respect, and to follow all the time. For, this is the only **Law**, according to **Manu - the Law Giver**, we have inherited, and we must propagate for the survival and evolution of our species.

Hence, our tribute to **Manu-the Law Giver**.

⁹ See Note 16

Appendix 1

The phenomenon of tension associated with deviation in rating-status equity is diagrammatically presented below:



Let us assume that work A involves higher mental efforts than B which involves higher mental efforts than C. The inherent ratings of these three works are a_1 , b_1 , and c_1 , and the ascribed status for workers associated with these works are a_2 , b_2 and c_2 respectively, where $a_1 > b_1 > c_1$, and $a_2 > b_2 > c_2$. Let us further assume that the actual status enjoyed by the workers are a_3 , b_3 , and c_3 respectively.

Then, $a_3 > a_2$; $b_3 > b_2$; and $c_3 > c_2$

If $a_3 = a_2$; $b_3 = b_2$ and $c_3 = c_2$, then there will be complete harmony in the organisation.

If, however, in case of, say, work B, $b_3 \neq b_2$ to such an extent that $b_3 > a_2$ or $b_3 < c_2$, and that when $b_3 > a_2$, b_3 is located at x_1 , and when $b_3 < c_2$ it is located at x_2 , then we get the

following:

In case of B, there is deviation in rating-status equity. At x_1 position the magnitude of deviation is $(x_1 - b_3)$. Here the worker enjoys more status than he deserves according to the rating of work B done by him, i.e. without doing the work of higher rating that can only command x_1 status. The other way to look at this will be to say that the work B itself has been judged by the authorities to be of higher rating, and hence worker gets higher status. Since $x_1 > a_2$, it immediately initiates tension in the worker of work B as well as in the worker of work A.

The tension faced and generated by the worker of work B could be of various kinds. For example, he himself becomes uncomfortable with his new status which is now higher than that of the worker doing the work of higher rating. He feels insecure thinking that any day his status may get reverted to its original position. He fears antagonism and ridicule from worker of work A as well as of other works. Not confident with his new status and to avoid antagonism and ridicule he may take resort to appeasement of other workers, or get himself isolated. He may even wrongly perceive that the rating of his own work B is higher than that of work A, and hence he deserves higher status, and behaves accordingly. For such behaviour, he faces further reactions from his colleagues. He may take interest and put in extra efforts in altogether different kinds of works (unrelated to work B) to retain his new status. He may even put extra efforts to develop his skills so as to take over the work of A, thus creating tension in the worker of work A. He may even resort to other immoral means like bribery, appeasement, undue rewards to subordinates to get their support to maintain his new status. Thus, the desire to retain the status higher than what the work deserves, being immoral, creates disharmony.

The worker of work A will react in one or more of the following three ways: One, he resigns to the situation, remains discontented, and becomes quarrelsome; Two, he himself tries to push for a status higher than x_1 (say y) *without* doing the work of higher rating that can only command y status; Three, he tries all possible means to push back the worker of work B from x_1 to its ascribed status, namely, b_2 . Thus, there will be disharmony in the organisation.

At x_2 position, the magnitude of deviation is $(x_2 - b_3)$. Here the situation is reverse. The worker of work B gets lower status than he deserves according to the rating of work B done by him, i.e. *without* doing the work of lower rating that can only command x_2 status. The other way to look at this will be to say that the work B itself has been judged by the authorities to be of lower rating, and hence worker gets lower status. Since $x_2 < c_2$, it creates tension in the worker of work B as well as in the worker of work C.

The worker of work B will then react in one or more of the following three ways: One, he resigns to the situation, remains discontented, and becomes quarrelsome; Two, he does the work of such rating that deserves x_2 status, i.e., he downgrades his work; and Three, he tries all possible means to push down the worker C from c_3 to say, z position, so that he has atleast some satisfaction of having relatively higher status than the worker of work C.

The worker of work C gets entangled in a tense situation and reacts in many ways. For example, he becomes uncomfortable with his own status which is now higher than that of the worker doing the work of higher rating. He loses confidence in the judgement of the authorities and feels insecure. He fears that perhaps he will be the next victim whose work will be judged by the authorities to be of lower rating than what it is, and consequently his own status will be pushed down below x_2 . He fears being ridiculed by the worker of work B and of other works. He tries to incite and support the worker of work B to fight against the judgement of the authorities to regain his lost status. He may even wrongly perceive that the rating of his own work (C) is higher than that of work B and hence he deserves higher status, and behaves accordingly. To such behaviour he will face further reactions from the worker of work B and also from other workers. There will be many such reactions creating disharmony in the organisation.

From the above it could be seen that with any type of deviation (leading to gain or loss of status), there will come in operation forces (tensions) trying to push back the status of worker of work B from x_1 to b_3 or x_2 to b_3 as the case may be. In other words, tensions force re-establishment of harmony.

Notes

1. The paper should have been completed long back. But, as it often happens with many of us, the temptation of earning some extra money and status through foreign assignments, and research sponsored by international funding agencies, (which not only buy our time but soul as well) delayed the output. The first draft prepared in August 1987 remained unfinished till now.
2. The present title emerged during discussion in August 1987 with Dr. Yogesh Atal, Regional Adviser, UNESCO, Bangkok, who commented on the preliminary draft and also drew my attention to works of various authors on the subject.
3. Comparing religions of the East and West Radhakrishnan³ observed, "Speaking in general terms we may say that the dominant features of Eastern thought is its insistence on creative intuition, while the Western systems are characterized by a greater adherence to the critical intelligence".
4. The degree of unpleasantness associated with a work may vary from society to society, and for the same society it may vary over time according to stage of development. However, the fact remains that there is always an aggregate sense of pleasantness/unpleasantness associated with each work.
5. We can further classify: whether the work hurts (1) the senses of the worker only; (2) senses of the "Onlooker/s only; (3) of both ; and (4) neither that of the worker nor of the onlooker/s.
6. Senses are primarily associated with survival--warn about dangers in the environment as well as inform about food. Sense of hearing, sight, smell and touch are directly associated with the surrounding environment. For example, hearing with sound, sight with light (i.e. image and perspective, distance and form), smell with perceived nature of nearby objects (danger, security), and touch with movement and power, and taste, often associated with sense of smell and sight, again with food needed for survival. Relative importance of these, individually and in permutation and combination, for survival could be the basis for working out the ratings for various combinations of senses.
7. Following this line of thinking we can say that total mental and manual *energy* required for a work would remain the same whether the work is done with or without the use of machines. We can also say that mental energy partly replaces manual energy when technology is used. From this one can calculate the 'quantity' of mental energy gone into technology by finding out the manual energy saved by use of technology.
8. In this connection, Charles Perrow's⁴ ideas are worth noting. According to him organisations are designed to get some kind of work done. "To do this work they need techniques or technology. These techniques are applied to some kind of "raw material" which the organization transforms into a marketable product. It doesn't matter what the product is; it may be reformed delinquents, TV programmes, advertising symbols, government decisions, or steel. But some technology is required, not only in the actual production process, but also for procuring the input of materials, capital, and labour and disposing of the output to some other organisation or consumer, and for coordinating the three "functions" or "phases" of input-transformation-output." He further pointed out that machines and tools are merely tools; they are not the technology itself.
9. Nature of technology commonly in use indicates the stages of industrialization of a country. In early stages of industrialization in a country, agricultural raw materials are converted into new products primarily with the help of first manual and then mechanical engineering (for crushing, twisting, blending, weaving, etc.). Real scientific and technological breakthrough comes with the understanding of and mastery over chemical processes, and mechanical engineering is increasingly supplemented by chemical engineering. (e.g., solvent extraction plants, chemical plants for processing of molasses.)
10. For further discussion on this see Charles Perrow, pp.80-5.
11. Not pressing the buttons as per requirement may do irreparable, irreversible damage to such a plant (unless other checks are incorporated in the design of the plant itself). Thus, even a work of low rating can have potential for causing high damage. But this should not change the intrinsic rating of work. I remember a Laurel and Hardy movie, where the owner of a completely automated plant hired the pair because he found them amply suitable for the job which did not require any brains, but purely manual work of pressing. I think, one button in the morning to start the plant and the other in the evening to stop the plant. They were the only two persons employed in the plant. Knowing the pair, you can anticipate the results.

12. This is unlikely to happen in near future. For reasons why automation can not in the short run revolutionize industrial societies see "Foreword" of Georges Friedmann.⁵
13. This has been observed in medieval Europe as pointed out by Ram Swarup⁶ in his review of the book by Harold A. Gould, *The Hindu Caste System: The Sacralization Of A Social Order*, (Chanakyapuri Publications, Delhi, 1987). Ram Swarup observed, "In their preoccupation with the Hindu caste system, anthropologists have neglected comparative studies, the breath of any social science. Social differentiation and stratification - natural social phenomena - are widespread. Christian and Islamic cultures and countries too are not immune to their influence. Medieval Europe had its inflexible castes. It even had its untouchables--*Cagots*. From *Encyclopaedia Britannica* we learn that they inhabited a wide area; they were found in Spain, France, Brittany. They were shunned and hated everywhere. They lived in separate quarters called *cagoteries*."

- "They entered the Church through a special gate and a rail separated them from the main worshippers. Either they were altogether forbidden to partake of the sacrament, or the holy water was handed out to them at the end of a stick. A receptacle for holy water was also reserved exclusively for them. They were made to wear distinctive dress, and their touch was considered so polluting that it was a crime for them to walk barefoot on the road."
14. Status of butcher in a predominantly vegetarian society Vs in a non-vegetarian society varies due to relative dependence of these societies on flesh food for survival.
15. This may be the reason for the constant upheavals in the countries following marxists ideology.
16. The fundamental law of rating-status equity remains constant throughout the evolutionary process. Since evolutionary process is extremely slow (from human time perspective), and hence imperceptible, the ratings of work will seem to be constant even over a long period, of say a thousand years. However, rating of every work is determined by the complexity of the problems faced by the human species, as well as by the stage of development of human mind at a point of time in the process of evolution. Both these factors change continuously in the evolutionary process. Human species will continuously face more and more problems of increasing complexities, and will also develop mental capabilities to solve these. There will always be new ideas, new solutions, and new inventions dealing with more complex, new phenomena. With emergence of new problems and new ideas, relative ratings of every work will also change. For example, a work rated high today because of its importance for human survival against a threat, will not be rated so in future if that threat to survival diminishes. Changes in the ratings must accompany with changes in the status of worker; otherwise, there will be disharmony.