Antar

A Journal of Difference & Spontaneity

Themed Issue on *"Chaos and Management"*

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Themed Issue on

"Chaos and Management"

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বিল্বতোষ চ্যাটার্জি *(Mr. Bilwatosh Chatterjee)*

Contents

EDITORIAL

From the Editor's Desk

Difference and *spontaneity* –

admired yet *dreaded*, *isolated* yet *accommodated*, *loved* yet *hated*;

That's the difficult conjecture, under which *Antar-* **A Journal of Difference and Spontaneity** projects its first appearance as a voice of **Techno India Group – School of Management (TIG-SOM)**. The sphere of Business Administration and Management has always struggled to manage its ways out (read optimize out) of these two states, and this journal seeks to contribute to the thought process behind that struggle. How does one accommodate the simultaneous co-existence of *difference* and *spontaneity* is the difficult question this journal seeks to dig into, and desires to continue for the time to come. As the stepping stone of that quest, this first issue deals with the theme of "chaos and management", which in a way aligns to its broader question.

This issue seeks to address the theme of "chaos and management" from an open lens, accommodating different spontaneous positions, moving beyond disciplinary boundaries. The idea of *co-existence of differences* indeed is also the position with which TIG-SOM has travelled (albeit its limitations), and *Antar* seeks to begin its journey as a thought provoking mouthpiece of this institution and its journey, sharing its views and arguments. That is why we might proudly state that the presentation of this issue has also come out of a collective co-existence of students-faculty-staff, and we truly congratulate every soul behind it.

Co-existence is rare in the current juncture, yet as the members of TIG-SOM, we desire to stick to it and expand its spectrum by inviting engagement through this journal. It's a space for rethinking 'management' at the current juncture, and for that, not just engagement, but critical engagement seems to be a necessity. Hence, we lay open our thoughts for critiques and differences evolving spontaneously from anyone who engages with this piece.

অন্তরে অন্তর মিলুক

(May the spontaneous hearts co-exist in differences...)

The Editorial Team
Antar- **A Journal of Difference and Spontaneity**
Techno India Group – School of Management

EDITORIAL

Re-viewing *12 Angry Men* in 2023 - An experience of *chaos* and *management*

Khushi Thakur

I. Chaos of mind

How does chaos unfold? Is it difficult to exist within chaos? Is chaos instrumental to beautiful endings or disastrous outcomes? Is chaos beautiful in itself? – The questions pester every seeking soul striving to 'manage' out of the messy situation that is 'life', and the author is not an exception. As a generation baptized of the pious waters of disciplinary codes, we have constantly found ourselves facing the dilemma of how to manage the chaos of uncertainties, desires and imperfections that each of us are subjected to, be it in the stains of spilled coffee on the dining table or the missed assignments back in college. But it's worth wondering, do we always *need to* get out of chaos? Or rather we evolve from within chaos, where chaos inherently gets connected to our existence? This is a question which one can answer through her own experiences, and I would be seeking to do the same here. It's one lived experience I intend to share with the readers, which I

believe pertains to the theme of this issue – "chaos and management."

It's about a movie, which I, or rather we had watched together as a part of the Cine-club initiative of Techno India Group – School of Management[1], within a chaotic environment of a packed room with yawning souls, uncomfortable chairs and gazes of compulsion (really? Difficult to say, actually) – **12 Angry Men**. This essay attempts to document the feelings that the movie incites, and the impression it leaves upon. It wouldn't be far-fetched to say that my note here seeks to strive through the 'mystique writing pad'[2] of my mnemic apparatus to unfold and decode the impressions left by the movie. And that indeed is a chaotic task to do. Hence, it's a disclaimer at the beginning – this is an editorial, where a chaotic mind unfolds herself, moving beyond the (not so 'chaotic') dictums of academic editorials.

II. About *12 Angry Men*

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[1] Which I believe was one of the initiatives undertaken to manage the chaos we as an institute go through.

[2] Thanks Mr. Freud. [Freud, S. (1951). A note upon the" mystic writing-pad".]

Released in April 1957, '12 Angry Men' is a legal drama shot primarily in one room, with the exceptions of the first and last scene of the film. With a Writers Guild of America Award for Best Written Drama, the movie has won various other accolades, including the BAFTA Award for Best Foreign Actor won by the lead actor and co-producer of the movie, Henry Fonda. It was written by Reginald Rose, and was first broadcasted as a television play in 1954 before its adaption with the same name by the director Sidney Lumet.

The story revolves around a case that involves the trial of an 18-year-old boy who has been accused of murdering his father. The scene begins with the judge consulting the jury to decide upon the fate of the accused, meaning that if he was to be found guilty, he would be given a death penalty for his crime. Right from the beginning, a sense of tension amidst the chaos is invoked in the minds of the viewers, as well as a tinge of sympathy for the boy who only gets a short, yet meaningful appearance.

The major part of the movie, as mentioned earlier, has been shot in a single room wherein the viewers first get a glimpse of each juror as an individual. The first part of the scene involves a one take shot in which the camera very skilfully focuses on all the jurors interacting amidst each other and their surroundings, wherein the viewers develop a first impression of all the characters and their personalities. The heat in the room subtly symbolizes the intensity of the responsibility on their shoulders. For example, when juror 7 first goes to switch on the fan, he fails and then quickly dismisses it as he did not consider the heat too bothersome at first. Eventually, when it starts to rain and they are forced to

switch on the light of the room resulting in the starting of the fan, it shows that when forced to think long enough about an issue, the clarity of the issue increases and hence the thought process of people can be subjected to change.

The most noteworthy aspect of this film is the importance of the opinion of *one amongst* the many. Considering the fact that the jury was bound by the rule of complete consensus, it was vital that all of them must unanimously agree on the same verdict, which meant that even if it was just the one person (juror 8) against all the others in the beginning, logic and open mindedness became a vital key in the decision-making process, leading to an effective and fair judgement. Alongside this, the viewers can notice the varied thought processes and moral standings of the jurors involved, be it prejudice (juror 10), personal grudges (juror 3), fickleness (juror 12) or simple logic (jurors 4 and 8). This also highlights the theme of "reasonable doubt", as invoked at significant points in the film, particularly when the vote of every juror changed.

Trying to look at the movie from a managerial perspective, one might infer how patiently and calmly juror 8 managed to get his point across and completely change the dynamic of a completely chaotic room. Instead of getting lost in the chaos, he found a way to manage the chaos in such a manner that the other men felt compelled to question their beliefs and change their fixated and biased point of view. As a budding manager, one could stand to learn a lot from the way he interacted within that chaotic environment and used the chaos to manage the situation in favour of saving the young boy's life. He one by one convinced every other juror to put forward an unbiased

and open minded verdict and in turn got the jurors who were beginning to change their mind to support his cause, which is admirable and inspiring.

III. Reason with(in) chaos – a story of a tabooed relationship

What unfolds through the scenes of this movie is a story of some chaotic souls trying to manage a resolve called 'consensus'. Alongside, there pops an ally much treasured, which the chaotic minds encounter – reason. We are generally accustomed to the antithetical compartmentalization of 'reason' and 'chaos', but this cinema explores this illegitimate relationship between reason and chaos to seek the ecstasies within. The cinema shows how reason evolves both with chaos and in chaos. It breaks down the rigid walls between 'reason' and 'chaos' to present their interconnections. It is from within chaos, that the reasoned consensus evolved. The movie began at the calm clarity of majority (11 against 1), just to thrive through a rough muddle of chaos to reach a calmer position of consensus (0 against 12) – a reasoned consensus, but the decision being completely contrary to the initials. It unfolds in front of us, the power of collective discussion (which is rare to find at the current juncture), in resolving *chaos* through *chaos*. The first notion being a chaotic decision and the latter being the chaotic process through which the former gets changed.

This discomforting relationship is often something we crave for in today's juncture, where every space wants to stay under the comforting robes of *majority* in decision making, without invoking the discomfort(s) of *consensus*. But this craving is something we must be unapologetic about, especially as budding managers trying to learn decision making. The notion of standing out, voicing one's opinion out loud and not fearing backlash must be inculcated in order to truly understand the essence of managing chaos and chaotic management, which is coordination of every element involved, irrespective of the difficulty of the situation at hand. That is something this movie would always trigger within me and every soul that watches it.

IV. Back to the chaos of mind.

To conclude then, one has to summarise what (s)he has tried to jot down in an essay, yet let proper justice be done to the theme of the issue – let it not be structural, but chaotic. What then is to be done? Do we then start trying to embrace chaos as a necessary companion or as that stranger whom the Fathers warned of avoiding? My chaotic mind doesn't have the answer. Hope the essays in this issue would seek to address some of these dilemmas.

***

"Being"
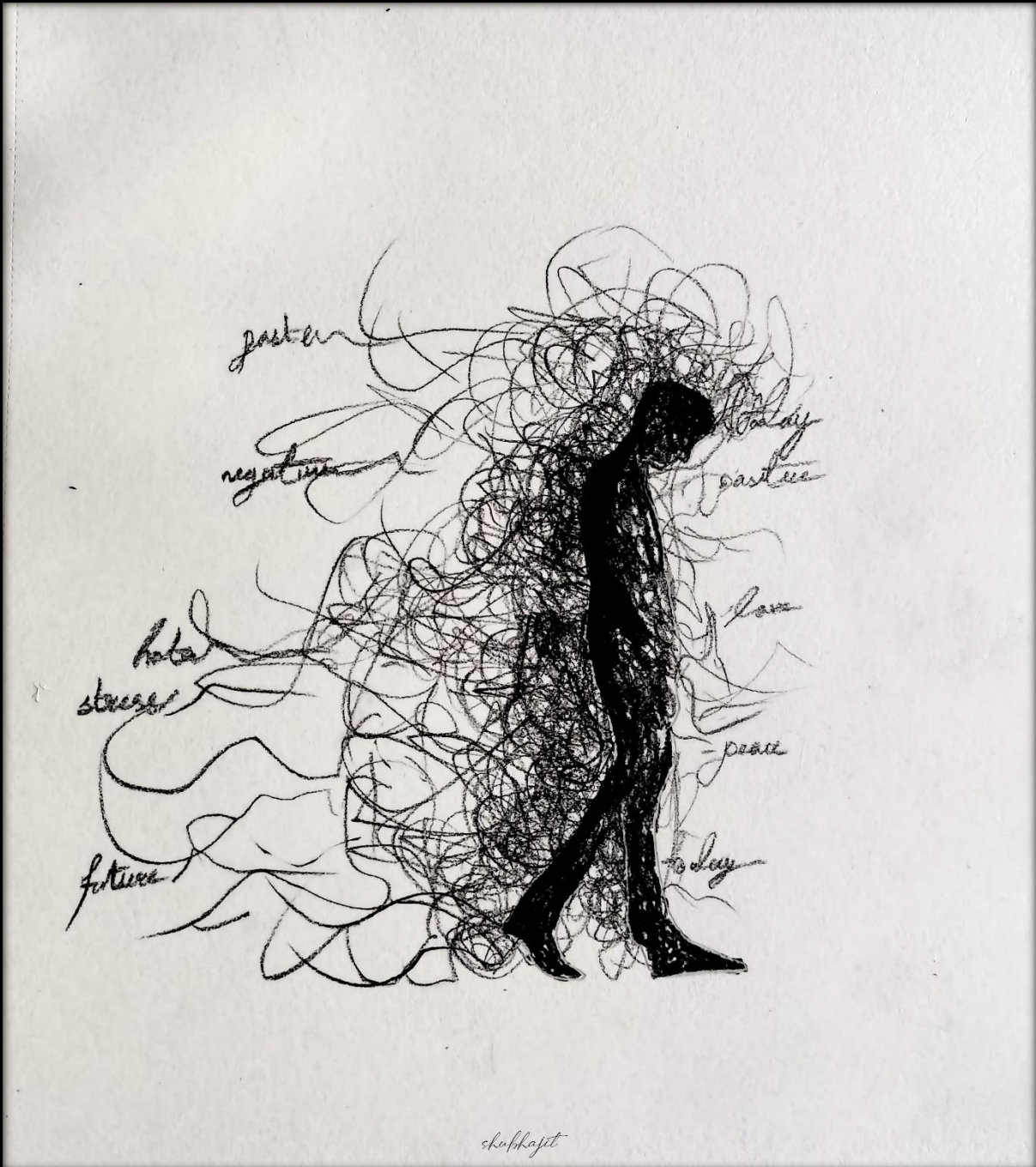
It's the chaos that constitute the being of a human life – an entity dreaded yet integrated. And one walks on …

Drawn by Shubhajit Paul (Student of MBA 1ST Year, TIG-SOM)

COMMENTARY

The Birth of Modern-day ODI Cricket – A case of Chaos and Management

Jayanta Laha

Abstract: The chaos theory of management focuses on the unpredictable situation or changes the organization or the business or any other entity faces, and relevant consequences thereafter. The management of chaos itself gives birth to innovative solutions which have a prolong impact on relevant fields too. A conflict between Kerry Packer, an Australian Business Tycoon and Australian Cricket Board (ACB) stirred the entire cricket world for almost a couple of years. The chaos and uncertainty ultimately brought drastic changes in traditional cricket and gave birth to modern-day glamorous ODI cricket. The chaos resolved, dust settled down but the innovations remained there and cricket became the ultimate beneficiary.

Key-words: World Series Cricket, Super Tests, One-Day-International, Chaos

Abbreviations: WSC: World Series Cricket; ACB: Australian Cricket Board; ABC: Australian Broadcasting Commission; ICC: International Cricket Conference; ODI: One Day International; SCG: Sydney Cricket Ground

Cricket has been a very popular outdoor game especially in United Kingdom, South Asia, Australia, New Zealand, Southern Africa and West Indies for more than hundred years [1]. Originating in England possibly in the medieval period [2], cricket was popularized in the other parts of the world with the advancement of the British Empire in the seventeenth-eighteenth century onwards. Over time the game has witnessed so many changes to remain popular and competitive in the commercial field.

However, the revolution in Cricket came with the Australian business tycoon Kerry Packer's brain child, 'World Series Cricket' (WSC) in late 1970's. In the words of Ehsan Mani, the former International Cricket Council (ICC) President [3]: "very few people in the history of the game, either players or administrators, can be said to have changed the game, but Kerry Packer can rightly be considered someone who did just that."

However, the revolutionary initiative from Packer came in a very chaotic manner and the purpose was not totally in tune with what it ultimately achieved.

The revolution perhaps would not take place at least at that point of time if the Australian Cricket Board had been willing to grant the television rights for Test match cricket to Packer's Australian commercial network Channel Nine. The cricket-loving billionaire tabled a $1.5 million, three-year offer to the Australian Cricket Board (ACB) for the exclusive TV rights of cricket in Australia. But ACB preferred Australian Broadcasting Commission (ABC), their long term public broadcasting partner even though their offer was almost 8 times smaller. Packer was not even permitted to bid [3].

But Packer was not a person to let the matter go. The rejection simply provoked him to come up with his own form of competition 'World Series Cricket' and the war broke out between him and ACB and later with International Cricket Conference (ICC), Cricket's world governing body.

But even before the conflict between Packer and ACB, the stage was already set for the advent of such a privately owned cricket series like 'World Series Cricket'. The players around the world including Australia having common grievances regarding poor payment in comparison to their commitment. As there was hardly any full-time formal contract between cricketers and cricket boards, cricketers were often in dilemma whether to sacrifice their other career opportunities for the sake of playing cricket [4]. The second big issue was lack of initiatives from Cricket Boards regarding timely commercialization of cricket. According to Packer, as color television set was already in the market, people would prefer to enjoy a match with players using colorful kits rather than traditional white dresses used in 'test' cricket. Adding color to the game would attract large pool of audiences and thereby increase its commercial viability.

Packer planned to make best of the situation. He never underestimated red-ball traditional 'Test Cricket'. But a visionary like him foresighted the future of the game in white-ball limited over cricket, that too under floodlighting as day-night match with players being colourful dressed up.

Packer himself met top cricketers dissatisfied with low salaries and other issues. After secret negotiation, thirty-five of the most renowned cricketers of that time from Australia, West Indies, England, New Zealand, Pakistan and South Africa (then banned from the international cricket for apartheid policy of their government) joined WSC. This list included heavyweights like Greg Chappell, Denis Lillee from Australia; Javed Miandad, Imran Khan from Pakistan; Viv Richards, Clive Lloyd from West Indies; Richard Hadlee from New Zealand; Kepler Wessels from South Africa, Tony Greig from England to name a few. Packer entrusted Richie Benaud, former Australian captain as advisor on how to run WSC [5].

The ICC, being afraid of losing its sovereignty came hard on Packer, announcing that WSC matches would not be given First class cricket status and the players who joined Packer would be banned from Test cricket and First-class cricket. This created a panic among the WSC players, as they already had some contractual agreements with other authorities regarding playing first-class cricket. Some of them decided to leave Packer under such a chaotic situation. But Packer was there with 'never say die' attitude. He backed his players in High Court, London and after seven weeks, won the judgment in their favor and against ICC's step. The court clearly told that the ICC should never intervene in WSC and for their own interest, could not forbid someone from earning their livelihood or enjoying some benefits from WSC that the ICC could not provide. Needless telling that it was a big win for Packer backed WSC players and adding only salt to ICC's injury, threatening their authority [6].

The World Series Cricket was legally restricted from using the word "Test match", call the Australian team "Australia" or using the official rules of cricket. But 'who cares?', WSC started with their self-styled "Super Tests" and one-day matches, with teams including 'WSC Australia XI', 'WSC West Indies XI' and 'WSC World XI' [6].

The first season (1977-78) of WSC was unable to attract too many audiences. But situations turned drastically in favor of Packer and WSC since the first day-night match played at the Sydney Cricket Ground (SCG) between the WSC Australian and WSC West Indian teams on 28th November 1978. Near about 44,377 spectators turned out to enjoy the limited over match. A few days later, almost 40,000 spectators over three days attended the Super test final at the SCG between WSC Australian and the WSC World team, played under lights. The tremendous marketing effort from Packer and his team, the day-night limited over games, bright colored kits, white ball, Bernaud led professional commentary team made the WSC much more attractive than the traditional color less day test matches with red ball and age-old commentary. Not only traditional cricket in Australia was losing spectators but their national team also showed dismissal performance in absence of front line players, joined WSC [6].

The ACB, other cricket boards as well as ICC well realized the graveness of the situation. They were continuously losing their feet. On the other hand, not only these authorities but Packer himself was also under tremendous financial stress to run WSC. Both the parties were looking for a win-win compromise. Finally, on 30th May, 1979; surprising every cricket lovers,

the ACB offered Channel Nine the exclusive rights to telecast Australian cricket. In addition, Packer received a ten-year contract to promote and market cricket through a new company, PBL. In exchange of it Packer called off WSC and all the players associated with it returned to traditional cricket [6].

The entire Packer-ACB-ICC saga was unpredictable and one of its kind in the history of cricket. No one ever anticipated that a chaos over broadcasting issues would bring so much drastic changes in 'cricket as an entertaining instrument'. The initiative was a big threat to the formal structure of the cricket around the world. As the situation took an unprecedented turn, first the ACB and then even the ICC had to come to the field for damage-control as well as to maintain their sovereignty. And after the negotiation, it was almost win-win situation for both Packer and ICC-ACB. But the ultimate beneficiary was cricket itself. If the conflict over the broad casting issue was the 'chaos', the same 'chaos' actually gave birth to so many innovative ideas like limited over day-night matches under floodlighting, colorful kits for cricketers, white ball, professional commentary, better payment and long term full-fledged contracts between boards and players. In true sense, the 'chaos' prompted to bring modernization, commercialization and globalization of 'cricket' and gave it a perfect makeover to contest with other popular 'sports' on the threshold of twenty-first century. The chaos and thereafter managing it efficiently from both sides not only saved the traditional structure but also gave birth to modern 'One-Day-International' cricket and thereby keeping it popular and competitive in commercial market also.

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References:

[1] Cricket - International cricket | Britannica (accessed on 25th Feb, 2023)

[2] Cricket - Technical development | Britannica (accessed on 25th Feb, 2023)

[3] https://www.foxsports.com.au/the-sideline/the-packer-revolution/news story/18ef12781ed1cd7c5f93f43b6 4e5061c (accessed on 25th Feb, 2023)

[4] https://www.insidethegames.biz/art icles/1047497/how-packers-revolution-changed-cricket (accessed on 25th Feb, 2023)

[5] https://m.famousfix.com/list/world-series-cricket-players (accessed on 25th Feb, 2023)

[6] https://www.espncricinfo.com/stor y/world-series-cricket-72632 (accessed on 25th Feb, 2023)

Relationship Management Through Trust Building

Dr. Tridib Chakraborti

"Trust Begets Trust...Distrust

Begets Distrust"

"Trust cannot be demanded. It has to be earned"

THOUSAND years ago, the great Greek philosopher Aristotle wrote, "Man is a Social Animal." In fact, each of us need other people. It is also true that people join together not only to survive, but also to fulfil their personal human strivings. Quite obviously, we need to feel close to at least one person, such as a parent, spouse or friend' and we also always seek companionship of other people. Therefore, it has been rightly stated that a well-rounded life includes both types of relationships. It has been found that we band together in families to procreate and preserve human life. There is an interpersonal relationship between all the members of the family at different times and at different levels.

We also cooperate with others to satisfy a wide range of needs and to attain mental goals. We depend on the services of variety of community organizations such as hospitals, police and other public service organizations. But the fact remains that as the society is getting more complex day by day and we are slowly but steadily moving towards a digital based society; the common people are also growing more dependent on police services to satisfy their need for security. This growing dependence certainly calls for a trusting relationship between the two, i.e., the police forces on one hand and the common people of the society on the other.

Today there is no denying the fact that trust is enormously powerful in an organisation. People won't do their best unless they believe that they will be treated fairly--that there's no cronyism and everybody has a real shot. The only way we can know to create that kind of trust is by laying out our own values and then walking the talk. We must continuously do what we say with consistency and dedication.

Broadly speaking, trust is defined as the reciprocal of faith in others' actions and behaviour. Experts on the subject explain the reciprocal (give and take) aspect of trust in simple terms - "When we see others acting in ways that imply that they trust us, we become more dispensed to reciprocate by trusting them more. Conversely, we

come to distrust those whose actions appear to violate our trust or distrust us." In short, we tend to give what we get; trust begets trust, distrust begets distrust.

More specifically, it is to be noted here that trust in general involves a *cognitive leap* beyond expectation that reason and experience only would warrant. To take a typical example from our police force, suppose a member of the newly formed investigating team of a department works hard based on the assumption that his/her teammates are also working hard. That assumption, on which his/her trust is based, is a cognitive leap that goes beyond his/her actual experience with their teammates. In fact, when we trust someone, we have no doubt and complete faith in their good intentions. However, it is also true that the act of trusting someone carries with the inherent risk of betrayal. But today's progressive professionals firmly believe that the benefits of interpersonal trust far outweigh any risks of betrayal trust.

Now, the brief analysis stated above boils down to one single question: How to build Trust? There are six broad guidelines prescribed by the experts in the concerned field. These guidelines should be followed by every professional for building and maintaining trust. These readily available guidelines are:

- *Develop free fair and open communication system by keeping informed all team members in plans, programmes and decisions, and taking feedback regularly.*

- *Providing support and help to team members by always being available and approachable.*

- *Showing managerial respect to team members by delegating work with decision making authority.*

- *Practising fairness by giving credits and recognition to deserving team members.*

- *Trying to be practical by keeping both implied and expressed promises.*

- *Enhancing credibility by demonstrating good professionalism.*

Therefore, in our day to day professional work life, we have to keep in mind always that,

"Trust cannot be demanded. It has to be earned."

***

COMMENTARY

The relevance of *Chaos Theory* within *Management* and beyond

Twisha Ray

The Chaos notion is a scientific principle describing the unpredictability of systems. When it was added for the first time in the early 80's, the area was all sundry and had a fling with it. The premise of the organizational construction frequently continued to be in Chaos, producing electrical energy then again barring any predictability or direction. The Chaos thought suggests preferring high-quality leadership, a guiding vision, strong values, organizational beliefs and open communication, so that the administration can bridge the gap between method and the operation.

Now, suppose about a corporation dominated with the aid of Chaos in the absence of sturdy leadership, administration and values. It is really doomed to fail. Chaos at its most extreme beats up the personnel to the element of location that the personnel will surely put on to. Employees constantly hit upon themselves assessing damages and firefighting with no time for creativity or productivity. In such a work environment, Chaos will come to be the predominant dimension of failure and purpose for monetary loss and bankruptcy. Inexperienced personnel can cause a lot of harm to the organization. They have horrible results in the workplace. Such personnel are regularly addicted to Chaos due to the reality of their lack of capability to manage the interior system, and characteristic of their non-public work.

Some entrepreneurs are given their actual job to create Chaos in order to get things going. By doing so, they agree to develop momentum and accountability in one action. It is true that Chaos is a fundamental segment of every leader's existence and how such leaders thrive in Chaos. However, it is the process of how the leaders deal with Chaos that will figure out the success or failure of the company. Great administration in situations of chaos is invaluable. Chaos virtually cannot be successful for so long. It ought to be managed continually and proactively with proper organizational structure and governance.

The nature of "chaos" is understood in many other approaches. In chaos theory, it is the chaotic kingdom that is charming and that incorporates underlying order in the shape of strange attractors and fractals.

In neighbourhood theory, through contrast, the chaotic regime is typically seen to be too random and disorderly to have a complete application. This "edge of chaos" circumstance is working by using the capabilities of some of its more ardent proponents to hold the secret of the entirety from reading to the genius of the evolution of frequent existence.

Both the thoughts of chaos and complexity try to reconcile the integral unpredictability of nonlinear dynamic constructions with a trip of underlying order and structure. There are, however, some huge distinctions between the two approaches. Chaos notion searches for a small number of deterministic mathematical facets using a system; in populace models, for example, these aspects would perchance signify the fluctuations in the numbers of a species. Network thinking is a whole lot less concerned with underlying simplicity; it tends to count the number of brute strengths utilized to model massive numbers of nodes associated by using the potential of convenient logical rules.

Chaos concept permits for the modelling of such dynamic interactions as these are between a business enterprise and its stakeholders (employees, customers, suppliers, partners), or between a business enterprise and the surroundings in which it operates.

Organizations/businesses are complex, dynamic structures with far-from-equilibrium properties. They are additionally nonlinear systems; their future overall performance can't be estimated through previous and existing occasions and actions.

There is frequently a lot of chaos in the world of management. This is due to the fact there are so many transferring components and a good deal that can go wrong. However, this does not suggest that administration is an awful thing. In fact, chaos can virtually be an accurate element for management.

Chaos can assist to maintain matters that are clean and new. It can additionally assist to forestall complacency and boredom. When matters are continuously changing, it forces humans to continue to be on their toes and be alert. It additionally encourages creativity and innovation.

Chaos and administration are two ideas that are regularly spoken about in the identical breath. And with accurate motive - they are each quintessential component of any profitable organization. Management is all about planning, organizing and controlling the sources of an enterprise in order to acquire its goals. Chaos, on the other hand, is the absence of order or predictability.

In many ways, chaos is the antithesis of management. But that does not imply that chaos is always bad. In fact, some businesses thrive on chaos. Many start-ups, for example, function in a country of steady chaos as they attempt to discover their footing and parent out what works and what doesn't. For these organizations, an awful shape and order would stifle creativity and innovation.

For example, think about an employer that is going through a predominant reorganization. The historic shape is being dismantled and a new one is being put in place. This can be a very chaotic time for the employees, with a lot of uncertainty about what the future holds.

However, it is additionally a time when sturdy administration is wished to maintain matters strolling smoothly.

Likewise, even in a corporation that is going for walks smoothly, there can be pockets of chaos. A new venture can also be a beginning of the requirements of others to adapt to new roles and responsibilities. Or there can also be a surprising inflow of work that stretches everybody thin. In these situations, suitable administration is wished to carry order out of the chaos.

So, whilst administration and chaos may additionally appear like opposite ends of the spectrum, they really have pretty a bit in common. Both require adaptability, flexibility, and sturdy management to navigate successfully.

In the latest commercial enterprise world, it is extra necessary than ever to be capable of efficiently controlling chaos. With the continuously altering panorama of the marketplace, companies should be capable to adapt and alternate rapidly in order to remain ahead of the competition. These instances can frequently be a challenging task, as it requires cautious planning and execution.

However, with a well-thought-out sketch and the proper group in place, it is possible to efficiently navigate via chaotic situations. By being proactive and prepared, you can keep away from many doable issues that may want to arise. Appropriate administration throughout chaotic instances can assist to make sure that your enterprise stays profitable even in the most difficult circumstances.

The interaction between administration and chaos is a subtle one. On one hand, administration represents order and stability, whilst chaos represents alternate and instability. On the other hand, besides chaos there can be no boom or progress, and besides administration there can be no route or purpose. It is solely when these two forces are in stability for growth making.

This stability is now not an effortless factor to achieve. It requires a deep perception of each force, and how they have interaction with every other. It additionally requires a willingness to include change, even when its capacity is letting go of some control. Only then the full plausibility of each administration and chaos can be realized.

II. The science of Chaos Theory

As mentioned by using James Gleick, chaos is a science of the "global nature of systems," and so it has crossed many disciplinary lines—from ecology to medicine, electronics, and the economy. It is a theory, method, set of beliefs, and way of conducting scientific research. Technically, chaos fashions are totally based on "state space," increased variations of the Cartesian graphs used in calculus. In calculus, velocity and distance can be represented on a Cartesian sketch as x and y. Chaos models permit the plotting of many greater variables in an imaginary space, producing extra complicated imaginary shapes. Even this mannequin assumes, however, all the variables can be graphed, and may not be additionally in a position to account for conditions in the actual world the place the quantity of variables adjustments from second to moment.

The most important device for the perception chaos principle (and complexity concept as well) is dynamic structures theory, which is used to describe tactics that continuously trade over time (e.g., the ups and downs of the inventory market). When structures turn out to be dislodged from a secure state, they go through a length of oscillation, swinging back and forth between order and chaos. According to Margaret J. Wheatley in Leadership and the New Science, "Chaos is the last country in a system's motion away from order." When a machine does attain that point, the components of a machine take the place of a turbulence, absolutely missing in route or meaning. Wheatley rates researchers John Briggs and F. David Peat explaining the method of oscillation:

Evidently acquainted order and chaotic order are laminated like bands of intermittency. Wandering into sure bands, a gadget is extruded and bent again on itself as it iterates, dragged towards disintegration, transformation, and chaos. Inside different bands, structures cycle dynamically, retaining their shapes for lengthy intervals of time. But ultimately all orderly structures will sense the wild, seductive pull of the ordinary chaotic attractor.

Part of the concern in analysing chaos concept arises due to the fact that complicated structures are challenging to learn about in pieces. Scientists' efforts to separate portions of dynamical structures regularly fall apart. The gadget relies upon every minute of the section of the device and the way it interacts with all different components. As Briggs and Peat state, "The entire form of matters relies upon the minutest part. The section is the complete respect, for the motion of any part, the

entire shape of the chaos or transformative trade might also manifest."

In the identical breath, it is vital to set up the significance of the autonomy that the smallest components of a device possess. Each aspect of a complicated device has the potential to fluctuate, randomly and unpredictably, inside the context of the device itself. The system's guiding concepts (the attractors) enable these components to cohere over time into specific and predictable form. This runs opposite to the influence theory of chaos that many have, believing that there is no order to be in such a system. But chaotic motion does possess finite boundaries, inside which there is the potential for endless possibility. Even missing direction, components of a device can mix so that the machine generates a couple of configurations of itself, exhibiting "order besides predictability." These structures in no way land in the identical vicinity twice, however additionally they do not exceed any boundaries.

III. Practical applications of Chaos Theory

By the early 1980s, proof accrued that chaos concept was once an actual phenomenon. One of the first frequently-cited examples is a dripping water faucet. At times, water drops from a leaky faucet showcase chaotic conduct (the water does no longer drip at a consistent or orderly rate), getting rid of the opportunity of precisely predicting the timing of these drops. More recently, the orbit of Pluto was once proven to be chaotic. Scientists took gain of purposes to the usage of chaos to their benefit; chaos-aware manage methods should be used to stabilize lasers and

coronary heart rhythms, in the company of more than one different use.

Chaos ideas are very beneficial for the organizations. Applying chaos principle to organizational conduct lets the theorists take a step away from the administration of everyday things and to see how the companies are characterized as unified systems. An agency is a traditional instance of a nonlinear gadget (i.e., a gadget in which minor occasions have the doable to set off grave penalties or chain reactions, and fundamental modifications may additionally have little or no impact on the gadget whatsoever). In order to take advantage of the great chaotic organization, one wants to strive to see the organizational structure that emerges from a distance. Instead of pinpointing reasons in the organization for organizational problems, the enterprise is higher served, in accordance with chaos theory, via searching for organizational patterns that lead to positive sorts of conduct inside the organization.

Organizational expectations for ideal behaviour, and the diploma of freedom with which folks are allowed to work, structure the way a company's troubles and challenges are dealt by its members. By permitting human beings and agencies inside a business enterprise, some autonomy groups motivate the corporation to arrange itself, enacting a couple of iterations of its personal functioning till the range of portions of the enterprise that can work collectively as well as more effectively. A company that encourages this kind of administration has been termed as a fractal organization, one that trusts in herbal organizational phenomena to order itself.

However, making use of chaos principle to organizational exercise tends to go towards the grain of most formal administration patterns. Order can be pressured with the greater famous thinking of control. Defined through agency charts and job descriptions, usual administration is no longer trying to find to add ailment to its strategic plan. As Wheatley states, "It is challenging to open ourselves up to a world of inherent orderliness." Organizations are targeted on shapes and designs. Charts are drawn to illustrate who is guilty to whom or who performs what position and when. Business professionals wreck down agencies into small parts. They construct fashions of organizational exercise and coverage with hope that these atomizing yields higher facts on how to enhance the organization's functioning. However, the chaos concept implies that this is unnecessary, even harmful.

Self-organizing structures are those that enable us to develop and evolve with free will. As lengthy as every phase of the machine stays steady with itself and the systems past; these structures can harness the energy of creativity, evolution, and free will—all inside the boundaries of the organization's usual imaginative and prescient culture. In this respect, chaos ideas indicate the want for advantageous leadership, a guiding vision, sturdy values, organizational beliefs, and open communication.

One of the most influential enterprise writers of the 1980s and 1990s, Tom Peters (b. 1942), wrote, Thriving on Chaos: Handbook for a Management Revolution in 1987. Peters presents an approach to assist firms that deal with the uncertainty of aggressive markets through client responsiveness, fast-paced

innovation, empowering personnel, and most importantly, gaining knowledge about the work in a changed environment. In fact, Peters asserts that we stay in "a world turned upside down," and survival relies upon embracing "revolution." While no longer explicitly involved with chaos theory, Peter's focal point on letting an organisation (and its people) power itself is pretty well suited with the central tenets of chaos theory.

As the international economic system and science proceed to alternate the way an enterprise is carried out on a daily basis, proves that chaos is truly visible. While groups ought to be as successful as "non-adaptive," controlling establishments with permanently-installed hierarchical structures, present day companies ought to be in a position to restructure as markets extend and science evolves. According to Peters, "To meet the needs of the fast-changing aggressive scene, we should surely study to love exchange as much as we have hated it in the past."

Organizational theorist Karl Weick (b. 1936) provides a comparable idea to Peters, believing that commercial enterprise techniques must be "just in time…supported with the aid of extra funding in universal knowledge, a giant ability repertoire, the capability to do a rapid study, have faith in intuitions, and sophistication in reducing losses." Though he did not articulate his theories in phrases of the express thoughts supplied by using quantum physics and chaos theory, his statements helped the well-known notion that the advent and fitness of an agency (or a system) relies upon the interplay of a variety of human beings and components inside that system. However, as Wheatley states in her book:

"Organizations lack this variety of faith, belief that they can accomplish their functions in a variety of approaches and that they do high-quality work when they are on the centre of attention on course and vision, letting transient varieties emerge and disappear. We appear fixated on structures…and organizations, or we who create them, live on solely due to the fact we construct artful and smart—smart adequate to protect ourselves from the herbal forces of destruction."

When it comes to chaos and management, there are a few key factors to hold in mind. First, chaos is generally not something that can be absolutely avoided. There will constantly be some diploma of disorderliness in any system. Second, administration is about extra than simply controlling assets and personnel; it is additionally about growing order out of chaos. In different words, high-quality administration requires a positive quantity of creativity and flexibility. Finally, whilst administration can assist decrease chaos, it cannot continually put it off completely. In some cases, the fantastic thing a supervisor can do is to decrease the influence of chaotic events.

In the cutting-edge enterprise world, it is more vital than ever to be in a position to manipulate chaos and uncertainty. With so many exchanges taking place all the time, it can be challenging to recognize how to reply pleasantly to some conditions as they arise. However, there are some simple standards of administration that can assist you navigate these challenges.

First, it is vital to have a clear imaginative and prescient mind for one's organization. This will furnish a North Star to guide one's choices when matters get

chaotic. Without a clear vision, it is effortless to get misplaced in the shuffle and make choices that do not align with one goal.

Second, one wants to be capable of speaking effectively. This skill is being in a position to share your imaginative and prescient with others in a way that evokes them to action. It additionally skills of being capable to pay attention to remarks and enter from others barring getting defensive. When verbal exchange breaks down, chaos rapidly follows.

Third, you have to be capable of apprehending and embody change. Change is inevitable, and those who withstand it will solely discover themselves in addition behind. Instead, research to see alternatives as a probability for increase and advancement. Embracing exchange will assist you remain ahead of the curve and higher role yourself for success.

Finally, bear in mind that administration is no longer about control. Trying to manage the whole thing solely leads to frustration and burnout. Instead, centre of attention on managing the chaos through the usage of these ideas as your guideposts. By doing so, you will be able to create productive work surroundings for everyone

It is frequently stated that the solely consistent existence is changed. And nowhere is this more real than in the world of business. The capability to efficiently control chaos and alternate is a necessary talent for any leader or manager. After all, the only component that is positive in commercial enterprise is that matters will constantly be changing!

So how do you efficiently control chaos? The first step is to take delivery of that there will constantly be some diploma of chaos and uncertainty. You cannot manipulate everything, so you want to focus on what you can control. Once you've got this typical, you can begin to put structures and methods in location to assist you deal with the chaotic conditions when they arise.

There is a quantity of extraordinary equipment and strategies that you can use to control chaos. One popular method is recognized as the "5 S's." This stands for Sort, Set in Order, Shine, Standardize, and Sustain. By following these steps, you can convey some diplomas of order even in the most chaotic situations.

Another beneficial device for managing chaos is the "Pareto Principle." This precept states that 80% of the consequences come from 20% of the causes. In different words, most issues are precipitated by means of a small minority

The purposes of chaos have tested to be interesting and fruitful. Chaos principle used to be born from staring at climate patterns, however it has turned out to be relevant to a range of different situations. Some areas benefiting from chaos concepts these days are mathematics, geology, microbiology, biology, political science, economics, engineering, finance, algorithmic trading, meteorology, philosophy, anthropology, physics, politics, populace dynamics, physiology, and robotics. Besides these there are so many complete listing as new purposes are appearing. These structures encompass climate models, the inventory market, fowl migration patterns, conduct of boiling water, neural networks and structures

associated with quantum phenomena. This idea is primarily based on two most important components; the first one is that systems, regardless of their diploma of complexity, rely on an underlying normal equation or a precept that governs their conduct consequently making it deterministic, theoretically, which is no longer due to its instability and Barishal University Journal Part 1, 5(1&2): 123-140 (2018) Chaos Theory and its Applications a hundred thirty the presence of a giant range of contributing factors. The 2nd most important element is the excessive sensitivity to preliminary conditions, that a minute exchange in the preliminary conditions, such as rounding mistakes in numerical computation of a positive dynamical gadget can produce cataclysmic and unpredictable results for that dynamical system. Now we describe the following functions of chaos idea in our actual life. (i) Chaos concept in Stock Market Chaos evaluation has decided that market costs are quite random, however with a trend. The quantity of the fashion varies from market to market and from time body to time frame. The rate moves that take region over the duration of various minutes will resemble charge actions that take area over the length of numerous years. In theory. large market crashes ought to by no means happen. But Mandelbrot predicts that a market crash has to show up about as soon as a decade. Given the truth that we have had primary crashes in 1987,1998 and 2008-roughly as soon as a decade-it's clear that Mandelbrot made a particularly top prediction. The new Fractal Market Hypothesis, primarily based on the ideas of Chaos that explains the phenomena in the monetary branch, which the Efficient Market Hypothesis should no longer deal with. In the hypothesis, Hurst exponent determines the fee of chaos and extraordinary fractal from random time series. Lyapunov exponent determines the price of predictability. An effective Lyapunov exponent shows chaos and its units on the time scale which makes the kingdom of prediction possible. Plotting inventory market variants and matching them with chaotic analyses of above exponents, one may predict future conduct of the market. (ii) Chaos Theory in the Garment Industry and Fashion Design In this paper, we use chaos ideas to provide an explanation for the phenomenon in the discipline of trend design. First, we have to do a comparative evaluation between nonlinear and garment enterprise developments of chaos theory, and then talk about the impact of Butterfly Effect on the product positioning of apparel brand, find out about the relationship of the fractal concept between the integrity and locality of the garment enterprise manufacturer design. Finally, make examples of the various purposes of chaos concept in the area of inventive shape design. This paper introduces chaos concepts into the subject of garment enterprise and design, which will deliver a far-reaching effect to the improvement of the garment enterprise and the future design. (iii) Chaos in the Human Body Chaos principle can additionally be utilized to human organic rhythms. The human physique is ruled by using the rhythmical actions of many dynamical systems: the beating heart, the everyday cycle of inhaling and exhaling air that makes up breathing, the circadian Barishal University Journal Part 1, 5(1&2): 123-140 (2018) Biswas et al. 131 rhythm of waking and sleeping, the leaping actions of the eye that permit us to focal point and method photographs in the visible field, the regularities and irregularities in the talent

waves of mentally wholesome and mentally impaired human beings as represented on electroencephalograms. None of these dynamic structures are best for all the time and when a length of chaotic conduct occurs, it is not always bad. Applying chaos principle to these human dynamic structures affords statistics about how to limit sleep disorders, coronary heart sickness and intellectual disease. It has been argued that some cardiac arrhythmias are cases of chaos. This opens the doorways to new techniques of control. The usual approach of controlling a gadget is to mannequin it mathematically in enough elements to be in a position to manage crucial parameters. However, this technique fails in chaotic structures when you consider that no mannequin can be developed for a machine with a limitless quantity of unstable orbits. The OGY technique cited above was once capable of making most of the houses chaotic mechanical and electrical in system; however, system-wide parameters in the human physique can't be manipulated rapidly enough to manage cardiac chaos. Therefore, Garfinkel, Spano, Ditto and Weiss (1992) developed a comparable approach which they called proportional perturbation remarks (PPF). In eleven separate experimental runs, the method was once profitable at controlling precipitated arrhythmia in eight cases. The suitable element is that the stimuli did no longer virtually over force the heart; stimuli did not even have to be delivered on each beat. This contrasted properly with the periodic technique which was once by no means profitable in restoring a periodic rhythm, and even confirmed a tendency to make the rhythm extra periodic. Therefore, barring presenting a profitable approach of manipulation (Richard, 1994), the approach

would be a much less dramatic intrusion into the patient's system. Similar efforts are being made to manage epileptic intelligence seizures which showcase chaotic behaviour. This technique, controls by means of ready for the machine to make a shut strategy to an unstable constant factor alongside the steady direction. It then makes a minimal intervention to deliver the machine returned on the steady manifold (Robert 1976). Again, an essential gain is the minimal quantity of intervention required to manipulate the chaotic event. Redington and Reedbird (1992) tried to exhibit that the human coronary heart should show chaotic traits. They monitored the adjustments in between-heartbeat intervals for a single psychotherapy affected person as she moved thru intervals of various emotional depth at some stage in a remedy session. Results had been admittedly inconclusive. Not solely had been their ambiguities in the quite a number plots the authors produced to purportedly exhibit proof of chaotic dynamics (spectral analysis, segment trajectory, and autocorrelation plots), however when they tried to compute a Lyapunov exponent as greater definitive affirmation of chaotic behaviour, the authors observed they should no longer reliably do so. Barisal University Journal Part 1, 5: 123-140 (2018) Chaos Theory and its Applications 132 (iv) Chaos in the Social Sciences Some researchers in the area of social sciences (Kiel and Elliott 1996) even advocate that the chaos idea presents a modern new paradigm, away from the materialistic Utopia, and that social device ought to be maintained at the side of chaos, between too a whole lot and too little authoritarian controls. This remark worries about politics as a substitute than physics. The utility of chaos fashions in the evaluation of social

phenomena is accompanied by means of some vital scientific problems. First, whether or not observations of social phenomena are generated by way of nonlinear dynamics can't be ascertained past massive doubt, particularly when these observations incorporate a size error that is there is a hassle of exterior validity. Secondly, and extra important, as a concept of irregular cyclical social conduct is lacking, inductive-statistical principle formation about such behaviour, which is based totally on becoming a mathematical mannequin of chaos to observations of social phenomena, is not possible except extra statistics is used regarding the context and situations whereby the social phenomena occur; that is the inner validity of any theoretical clarification that is derived from solely a equipped mathematical mannequin (of chaos) can't be assessed. So, look up into the recommendation derived from mathematical chaos concept that irregular cycles may additionally be existing in the improvement of social phenomena over time requires theory-formation about irregular cyclical social behaviour on the groundwork of mounted theoretical insights and empirical proof as a substitute of becoming state-of-the-art mathematical fashions of chaos to observations of social phenomena. (v) Chaos in Engineering Even though long-term prediction may additionally fail if a gadget is chaotic, an engineer wants not to be over- worried about this failure. Rarely does an engineer want to predict the future nation of a device so accurately. An engineer is greatly involved with the usual residences of the orbit of a system. Even if one doesn't comprehend the future kingdom of the system, from the numerical answer of the involved differential equations one can say

30

with extremely good self-assurance that the kingdom will no longer run to infinity, will no longer collapse, and the nation will be "somewhere" inside a precise quantity of the nation space. One of the utilities of chaos is that it can supply a framework for analysing the place on the spectrum between pure sign and pure noise, a records set would possibly fall. Chaos is a kind of sign however can show up to be noise if not analysed properly. Chaotic indicators are irregular in time, however relatively structured in segment space. Phase area embedding consequently presents a device for visualizing the shape of chaotic signals, and for distinguishing chaos from noise. Furthermore, noise, by means of definition, is infinitely dimensional, whereas chaos is (relatively small) finite dimensional. Time sequence statistics can consequently be "unfolded" into greater dimensional area with the aid of sampling records factors at constant distances. A new information factor will be created from a single time factor and some integer wide variety of steps beforehand of that time point.

IV. Even Market Leaders Tend to Fail

Now reflect on consideration on the equal technological know-how agencies in the commercial enterprise of making Smartphones. A decade ago, Blackberry was once the sole element that got here closest to a Smartphone and indeed, it used to be the proto corporation that rolled out what can be referred to as the preliminary waves of the Smartphone revolution.

Now, does all and sundry comprehend what has taken place to Blackberry which without the customers of the company relying on it for higher safety and security no longer have a mass customer base as it did a decade in the past

when it used to be the undisputed chief in the industry?

The motive why it failed is that as astute its leaders have been about the marketplace, they have been in the back of the curve when it got here to recognizing the "chaos principle" of innovation, globalization, technology, and forces of entrepreneurship that represent the present-day marketplace.

Given that it is now feasible for all people somewhere to graph an app and make certain that it has a mass following capability of scale, or the measurement of the commercial enterprise and no longer ensures for longevity. The factor that we are making is that science and globalization collectively create forces that make everybody prone to being "Thrown underneath the onrush of technological change" and hence, even agencies such as Uber that are now the reigning leaders in their enterprise areas can't have the funds to stay complacent.

V. The Nervousness of the Leader

This "nervous" issue that the present-day enterprise panorama unleashes capacity that managers and leaders no longer have the luxury of a leisurely method to enterprise and instead, ought to deal with the chaotic stipulations that they come upon from the time they begin their day or even when they are sleeping.

For instance, it is now events for most human beings in the staff to start their day with the ultra-modern updates about whichever hobbies they have and for enterprise leaders, it is ordinarily about inventory updates, market movements, enterprise trends, and brand-new trends in their industry.

VI. Conclusion

Therefore, for all and sundry of you who are aspiring to work in the company world or are already there, this may appear apparent when you consider that no one is away from this chaos. However, the essential factor to word is that it is one kind of issue to view these activities in a dispassionate manner and altogether it is the selection maker for every other element in the "hot seat" and in the midst of all this turmoil.

In conclusion, the ones who are most probably to prevail are the ones with a "firm grip on the present, a stable perception of the past, and an imaginative and prescient for the future" and so that they are capable to be seen behind, appear ahead, and not to fall off the current to make sure that they are indeed in the, "thrive of chaos".

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COMMENTARY

Revisiting Chaos Theory, Organization and HR Process – the gaze of an HR Professional

Kushal Banerjee

Organisations have many change catalysts which are either within them or external, influencing change. In the external environment, there are market catalysts and internally there may be systems or leadership catalysts. How the organisation deals with change depends largely upon on its culture and the approaches taken by the leadership. The industrial revolution of the eighteenth and nineteenth centuries can be attributed to the genesis of modern organisation. Before this period, it was the "journey man" - the self-employed individuals who used to cater to the needs of the society like the iron monger, coppersmith, furniture maker, etc. With industrial revolution, came the mass production and allied efficiency rises through scientific management of Fredrick Taylor. Scientific management became the operative platform for organisations and it continues to define organisational change approaches even today. Over this period of genesis of the modern organization, failures to manage change and organisational developmental processes due to top down imposition and inability to handle crisis have compelled many to find newer ways to deal change management and OD processes. At the current conjecture, exploration of natural sciences having more dynamic world view(s) are being examined to see whether they are apt for applying in organisational HR processes. One such natural science is the "Chaos theory"

Chaos theory is defined by Merriam – Webster's dictionary as "... A branch of mathematical and physical theory that deals with the nature and consequences of chaos and chaotic systems." According to Duffy (2000), Chaos theory explains "Periods of transition in which change occurs in unpredictable, irregular and uncertain ways". Cutright (1997) argued that natural sciences do not characterise chaos by randomness and total lack of order, as it is commonly defined. Instead, chaos approaches provide evidence that seemingly random activities and systems are in fact evidence of complex, replicated patterns. The genesis of chaos theory can be traced to 19th century, when Henri Poincare found that the "gravitational and orbital behaviour of bodies in the solar

system could not be explained with simple, Newtonian linear physics" (Cutright 1997). During 1960s, meteorologist Edward Lorenz, while working on computer simulated models of weather patterns to study their predictability found that small changes in data affected the inter relations of variables, creating non-linear effects which create large impacts in different spaces. This gave rise to the basis of the phenomenon known today as the "butterfly effect".

The butterfly effect is the most commonly demonstrated concept emerging from chaos theory. It was explained by Hannay, Ross and Erb (2000), that the seemingly insignificant effect of a butterfly flapping its wings can have a substantial consequential impact on other systems. The example is that the butterfly flaps its wings in China and the small change in the environment causes a hurricane in Florida. While the butterfly does not cause chaotic situations by itself, the effect of it flapping its wings can change the inter relationships between variables of the systems with which it is involved directly and indirectly. It may take a very long time, but the connection is real. If the butterfly had not flapped its wings at just the right point in space/time, the hurricane would not have happened. A more rigorous way to express this is that small changes in the initial conditions lead to drastic changes in the results.

The butterfly's wings flapping, being a new input in the system can yield positive or negative results depending on the type of intervention and culture of the system. With this example if we look at an organisation, a small change in the material input into a product, which might alter the quality of the product, can have its sequences of its nonlinear events which may start with creation of new supplier base pricing change of product leading to competitors bringing in changes, leading to old suppliers losing business and the cascading effect of downstream supply chain players getting affected adversely. As these effects ripple out to the systems, businesses in other communities with no direct link to the organisation could be affected and fail. The sequence of the nonlinear events has a great impact and we can see short terms solutions or small changes in an organisation can have a catastrophic impact on the system as a whole. (Stapleton et al, 2006).

According to Bechtold (1997), "Chaos Theory assumes that a system creates its own order and natural growth by integrating transformations into its identity and thus ensuring continual growth" with enhanced functioning. It is increasingly being accepted that apparently chaotic workplaces can result better functioning of an organisation with capability to adapt to changes which is making Chaos Theory a feasible proposition to explore organisation system and their working. Chaos Theory, earlier used in mathematical and physical analyses purposes is now applied in organisational space. Physicist Alvin M Saperstein was one of the first to have applied Chaos Theory for social science uses. Mason (2007) defines Chaos Theory from the organisational context as "a tool for self – organisation within the workplace". Chaotic systems, often, are observed as subject to random activity, but what actually is observed is the unpredictability resulting from the complexity of organisational system (Pryor, Amundson & Bright, 2008). Chaos is not embracing disarray. It helps us to see

the order that exists within organisations without being predictable.

As mentioned earlier, Theitart and Forgues (1995) put forth that "organisations are dynamic systems influenced by nonlinear relationships. They suggest that external forces, many of which are difficult to predict, play a large role in shaping the organisation. Countering forces are constantly pressuring the organisation in and out of stability. In this dynamic pull and push, *planning, structuring* and *timelines adherence* are the forces that lend stability. With this dynamic system operating amidst unpredictability, it is imperative that the stakeholders in the organisation have a sense of order and stability. According to Theitart and Forgues (1995), structured planning enhances the organisation's capability to deal with the potential threatening forces of the environment and protect itself. A stable container allows the cope-ability of the stakeholders to deal collectively with the change processes, which are inherent to any unpredictable dynamic systems.

In such a scenario, the HR department and HR professionals have to lead the way and prepare the organisation by planning to provide the required stability within the organisation for its effective functioning. Hannay et.al (2000) has provided guidelines for organisations reflecting features of Chaos Theory. HRD professionals cognisant of such features may apply these guidelines:

1. Organisations should identify ways to embrace change as a constant process as they evolve
2. Organisations should focus on team working through project teams / self-managed teams etc.

3. Organisations should create processes involving shared decision making with those being affected as part of it.
4. Organisations should strive for flexible work processes through inter functional/ cross functional work responsibilities without silos.

These four principles "foster change capacity within a chaotic environment as well as supporting an inter-related web of relationships" (Hannay et. al, 2000) As a corollary, since HR professionals have to deal with Human resources in the organisations, who are part of the unpredictable forces, researchers have continued to integrate chaos theory with psychology. For example, in modelling group behaviour in which heterogeneous members may behave as if sharing (to different degrees) what in Wilfred Bion's theory is, a common basic assumption, researchers have found that the group dynamic is the result of the individual dynamics of the members. Each individual reproduces the group dynamics in a different scale, and the chaotic behaviour of the group is reflected in each member. For instance, team building and group development is increasingly being researched as an inherently unpredictable system, as the uncertainty of different individuals meeting for the first time makes the trajectory of the team unknowable and therefore potentially chaotic. It has been emphasised earlier that to counter the dynamic forces lending to the instability - planning, structuring and timelines adherence are forces that lend stability which is also reflected in the four guidelines.

The HRD's role is twofold in the application of Chaos Theory and dealing

with the resulting nonlinear events visible in the system dynamics. While accepting the chaotic processes at work, it has to work on stabilising processes which allow the organisation to embrace Chaos and emerge with improved functioning after the change process. HRD professionals' focus on the stability factors in alignment with the following guidelines can contribute to the organisation growth exponentially:

1. Have a Business Plan

"By failing to prepare, you are preparing to fail." – Benjamin Franklin

- There is need to have a business plan that clearly outlines the goals of the business.

- A business plan gives direction, helps employees know what needs to be done to get there and keeps everyone on the same page

2. Define Decision making process
- A clearly defined business hierarchy is a great way to reduce chaos in the workplace.
- Create ability for an employee to participate in the decision making process.
- By allowing the employee to make decisions that affect their immediate environment, leads to cope-ability in dealing with change processes

3. Communicate Effectively With Your Employees
"Communication is the real work of leadership" – Nitin Nohria
- Create widespread open communication channels
- Plan Communication processes that addresses employee concerns pre-emptively.

- Holding more frequent workplace meetings and explaining what is going on and what needs to be done in the near future.
- Keeping employees in the loop about ongoing projects, goals and timelines.

4. Create a Positive Work Environment

- Giving positive feedback when someone does a good job
- Using **employee motivation tools**
- Providing an outlet where employees can address their concerns
- Dealing with conflicts early, don't let them build

5. Be More Productive
- Once the working process is set for success, it is important to look at what improvements Teams/ and Leaders can make to their actions.
- How they manage their time most likely cause some of the chaos within the organisation and as experienced by those in it.
- Proactive steps to get the most out of the work day by proper scheduling is imperative to bring system stability

  - Day planning around what needs to be done
  - Doing important tasks first
  - Setting up 'do not disturb' hours, so one has some uninterrupted work time
  - Avoiding overworking – breaks are required to keep one's mind fresh!

6. Investing in Employees and Delegating Tasks

- Right hiring should be done. Role specific responsibilities and inter functional working process be defined.
- Proper delegating of the workload, and monitoring which tasks are being performed as per expectations
- Appropriate compensation and rewards should be planned.

7. Automate your business system

- ERP Business systems enable analysing of critical dynamic processes and interrelationships of non linear events emerging based on actions taken which facilitates decision making adapting to the evolving change.
- The electronic human resource management (e-HRM) business solution is based on the idea that information technologies, including the Web, can be designed for managing human resources and gather the information needed in decision making.
- At the same time, e-HRM can enable all employees to participate in the process and keep track of relevant information

To conclude, Chaos occurs **when there is no time to follow the rules and when no rules are established**. Chaos within an organization is not a death sentence. In fact, it is often a sign that a company is growing quickly or that the company is evolving. In this emerging process, these simple but effective steps may create that stability taking the organisation forward.

1. Managing people like the adults they are. A lot of time organisations react to chaos with an attempt to tighten up control.
2. Mistakes will be made. Leveraging on them will create opportunities.
3. Rejecting Either/Or Thinking. Decisiveness is the Key
4. Teaching people to Make a Decisions and empowering them.

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Reference: As cited by Vinuelas, Abbey Githens, Rod .P "Applying chaos theory to human resource development" 2010.

1. Chaos Theory- Merriam Webster dictionary.
2. Theitart & Forgues (1995)
3. Bechtold (1997)
4. Cutright (1997)
5. Duffy (2000)
6. Hannay et.al (2000)
7. Stapleton et. al (2006)
8. Mason (2008)
9. Pryor, Amundson & Bright (2008)

Value Management of Social Chaos

Dr. Prabir Mukhopadhyay

I. Introduction

"If winter comes can spring be far behind?"- was the famous line by the nineteenth century English poet P. B. Shelley. It is universally true. Spring follows Winter. Similar leader-follower relation is there between Chaos and Management. This is also universally true. They do exist together. The only dissimilarity between the two relations is that unlike spring, good management sometimes takes longer time to crowd out chaos. Other times, management makes chaos follow. It's a unique equation.

II. Chaos Categorization

Normally, in case of chaos in any organization, the existing management tries to enforce control over it, and in case of failure by the existing management, change of the leader becomes a possibility. An efficient Chairman or CEO is brought to tame down the situation. New management gives its hundred percent to control the chaos. This is what I intend to call *Genuine Chaos Management* (GCM1). In the late seventies, a most sought-after Public-Sector head known for his administrative capability had been brought to put the country's prestigious Airlines on track. Immediately after resumption of duty he initiated a slew of actions and controlled the chaos efficiently.[3]

I have come across another category of chaos, which takes entry into the organization following the footsteps of the newly appointed head of the organization, whose operational style was to create fuss in the organization at the outset and then solve it in a very smooth way by projecting himself as a saviour of the situation. Working people got baffled, but could not react as the head continued to reign and ruin the organization by the divide and rule policy. This is what I call *Generated Chaos Management* (GCM2).

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[3] Later, I had the opportunity to work with him. He became the Chairman of the Management Institute, I was teaching.

III. Start-up failure

The massive failure of Start-up movement in India is GCM1 type. Start-up movement was initiated with high hope of converting 'employment seekers' into 'employment givers' to restrain the increasing number of unemployed youths. However, it failed to mature and sent a shock through different segments of economy.

In a study[4] it was observed that 90% of the start-ups in India became unsuccessful within the very first five years of their operation. It impacted adversely both the individuals and institutions engaged in this great job directly or indirectly. Institutions included Government Departments, institutional finances including venture capital funds, Private Equity funds, Banks and Non-Banking Financial Companies, where the accumulated loan dues in Non-Performing Assets (NPAs) increased to an alarming height.

For Central and State Governments, outflow of crores of rupees in the form of incentives and subsidies was no doubt disturbing. More worrisome was the blockage created by the premature failure of start-ups on the way of reducing unemployment problem. All these are not at all favourable for better financial health of the economy.

Individuals associated with this movement (primarily the start-up entrepreneurs, entrepreneurs of the associated units like raw-material suppliers, whole sellers, dealers and retailers) were severely affected. Hardest hit was experienced by the confidence level of all the budding entrepreneurs.

How did these happen? The above study identified 'lack of pioneering innovation based on new technologies or unique business models' as an important factor. In other reports there were many factors found responsible for causing the damage. These were lack of original ideas, focus, agility, proper planning, innovative and technical capability.

Due to being associated with the industry for longer than 40 years, I got the opportunities of monitoring thousands of enterprises, where the cycle of chaos and management was on continuous move. In addition to all the factors enumerated above, one issue that used to keep me perennially perturbed was the lackadaisical attitude of entrepreneurs while dealing with the crucial situations at pre-failure stage.

IV. Social Values and Entrepreneurship

Indian middle-class, in general, had a slow and lackadaisical attitude towards work till the recent past. Graphically if labour and leisure are measured on horizontal axis and attitude shown on the vertical axis, representative sample data may depict a backward –bending curve. Why it is so has been explained by different people in different ways.

I had long sessions with these entrepreneurs. Some of them blamed the social value system for the undernourishment of leadership faculties within them. Main edifice of the value system in any society is its culture born out its own civilization. India's age-old civilization has facilitated development of its own culture, which, in turn, has given birth to social values.

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[4] Institute for Business Value and Oxford Economics, 'Entrepreneurial India'- IBM,

Tunia Cherian |Mumbai, May 17 | Updated On: Jan11, 2018, Business Line.

More specifically they pointed out about the lesson on greed they had learnt in their formative stage at home and school. Greed had been always taught as a demoniac vice that embitter human mind and help develop other vices. That its presence in human character was needed to be avoided had become part of the value system without appreciating it in proper perspective. It is true that in the Shrimad Bhagavad Gita[5], greed has been identified as a negative human trait and accordingly its existence in character is most unwelcome.

While identifying the best '*Guna*' ('quality'/'tendency') in human character out of three 'Gunas '- *Sattva, Rajas and Tamas*, (2nd,14th, 17th and 18th chapters of the Shrimad Bhagavad Gita), *Sattva* has been adjudged the best, whereas *Rajas*, is the most sought-after human quality for those aspiring for material gain.

All these led to development of a negative attitude amongst average people towards business, that was often reflected in people's underestimation of a self-employed person than an employed person particularly in case of social marriage. The budding entrepreneur born and brought up in this value system could not avoid getting confused whether to opt for doing business or a job, even if it is offered at the level below her or his academic attainment or of unsatisfactory nature as earning livelihood is a must for living in a society.

The entire thing grew out of inappropriate realization of the principles enshrined in the Srimad Bhagavad Gita, which truly enlightens us about how a person can upgrade from a demon to a human being and then to a divine soul. Seminal work by the management scientists have shown that innumerable transformable ingredients are inherent in Sattva and Rajas, that would facilitate leadership development in entrepreneur and manager.

Swami Vivekananda elaborated[6] how Sattva and Tama Gunas in human personality act and how Sattva Guna keeps a person "equally calm in all situations in life-whether it be prosperity or adversity", which is very much essential for an entrepreneur or a manager to follow while facing organizational stresses and strains. So, putting blame on the principles of Indian Philosophy by the entrepreneurs was nothing but a lame excuse for hiding their inefficiencies.

They could not become good leaders because they blindly followed the existing social values instead of applying their mind into the intricacies of the application part of the principles in practical life and thus failed to save their projects. The sole silver lining in the entire episode is that the chaos created by the massive start up failure has been able to make entrepreneurs at least aware of their poor qualities of leadership.

That is great contribution of the chaos. Chaos carries entrepreneurs and

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[5]   *tri-vidham narakasyedam dvaram nashanam   atmanah kamah krodhas tatha lobhas tasmad etat trayam tyajet*

There are three gates leading to hell of self-destruction for the soul-lust, anger, and greed: therefore, these three should be shunned.:

Shrimad Bhagavad Gita: chapter 16, Verse 21: translation by Swami Vireswarananda, Sri Ramakrishna Math, Mylapore, Chennai-600004

[6] *Thoughts on The Gita*, p-16-18, Swami Vivekananda, Avaita Ashrama, 5, Dehi Entally Road, Kolkata -700014

managers through the transformation process, that emboldens their knowledge-base and enhances skill with the help of which they become enabled to reduce weaknesses and increase strengths and convert threats into opportunities. It's a boon for a budding entrepreneur and a manager to be a good leader.

V. Reorienting Values

Developing oneself as a good leader or good entrepreneur or an efficient manager is a process that requires a comprehensive plan. As a part of this, a slew of actions is needed to be initiated to reorient social values to develop quality entrepreneur. Some of them are given below.

- Mass awareness campaign for reorientation of social value system at block level.
- School syllabus should include the changing socioeconomic scenario - the impending need of taking entrepreneurship as a career.

- Entrepreneurs' Cell should be created in colleges to provide information on product and service opportunities.
- Technical and Management institutes should have technology and business Incubation centres.
- Industry-Academia interface should be frequent, regular and result –oriented.
- Institution should be given annual targets for setting up start-ups.

VI. Conclusion

To end I must go to the point where I started from. Taking cue from Shelly's visionary observations, I say that let the chaos and management remain coupled for ever so that they can bear a healthy leader and make her or him ready for all the shows in future, as good parents do.

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"Chaos and Management"

"The foundation of the discipline of management lies on encountering chaos"

Drawn by Baljit Singh (Student of BBA 1ST Year, TIG-SOM)

"Balancing Unpredictability and Punctuality"

Taken by: Samrat Saha (Student – MBA 1ˢᵗ Year, TIG-SOM)

" Musk-ing Chaos "

By Subhajit Pal (Student – MBA 1st Year, TIG-SOM)

SPECIAL ARTICLE

Food Quality and *Brand Image Development*: Two important perspectives for the growth of Indian Food Industry – A Qualitative Study[7]

Dr. Amit Kundu

Epilogue

*This paper seeks to address the thematic issue of "chaos and management" from a slightly different lens. It interprets chaos to be arising from the uncertainty which is an inherent constituting factor to every industry seeking to thrive. Chaos as such becomes an inevitable factor for every industry. In that sense, how an industry tries to deal with the uncertain environment and grow is understood to be management in this exposition. Here, I take a specific context of the Indian food industry (particularly, dairy products' sector) to understand its current situation and chalk out managerial avenues to thrive above the situation. The primary focus of such avenues has been in improvement of food quality and brand image development. The reader might use that hindsight while engaging with this paper, and might find the traces of **chaos** and **management** unstated yet crypted beneath the arguments the paper poses.*

Keywords: Food Quality, Brand Management, Food Processing, Dairy Products.

I. Introduction

The food processing industry is one of the largest industries in India and ranks fifth in terms of production, consumption, export and expected growth. The industry is complex, highly fragmented, and is in nascent stage. It is growing at seven percent annually. The food processing industry is of huge significance to India because of the vital linkages and synergies that it promotes between the two pillars of the economy, agriculture and industry. Rising incomes, demographic pressures and shift in the consumer behaviour are the major issues for the growth of this industry in India. Economic liberalization may also open up the export potential and rapid growth of the Indian food processing industry.

To tap this growth potential two main issues should be addressed – a) quality b) brand image development. We may say, in other words, the development of the brand image based on the technological sophistication such as implementation of the quality norms, process and product standardization, packaging, etc.

Based on the product performance (sales growth) and brand image evaluation of a few Indian food sector firms a correlation has to be established between quality and brand image and indicating that these two issues must be addressed by the MSMEs in the food sector.

II. Context of the Study

Present scenario of Indian agro-food industry

India is the second largest producer of food (next to China) with natural advantages for producing a large variety of agricultural products. Also, India has locational advantages on the globe. The developing economies of East Asia on our east and the Middle East to our west offer potentially infinite opportunities for increasing the exports of processed food to these lucrative markets. The domestic as well as international market scenarios have resulted in increasing the importance of food processing industries in recent times. International attention is focused on India as one of the largest suppliers of food to the world now and in the future. Our target is to double our total food production in the next ten years. The agricultural and food processing sector is called the "sunrise sector", meaning that it is going to be one of the fastest growing sectors other than IT and pharmaceuticals, and is expected to contribute a significantly large share to our foreign exchange earnings.

Opportunities in this industry include the following sub-sectors:

- ❖ Food and food processing technologies, know-how and infrastructure, especially in the areas of canning, dairy and food processing, specialty processing, packaging, frozen food / refrigeration and thermos-processing.

- ❖ Fruits and vegetables.

- ❖ Fisheries.

- ❖ Milk and milk products.

- ❖ Meat and poultry.

- ❖ Packaged / convenience food.

- ❖ Alcoholic beverages.

- ❖ Soft drinks.

❖ Grains.

❖ Health food and its supplements is a comparatively new but fast growing segment that is becoming very popular among the health conscious.

The challenge

In present situation, the main problem associated with this sector is to maintain the quality as per the international standards as that reflects in the branding of the food and agro-based products. Due to the diverse agro-climatic regions, India has plenty of agricultural resources. Indian food industry cannot capitalize on the enormous variety of its resources due to insufficient infrastructural facilities, lack of technological sophistication, and lack of awareness about importance of quality. This affects our society in two ways. On one hand it retards the economic development and on the other, it has an adverse effect on the social development (status of living of the rural population). Many export consignments have been rejected by the developed countries such as the USA, UK and many countries of the European Union, on the grounds of failure to comply with international quality standards and / or improper packaging / labeling.

III. Purpose of the Study

Under the aforementioned circumstances, the main objectives of this paper are:

[1] to indicate the present growth potential of the milk and milk processing industry, and its export potentials.

[2] to assess the importance of branding in the food sector

[3] to highlight that an improved brand image indicates a high degree of food quality

[4] to establish the positive correlation between branding and quality assurance based on the above case studies

[5] to provide a guideline to the entrepreneurs in the MSME sector for giving emphasis on food quality maintenance and brand development for sustainable growth.

IV. Methodology of the Study

This paper seeks to opt for a qualitative, exploratory research comprising deep case studies of two giant dairy firms of Eastern India - *Mother Dairy Calcutta* and *Metro Dairy Limited*, to understand the present status of the Indian Dairy sector and gain insights into the relationship between quality assurance and brand development. The techniques used includes observation and unstructured, need-based interviews with top-level executives / decision-makers of the said organizations.

V.   Present scenario of milk and milk processing Industry

Even though India is now counted among the leading developing nations and an emerging economic power globally, we continue to be dependent on agriculture and livestock. India is the world's largest milk producer, contributing more than 13% of world's total milk production. We are also the world's largest consumer of dairy products, consuming almost 100% of our own milk production. Dairy products are major sources of cheap and nutritious food to millions of people in India and the only acceptable source of animal protein for the

large vegetarian segment of Indian population, particularly among the landless, small and marginal farmers and women. Dairy industry is thus of crucial importance to our country.

Dairying has been considered as one of the activities aimed at alleviating the poverty and unemployment especially in the rural areas in the rain-fed and drought-prone regions. About three-fourth of the Indian population live in rural areas and about 38% of them are poor. In 1986-87, about 73% of rural households own livestock. Small and marginal farmers account for three-quarters of these households owning livestock, raising 56% of the bovine and 66% of the sheep population. The National Sample Survey of 1993-94 highlights the fact that, the livestock sector produces regular employment to about 9.8 million persons in principal status and 8.6 million in subsidiary status, which constitute about 5% of the total work force. Animal Husbandry sector generates significant self-employment opportunities. According to National Sample Survey Office's 2010 survey (NSS 66th round; July 2009-June 2010), total number of workers in usual status, engaged in farming of animals were 13.6 million in rural areas and 14.9 million in rural and urban areas combined. Total number of workers engaged in farming of animals and fishing were14.9 million in rural area and 16.5 million in rural and urban areas taken together (Department of Animal Husbandry, Dairying & Fisheries, Ministry Of Agriculture, Government of India, 2012). Therefore, progress in this sector is of utmost necessity for balanced and sustainable development of the rural economy.

Policy

The total amount of milk produced has more than tripled from 23 million tons in 1973 to 74.70 million tons in 1998. The estimate of the milk production in 2010-11 was 121.8 million tons as compared to 116.42 million tons in 2009-10 indicating growth of 4.66% (Department of Animal Husbandry, Dairying & Fisheries, Ministry Of Agriculture, Government of India, 2012). The tremendous rise in milk production is primarily the fallout of the dairy farming policy reflected in operation Flood. Following the success of dairy farming policy, the Government has set up a dairy processing policy, reflected in the Milk and Milk Products Order. Also, the Government uses a variety of import restrictions to protect its domestic dairy market.

Milk Processing

The milk processing industry is small compared to the huge amount of milk produced every year. Only 10% of all the milk is delivered to some 400 dairy plants. A specific Indian phenomenon is the unorganized sector of milkmen, vendors who collect the milk from local producers and sell the milk in both, urban and non-urban areas, which handles around 65-70% of the national milk production.

In the organized dairy industry, the cooperative milk processors have a 60% market share. The cooperative dairies process 90% of the collected milk as liquid milk whereas the private dairies process and sell only 20% of the milk collected as liquid milk and 80% for other dairy products with a focus on value-added products.

The World Bank has ranked India as the fourth largest economy in the world based on purchasing power parity

estimates. In fact, recently it has been suggested by OECD that India has probably surpassed China to become the third largest economy. Further, India has been identified as among the first 10 emerging markets in the world. India has one of the largest domestic markets in the world with over one billion consumers - a majority of whom are vegetarians with drinking of milk as habit. The untapped potential of the dairy sector is immense and opportunity to set up a new dairy venture is great.

Export Potential

Strangely, India's share of dairy products in the global export is quite negligible. This is reportedly due to the sanitary and phyto-sanitary standards used by the developed countries. The EU, USA and other countries around the world, for instance, have imposed a new set of directives on import of milk products from India. Fulfilling these conditions require substantial investment, e.g. milking of cows will have to be fully mechanized to prevent contamination, potable water will have to be used for processing milk and stainless steel machinery will have to be used for processing dairy products with filtered air.

To tap the export potentials of dairying sector, India needs to formulate a suitable export strategy by initiating series of steps, viz.

(i) Adoption of international standards for production and processing of milk;

(ii) Increasing production through application of advanced technologies in the processing of dairy products;

(iii) Better and improved packaging,

(iv) Improving cold storage and transportation capacity,

(v) Developing an efficient export marketing network to optimize the production and exports; and

(vi) Setting up of more quality control laboratories for testing the quality of dairy products.

With the implementation of the above steps, the exports of dairy products are set to make a breakthrough in the coming years.

VI. Food Quality and Brand

In the present day situation, the quality consciousness of consumers regarding food product is rapidly increasing even in India. Couple this with the increasing access to disposable income, and we have a huge market, mainly the untapped rural markets, for quality food products. These quality aspects are positively correlated with the branding of the organization.

Brand is defined as "a perception resulting from experiences with and information about, a company or a line of products." A brand is "a mixture of tangible and intangible attributes, symbolized in a trademark, which, if properly managed, creates influence and generates value."

Table 1: Brand Characteristics

Tangible attributes		Intangible attributes	
(1)	Design	(1)	Value
(2)	Performance	(2)	Brand Image
(3)	Ingredients / components	(3)	Image of stores where sold
(4)	Size / shape	(4)	Perception of users of the brand
(5)	Price		

Tangible attributes / parameters basically indicate the quality of the products and these tangible parameters ultimately affect the intangible ones, i.e, brand value development.

Agricultural and processed food products are dynamically growing areas for packaging and branding. Branding is necessary to create favourable emotional associations in the mind of the consumer thereby creating a distinct identity within the clutter of hundreds of labels, top of the mind recollect, favourable word of mouth, and ultimately inducing the customer to ask for products not as any commodity but by brand name.

Branding in the food sector involves application of many strategies applied for other sectors like:

- ❖ Focusing on health and quality

- ❖ Creating lifestyle brands

- ❖ Packaging

Product Position refers to a brand's objective (functional) attributes in relation to competing brands. It is a characteristic of the physical product and its functional features. Brand Position, on the other hand, refers to a brand's subjective attributes in relation to competing products. The brand positioning strategy in the food sector must be based on emphasis on physical attributes mainly on quality perspective and enriching the brand with strong, non-functional values which add up to its reputation and image. Thus brand name creates a favorable perception in the mind of the consumer regarding need fulfillment, quality, image, etc. Therefore, branding is deeply associated with the producer / marketer having essential quality assessments / certifications like HACCP, ISO 22000, etc.

Successful brands are able to leverage their image for viral marketing, i.e., creating a "buzz". Thus, marketers are no longer dependent on elaborate advertising budgets. Rather they can focus on brand attributes and overall quality, thereby providing a product to the consumers, which is so satisfactory that they volunteer to be self-elected brand ambassadors. Thus, sales and profits follow automatically.

VII. Case Studies

Two case studies illustrate how Mother Dairy Calcutta [MDC] and Metro Dairy Limited have consistently improved their product attributes (quality), which has created a strong brand image, thereby gaining top-of-the-mind recall and favourable word of mouth. As a result, these companies now enjoy significant market shares.

CASE STUDY A: MOTHER DAIRY CALCUTTA [MDC]

Organization Profile

Mother Dairy Calcutta, a Govt. of West Bengal Project, was commissioned in December, 1978 with a capacity to process and market 4 lakh litres of fluid milk per day. Its capacity has been expanded to 6 lakh litres per day in December, 1995. Initially, the management of the Dairy was entrusted with National Dairy Development Board (NDDB), who designed and installed the plant and also carried out the expansion project on turn-key basis. With effect from November, 1996, the Management of the Dairy has been handed over to West Bengal Co-operative Milk Producers' Federation Limited.

The Dairy Plant: State-of-the-art infrastructure and processes

The Dairy produces and markets Pasteurized and Homogenized toned milk in bulk and polypouches, double toned milk, cow milk and full cream milk in polypouches. It procures wholesome fresh milk from different co-operative milk unions within and outside the State. It uses a processing technique of recombination and reconstitution, a process developed by the dairy experts, by which liquid milk of acceptable standard and nutrition at affordable price is produced using fresh milk with reconstituted and recombined milk obtained from skimmed milk powder/whole milk powder and butter fat from white butter/ butter oil respectively. Processed milk is fortified with Vitamin 'A' to prevent night blindness. The Dairy has sophisticated milk reception, storage, processing and despatch facilities comprising two 30,000 ltrs. per hour fresh milk reception line including pumps, chillers, 3 pasteurization plants of one 30,000 and two 20,000 ltrs. per hour capacity with pasteurizer, clarifier, homogenizer and nine 1 lakh ltr. capacity and two 60,000 ltrs. capacity silo for storing raw milk, processed milk, efficient powder reconstitution and butter fat recombining plants and a massive fleet of 52 Insulated Road Milk Tankers of capacity varying from 4,000 ltrs. to 13,000 ltrs. for catering loose milk in bulk to different outlet points. The Packaging Section has 13 sophisticated 5000 ltrs. per hour capacity high speed milk packaging machines, 3 crate washers and a cold store capacity of about 2.25 lakh ltrs.

The dairy also manufactures and markets milk products like *Mishti Doi*, Flavoured Yoghurt and Plain Yoghurt and has an installed capacity of 1500 kg. per day. The production technique developed by National Dairy Development Board (NDDB) and adopted by the Dairy includes preparation of mix by pasteurization of fresh milk and recombined milk from skimmed milk powder, addition of sugar, caramel, colour and flavour, use of freeze dried culture for *Mishti Doi* and those from National Dairy Research Institute, Karnal and manufactured in Canada, Denmark and France as Mother Culture, filling, sealing in cups in high speed packaging machines, incubation under controlled temperature and cold storing. Strict hygienic practice is followed in different stages of handling and production in the milk product section.

It has started manufacturing "Paneer" from December 2005, with state-of-the-art technology and techniques and packed through modern and sophisticated packing machine. At present, daily average production is 300 kg (approx.) with different pack size.

Strict adherence to quality

The Dairy adopts strict testing and quality assurance practices and programmes right from the stage of receipt through different steps of processing and packaging to the dispatch of finished products to the market, and also, that in the maintenance of quality in the field.

Sophisticated machinery

Q.C. Laboratories in the Dairy as well as in the city office have sophisticated and costly testing equipments like 3 milkoscan machines, 2 lactostar machines and video microscope besides a host of other electronic equipments. Mobile Laboratory is used in the field to maintain and control quality milk at the outlets as well as to build consumers' awareness.

The Dairy has taken a strengthening programme and massive renovation activities of its plants, machineries, utilities and facilities by replacing old machines in upgrading existing ones and introducing process control. Mechanization of milk product section is on the verge of completion. The quest for excellence in all the activities is a continuing affair in Mother Dairy Calcutta.

Completely automated system

The dairy's massive vertical silos and straight-through processing hall are equipped to make use of the latest techniques of temperature and environment control.

These facilities permit rapid receipt, recombination and pasteurization of the highest quality milk and ensure freshness of flavour without impairing nutrient values. After processing, milk is transported in insulated road milk tankers to the Mother Dairy's refrigerated "mini-dairies" (milk booths). The "mini-dairies" are the final point in the new urban milk marketing concept, where, by inserting a token, the consumer can buy delicious and wholesome chilled milk right in his neighbourhood.

Milk supply to these "mini-dairies" is backed by an efficient communication system which ensures smooth distribution. The "mini-dairies" are connected to the Mother Dairy's Central Control Room through mobile network.

The Mother Dairy is also installing insulated containers of 200, 400 & 600 litres capacity in areas where construction of milk booths is not possible. These insulated containers are manually operated and vend milk to the customer's containers.

Meanwhile, arrangement for marketing milk through poly-pack continues to be increased to meet the changing demand and preference of consumers. At present it has the arrangement for packing and marketing up to 2.25 lakh ltrs. of milk through pouches.

Quality Management

ISO certification

It helps an organization to establish a quality management system whereby needs of customers are taken care of in a cost effective way. The Dairy has been declared the first ISO 9002 organization in dairy industry in entire eastern India. It has got conversion to the latest of ISO 9001:2000 duly audited by M/s SGS, Kolkata.

HACCP implementation

Hazard Analysis and Critical Control Points (HACCP) is a certification process, where all identified critical points to production are taken care of enabling a safe food for customers. Mother Dairy is the only major dairy industry in eastern India with HACCP certification implying that it ensures total food safety to the consumers.

Quality inspections at every stage

The dairy adopts, as a matter of principle, strict testing and quality assurance right from the stage of receipt of raw materials from villages through different stages of processing and packing to the dispatch of finished products to the market for use of the consumers. A well-equipped mobile laboratory in the field is used to maintain quality milk at outlets and to create awareness about Mother Dairy milk and milk products to the consumers at their door steps.

Management tools and techniques

These are 5S (workplace management), Kaizen (small and continuous process improvement), TQM (all out effort to get efficiency), TPM (Structured Preventive Maintenance management), and small group activities like Quality Circles (Group work) to enhance business excellence for customers' delight.

The Recognition

Mother Dairy's constant efforts to improve quality has been recognized in the following ways:

Awards

Dairy won the coveted Productivity Award from National Productivity Council of India, Delhi in 1987. It also won the 1st Prize in the Environment Excellence Award from the West Bengal Cleaner Production Center, a jointly managed organization of West Bengal Pollution Control Board, Indian Chamber of Commerce and National Cleaner Production Center, New Delhi in 2002.

Table 2: Achievements of Mother Dairy

1987:	National Productivity Award
2000:	ISO certification by DNV
2001:	HACCP (food safety) certification by DNV
2002:	Environment Award 1st Position
2003:	Safety Audit

Environment Policy

The dairy has adopted an environment policy to maintain an eco-friendly environment free of pollutants.

Social Responsibility

Dairy feels that it has a definite role to play in discharging its duties and responsibilities towards the society at large : With this in view, it ensures timely payment of bills of cooperatives towards supply of milk from different societies, to the different suppliers/vendors etc. It also gives some monetary support to many social organizations for conducting blood donation camps, literacy drives, games and sports, sit and draw and cultural programmes.

Brand Development

Mother Dairy concept

The concept of the Mother Dairy was evolved as an integral part of the Dairy Development programme popularly known as "Operation Flood" launched in July 1970. It aimed at creating a "flood" of rurally produced milk in the hinterland milk-sheds of Bombay, Calcutta, Delhi and Madras. With this supply of good quality milk, the four cities' modern dairies were expected to win commanding shares of their milk markets.

The Mother Dairies are considered to be an advancement in urban dairy design, offering savings in capital and running costs, plus a higher degree of engineering control over each stage of processing than has been available in the urban dairies so far built in India.

The Delhi Mother Dairy was the first of its kind in India, embodying a new milk marketing concept oriented to the urban milk consumer. The Calcutta Mother Dairy is the second example of the system in the country.

This unrelenting pursuit of quality has made it the undisputed leader in the milk market in the state of West Bengal. It

was a long journey replete with obstacles and it has had to overcome them one by one. Procurement of good quality raw milk from rural milk producers was a real challenge to us. These factors and unhealthy competition particularly from the unorganized sectors i.e. "Khatals" affected its performance to some degree.

Apart from focus on its impeccable quality of milk and products, dairy also undertook new relationship management development programmes to provide additional benefits to the milk consumers and for further improvement in the quality of its service. Retailers & concessionaire meets are regularly organized. They are being trained and given awareness for consumer delight. More than some lakh school children, doctors, nurses, and guardians' associations have already visited the dairy and gone through quality production processes and have expressed their all out satisfaction at the quality work on process at dairy.

The primary focus is on all round quality. The ISO and HACCP certification shall serve as a benchmark for dairy to excel and continue providing quality service to the consumers that has always made the dairy the undisputed leader in the whole of West Bengal. All its efforts is a part of its social responsibility to improve the socio-economic conditions of the rural milk producers. For more than 3 decades, dairy has been actively developing rural economy by milk procurement policy. This has helped protect the rural milk producers and their livestock from exploitation and has also helped preserve high yielding genetic stock. Mother Dairy lives by its 'mantra' of giving all its consumers 'only the very

best'. This relentless pursuit of all important quality begins with fodder control by milk unions and continues right through production process. Well trained and highly motivated employees are essential for performance enhancement, organization stability and overall success.

Thus Mother Dairy means healthy and happy lives to the people of West Bengal.

In the recent Brand Equity survey titled "Most Trusted Brands 2009" carried out by Nielsen, the top 10 brands across top five cities (Delhi, Kolkata, Chennai, Mumbai, Bangalore) were ranked. It was found that in Kolkata, Mother Dairy was ranked as the 5th most trusted brand in the consumer products category and the no. 1 brand for milk products.

CASE STUDY B: METRO DAIRY LIMITED

Company Brief

Metro Dairy Limited is a joint sector company with an annual turnover of Rs. 180 crores. The equity shares are held by West Bengal Co-operative Milk Producers' Federation Limited (47%), Keventer Agro Limited (43%), and ICICI Bank Limited (10%).

The only dairy in the joint sector under the Operation Flood Programme, the Company's project was totally funded by the World Bank. The dairy, which was planned and set up under the supervision of the National Dairy Development Board and commissioned in 1996, was built at a cost of around Rs. 49 crores.

The objective of the World Bank in funding and setting up this dairy was "to ensure a market for the co-operative milk

farmers of West Bengal and to assure them of remunerative procurement prices, as also to ensure consumers of Kolkata and surrounding areas with wholesome and hygienic products at reasonable prices."

The Company is professionally managed, the overall control being with the Board of Directors representing the various equity shareholders of the Company. The Chairman of the Company is the Minister-in-Charge of Animal Resources Development Department of the State.

The Dairy Plant: State-of-the-art infrastructure and processes

Metro Dairy's plant is one of the most modern dairy plants in Asia, even today, in terms of sophistication of machinery, automation, PLC system and effluent control.

This configuration of excellence ensures consistent repetitive product quality and high levels of sanitation and hygiene – which, in turn, manifest in the product in terms of consistent product composition and better shelf life.

Strict adherence to quality

The parameters that ensure high quality in production and continuous future improvements in quality are as under:

Imported Machinery

The main imported machineries used in the Metro Dairy Plant are characterized in Table 3, which follows.

Table 3: Main imported machinery in the Metro Dairy plant

Milk Separator & Standardising Device	Westfalia, Germany.
Pasteuriser	APV Baker, Denmark.
Homogeniser	APV Rannie, Denmark.
Ice-cream equipment	Gram, Denmark, and Schneider, USA.
Compressor	York, USA.
Automatic Sack Slitter	Beltyne, USA.
Programmable Logic Controller	Yasakawa, Japan.
Automated online Quality Control System such as:	
Milko-scan Milk Analyser	Foss Electric, Denmark.

Completely automated system

Automation System comprises of a computer network with Central Management System and individual Graphics terminals for each major section of the plant. The system includes measurement and monitoring of services and utilities, operating parameters and consumption data for all services of the dairy complex. Measurements are logged, Control & Sequencing Operations performed, and Reports generated on plant area basis and also on the total plant. All operations from milk reception to product dispatch including CIP operations are controlled from control stations provided at different plant locations. The system design is such that it can operate continuously in the ambient plant temperature and can be expanded for eventual inclusion of all data

and control required for expansion to 6 lakh litres per day.

The Control System comprises of 4 major sub-systems:

1) Front-end Controllers – PLC System.

2) Modbus Plus LAN Data Highway.

3) Man-Machine Interface Units.

4) Central Computer for MIS.

Ensuring quality input: sourcing of milk

Primarily, the Company is procuring as much liquid milk as possible from the cooperative sector in West Bengal.

It has already started receiving milk from Bhagirathi Milk Union in Murshidabad District and Kishan-II Milk Union in North 24 Parganas District. Also, it is about to procure milk from Damodar Milk Union in Hooghly District.

To mitigate the shortage of supply of milk from West Bengal, the Company is also sourcing liquid milk from the Andhra Pradesh Milk Federation.

Skilled human resource

Metro dairy recruits and develops skill sets in their different process technology areas to sustain its quality production system, e.g., dairy technologists with experience in the co-operative dairies, engineers with specialization in electronics and refrigeration, technicians mostly with specialization in instrumentation, and especially quality control personnel with Doctorates in dairy chemistry, dairy bacteriology, etc.

Waste management

The dairy has a bio-degradable sludge-bed type Effluent Treatment Plant (E.T.P.) where dairy effluents are treated under continuous lab analysis before being finally emitted into an adjacent canal.

Quality assurance

Metro dairy banks on quality assurance to develop its brand image. Their focuses on continous improvement of its processes are a result of its corporate strategy of maintaining the loyalty of its customers through consistency, commitment and responsiveness to food safety and consumer health, affordability and availability.

Quality in this dairy is not just adherence to certain pre-fixed specifications but it is a continuous development process. In order to achieve this, quality monitoring is embedded into the entire processing activity. The dairy plant is equipped with a sophisticated laboratory which has the latest imported equipment, such as the Micro-processor based Milk Analyser or the bacteriological chamber for microbiological analysis, to name a few.

Brand development

From the inception Metro Dairy has built up a quality product image in the dairy sector in Kolkata market. They communicate the message giving emphasis on the quality, the freshness. They always use the tag line in the advertisement for their milk as "*Ghana taja dudher raja*" (Thick & Fresh – The King of Milk). They consciously promote their ice-cream as Dairy Ice-cream as they use fresh milk as ingredients. That makes the huge demand of the ice-cream product compared to their competitors and its pricing strategy also helps to increase market share. The great success has

reflected in the present market research data that has conducted by AC-Nielson in the time period April-Dec'2006.

Table 4: AC-Nielson Study for ice-cream segment in Kolkata Market April-Dec'2006

Brand	% Market Share (based on volume)
Metro Dairy	45
Quality Walls'	20
Rollick	15
Big-Ones	7
Amul	5

To meet up the demand of the market, they are also expanding their production capacity. They have increased 50% of their production capacity within the time period from 2002-2003 to 2008-2009 (Data: Production capacity in the year 2002-2003--- 7000 liters per day and Production capacity in the year 2008-2009--- 11000 liters per day).

VIII. Conclusions drawn from the Case Studies

These two Kolkata-based Dairies are shining success stories. The qualitative findings seem to emphasize a positive correlation between quality improvement and brand image development. The strong brands of Mother Dairy Calcutta and Metro Dairy Limited have earned them significant market shares and customer loyalty.

In food sector, quality aspects are the key factors for brand image development.

The growth of milk sector is also related to socio-economic growth of rural people. Therefore, development of quality of milk products also fulfils the social responsibility of businesses. India has a growing population having increasing access to education. Therefore, the populace is gradually shifting from the unorganized sector ('*Khatals*') to organized dairies and branded milk products

IX. Guidelines for the Entrepreneurs in the MSME Sector

Globalization and Liberalization are the Mantras of the new economy today, which is now on the fast track. Industrial production is rapidly moving forward. The dairy industry is no exception. With the World Trade Organization (WTO) coming into effect, from 01 April 2001 and the imports and exports getting liberalized in the global economy, the dairy industry, which includes dairy products, faces both opportunities for growth as well as threats. There is a huge growth potential in the dairy industry but as per the WTO requirements, sanitary and phyto- sanitary measures have become mandatory for the dairy sector and serious efforts need to be made to adhere to these standards.

Among the myriads of public and private players in the dairy industry, it has often been observed that only those organizations that are serious about quality and invest resources in this regard seem to stay ahead in the race continuously and survive.

X. Implications of the Study

The brand image of the Indian food industry stands at an inflexion point. There is a need for greater discipline and objectivity in understanding how the value of brands impact business and shareholders' wealth. In the past few years we have witnessed a dramatic shift in the sources of the value creation from tangible assets (such as plant,

equipment, and inventory) to intangible assets (such as brands, customer base, business systems). This is a moment of great risk for many Indian food brands and businesses and at the same time, great opportunity to maximize value. To maximize the value, the objective is to improve the quality of the product. That improved quality builds the brand image of that organization in the national as well as international markets. Indian food brands have considerable economic substance to have a multiplier effect on business value.

Quality and brand image development are the two key issues that should be addressed by the entrepreneurs to succeed in their new ventures.

The National Dairy Development Board (NDDB) over the years has created its distinct brand identity for liquid milk being marketed through dairy cooperatives. Only those cooperatives that adhere to meet the quality parameters and guidelines laid down by NDDB are allowed to use its brand. Thus NDDB also endorses the fact that quality is the prime mover in the dairy sector.

XI. LIMITATIONS AND SCOPE FOR FURTHER STUDY

This is only a qualitative research establishing the correlation between quality improvement and brand image development. Taking the key factors of quality into consideration, a model can be developed to establish the degree of correlation quantitatively between the quality parameters and performance indicators of the firm such as sales growth, market share and profitability.

Moreover, one can argue that the exploratory empirical analysis stands a bit dated, with the data used being of few years back. However, I believe that in spite of its temporal limitations, the study opens up an area which stands at the acme of relevance at the current conjecture too, given the escalation of uncertainties and chaos in the Food industry of India, due to the enhanced competition and technical infusion. Any interested soul can seek to engage with the current situation (with the latest data) and seek to examine the relevance of the propositions of this paper.

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References

Barnham, C. (2008). Instantiation: Reframing brand communication. *International Journal of Market Research*, *50*(2), 203-220.

Barnham, C. (2009). Essence: The structure and dynamics of the brand. *International Journal of Market Research*, *51*(5), 593-610.

CAC. (1996). *FAO/WHO Food Standards*, Rome, Italy: FAO. Retrieved from http://www.fao.org.

Chandler, J., & Owen, M. (2002). Developing brands with qualitative market research. In G. Ereaut, M. Imms & M. Callingham (Eds.), *Qualitative Market Research*. London: Sage Publications.

Deodhar, S.Y. (2001). In a freer WTO trade regime, food industry must

focus on quality management. IIM-A Working paper # 2001-04-06.

Deodhar, S.Y. (2001). WTO agreements on SPS and TBT: Implications for food quality issues. *Indian Food Industry*, *20*(3).

Deodhar, S.Y. (2003). Motivation for and cost of HACCP in Indian food processing industry. *Indian Journal of Economics and Business*, *2*(2), 1-21.

Department of Animal Husbandry, Dairying & Fisheries, Ministry Of Agriculture, Government of India. (2012). *Annual Report 2011-12*. New Delhi: Author.

Elangovan, D. & Chalakh, M. L. (2006). Arsenic pollution in West Bengal (Technical Digest Issue 9). 31-35. India: NABARD. Retrieved from http://www.nabard.org/fileupload/DataBank/TechnicalDigest/ContentEnglish/issue9td-8.pdf

Faergemand, J. & Jespersen, D. (2004). ISO 22000 to ensure integrity of food supply chain. *ISO Management Systems*, September-October, 21-24. Retrieved from http://www.iso.org/iso/tool_5-04.pdf

George, J. (2004). WTO and food processing industries in India: Impact and challenges. *Indian food industry*, *23*(1), 12-20.

Heath, R., & Feldwick, P. (2008). Fifty years using the wrong model of advertising. *International Journal of Market Research*, *50*(1), 29-59.

India probably world's 3rd largest economy: OECD. (2013, May 30). The Economic Times.

Loken, J. K. (1995). *The HACCP food safety manual*. John Wiley & Sons Inc.

Most trusted brands 2008 (Survey Report). (2008, June 11). *The Economic Times (Brand Equity).*

Noordhuizen, et. Al. (Eds.). (2008). *Applying HACCP-based quality risk management on Dairy farms.* Enfield Pub.

OECD. (2007). Economic survey of India. Paris: Author. Retrieved from www.oecd.org/india/39452196.pdf.

OECD. (2013). OECD economic outlook May 2013. Paris, France: Author.

Stagliano, A. & O'Malley, D. (2002). Giving up the ghost in the machine: How to let brands speak for themselves. In M. Baskin & M. Earls (Eds.), *Brand new brand thinking* (pp. 26-43). London: Kogan Page.

Tasgal, A. (2003). The science of brands: Alchemy, advertising and accountancy. *International Journal of Market Research*, *45*(2), 133-166.

Top 50 company brands (Survey Report). (2008, September 2). *The Economic Times*.

Wallace, C. A. (2008). *Intermediate HACCP (2nd Edition).* Highfield.

SPECIAL ARTICLE

Chaos and Management – From the vantage point of Information Technology

Ajiteshmoy Ghosh

Abstract:

As a system when moves away from order, chaos is its eventual condition. When a system reaches that stage, its constituent pieces manifest as turbulence and are completely devoid of purpose or direction. Chaos in business perspective is being discussed more and more these days, both in the context of major businesses and start-ups at various stages of growth. Every firm must figure out how to manage in the face of chaos or disarray. Instead of defining organisational reasons for organisational problems, chaos theory suggests that the corporation would be better served by looking for organisational patterns that lead to specific forms of behaviour inside the organisation. Covid-related challenges might have escalated chaotic behaviour among organizations, lead to consider business pattern outside conventional way.

1. Introduction

The fundamental principle of chaos theory that can relate with entropy is that the system tends to be chaotic. Entropy has already been demonstrated to be a state function. In other words, we can define the starting point and destination without thinking about how we got there. This is reassuring since we cannot always foresee the outcome of a chaotic system. Chaos management must become more knowledgeable about "management on the edge" and have some expertise in this field. New initiatives must be protected from "dominant attraction," and when it can defend itself, he must let it alone. Determine a preconceived strategy and a mechanised design in chaotic systems is impossible, and even if it is, it cannot be justified inside the organisation. In these systems, recognition can be produced via information, awareness, experience, and experimentation. If we think of businesses, firms, and industries as complex, dynamic nonlinear systems, we may apply the idea of chaos theory. Whether it's through suppliers, vendors, or direct rivalry, businesses continuously connect with one another. According to Levy, all interactions between companies are strategic in the sense that decisions made by one business account for potential responses from other firms. Corporate macro and micro actions is interdependent. According to chaos theory, minor disturbances inside a single organisation grow nonlinearly larger over time. As a result, the first move could have an impact on other firms. Since there are too many variables to take into consideration in chaos theory, forecasting and long-term planning are impossible to accomplish. According to conventional ideas and paradigms of strategy, tiny changes in the parameters should result in proportionally modest changes in the equilibrium result. Chaos theory refutes this idea and compels us to examine how seemingly little changes may have profound effects.

The edge of chaos, which is the event horizon at which an organisation is susceptible to forces of stability and instability, is one technical word from chaos theory that is very much a part of this terminology. The bifurcation point, which is a time of disequilibrium signalling a break from the past, is reached by an organisation when it achieves irreversible disequilibrium, which is the moment at which the trend towards equilibrium is overcome when the organisation is on the verge of chaos. Hence, organisations might detach themselves from outdated procedures and let the creation of a self-organizing system on its own. An organisation is abruptly and suddenly moved from one state to another by this emergence at the discrete bifurcation point. After the chaotic stage, the organisation may survive until it faces the next environmental challenge if a new organisational order emerges. Although the results vary with each repetition of this chaos and order process, it is an ongoing process.

Moreover, this new order may produce fractals, which are the development of similar structures and processes at many organisational levels, including organisational, unit, and individual levels. The force that pulls an organisation to a recognisable structure or procedure is what propels these fractals. Moreover, organisations on the cusp of chaos are defined by their sensitivity to beginning circumstances, which suggests that little adjustments may magnify and multiply to have significant effects. This suggests that long-term forecasting is not possible.

The irreversibility of action, which asserts that if an action is conducted twice in the same organisation or a similar organisation, it is unlikely to have the same consequence. Chaos theory helps to explain multi-firm alliances, the operations of high-risk firms, and self-organizing

systems from which cultural patterns and complex structures develop despite its strange technical vocabulary and theoretical proposals. Organization and management, according to chaos theory, are illusions since they can't be forced into existence. It implies that a practitioner can only control the circumstances necessary to facilitate the creation of order. So, rather than using a traditional mechanical metaphor where management is deterministic, the theory is built on a biological metaphor, with an organisation being considered as an open nonlinear dynamic system exposed to the environment capable of organismic evolution and self- determination.

The unifying thread here is that, unless intentionally controlled, corporate processes become progressively fragmented over time. Every organization has highly interconnected functions that play critical roles in delivering products and services to consumers. To manage chaos management, it is critical that these functions are well connected at all times. Typically, in a technology company, these functions range from Product Development, Engineering, Product Management, Supply Chain, Marketing, Sales, Order Processing & Billing, and several critical support functions including Finance, Operations, and IT, to name a few.

2. Related Study

Chaos theory, which emphasises the need of viewing events from several angles and continually gathering data for successful management, is founded on the idea that although everything is known, there is also something that is unknown. These data do not, however, allow us to make an accurate prediction; rather, they just get us a little bit closer to making a correct prediction since there may be continual and unexpected changes in the data obtained. In addition to applying chaos theory to management, it is

important to evaluate management strategies employed before and after the chaos to comprehend what led to it and how it developed. The primary characteristics and dynamics of the modification to the management strategy may also be discovered in this method. It is well knowledge that the traditional management strategy relies heavily on a scientific methodology. This new structure has made it necessary for managers to adopt organisations that can more quickly adapt to changes in the environment and use an integrated approach ideal for cooperation instead of specific plans, inspections, and regular operations. Management level individuals should engage in a process that places an emphasis on the individual and, as a result, organisational development and continuous learning, and is thus not closed to change and can take place in the long term. They should essentially create "organised chaos" by moving away from the conventional management approach and with a common vision [1].

Every organisation occasionally experiences unanticipated changes in the business environment. These departures from "business as usual" frequently occur beyond of an organization's control and may start slowly and subtly or appear out of nowhere. Businesses must, by necessity, adapt if they want to survive. This may be done either through constant evolution in response to slow change or through quick revolution when the unexpected happens. It is obvious that giving in to the unseen forces of entropy that work nonstop to thwart company goals is not a desirable course of action. Corporate executives then look to Business Continuity Management (BCM) strategies to provide a roadmap for constructing disruption resilience. A business is prepared to minimise the size and length of the interruption by having the capacity to quickly comprehend and respond to a shifting event. A firm may also be able to gain something from the chaos with the aid of a really agile reaction. If the

attribute of being injured by stresses is fragility, then resilience cannot be the reverse of fragility. Resilience is more concerned with a neutral end, whereas antifragility requires a positive outcome. Although resilient organisations may withstand shocks and remain unaltered, antifragile firms can take advantage of an uncertain environment and become stronger as a result of the blows they take. Antifragility is a lovely concept, but how can it be put into practise using BCM? To summarise, antifragility must be adopted throughout the organisation through a BCM strategy that includes: [2]

- Strategies that consider both the possible upside and drawbacks
- Analyses of risk and effect that detect and categorise opportunities resulting from disruptions
- Deployment of agile business continuity measures
- Plans for business continuity that transition fast from 'survive mode' to 'thrive mode'
- Creating a business continuity culture that facilitates decision-making and rapid innovation

Antifragility can present itself in the three major stages of crisis management: preparedness, which is the phase preceding the catastrophe; reaction, which is the actions taken during and shortly after the crisis; and recovery, which is the action taken after the crisis. Despite the precise form of antifragility, previous research reveals that numerous elements contribute to the growth of business intelligence. Chaotic situations may be turned into opportunities if firms can use environmental changes to boost their competitiveness. The critical and forward-thinking reaction to the issue can accelerate decision-making. This decision-making process must take into account both an organization's internal and external environments.

62

Digital technologies have a significant influence on organization's antifragility. They enable value creation for all parties in the digital ecosystem by facilitating the exchange of products, services, or social currency. Because of their increased flexibility, digital technologies have a favourable impact on the employee-employer relationship in terms of autonomy and control. Digital technologies have an immediate influence on the work of entrepreneurs and managers, affecting organisational performance and competitiveness. In terms of the external environment, digital technologies alter the methods through which organisations analyse their operating environment, recognising new possibilities and developing new strategies [3].

Data produced by the digital technologies with the help of internet-connected devices is enormous. Now, more than 50 billion devices are connected with sensors and actuators accounting for more than 50% of data collected. These devices may collect information ranging from environmental data to internal data such as usage data, operational data, marketing data, and business competition data. Data collected from various sources may be structured or un-structured and is in very large quantity called Big Data. This Big Data transform into business data. This business data helps to draw the business inference close to perfection. This eventually helps in formulating business strategies to minimize or nullify the probable business risks due to chaotic business environment. Big Data are normally stored in Data Centres. These Data Centres are stored in the servers located in remote locations called Cloud Servers. The Cloud servers are also may be used for advanced computations to produce sustainable business logic. The concept of Cyber Physical System (CPS) has enhanced the business organizational now a days to incorporate the computational unit along with business unit/s. CPS has Cloud Server,

IoT Devices, Sensors, IoT Gateway to connect with other IoT devices through Internet and Software coding to control the activities of the sensors for appropriate business data to produce desired business logic. Advanced Business Intelligence (BI) with the help of real time Data Analysis CPS has revolutionised the business perspective and minimized the turbulence created by unpredictable Chaos in business growth. Therefore, it has tremendously increased the business sustainability by providing business intelligence to the organizations. Here, Cloud Security also very important to protect business data to comply with golden rule of Data Accessibility, Data Availability and Data Security. All organizations following the path of business automation must be prepared for different Cyber-attacks such as Denial of Services (DoS) where a user System is hacked and sends non-stop service request to other important systems, thus important systems becomes non-responsive. Similar kind of attack is Distributed Denial of Services (DDoS) where multiple important systems are hacked used for non-stop service requests to other multiple systems, thus other important systems becomes totally non-responsive. Ransomware where effected system is attacked and asked to pay ransom money etc. [4].

The business organizations are now using advanced data driven technologies which revolutionized the business intelligence process and impacted positively to the growth of the business and guided business decisions to avoid unpredictable risks in the business. Technologies such as Artificial Intelligence, Machine Learning, Deep Learning, 3-D Printing, Big Data etc. have not only contributed to the growth of the business and also provided the business prediction, Data Visualization, accuracy in business growth, competitors analysis, future product prediction for the market. Introduction to the robotics also enhanced

the manufacturing units, impacted the infrastructure of Medical System by robotic surgery. All of these technologies brought the industry revolution (IR 4.0). The more advanced stage of industry revolution (IR 5.0) is expected due to the introduction of collaborative robot (COBOT) where human and machine will jointly work. COBOT and Robotics are combination of sensors, hardware and software where business logic programmed by high level languages (HLL). Combination of technologies with the help of sensors, actuators, hardware, Software Programming Languages help right from data collection to data visualization with the help of business logic. Machine Learning introduced the improvement of business logic with the help of statistical analysis. By condensing historical data, descriptive analysis provides an explanation for what occurred. It entails the description of samples and populations. Many useful bits of information are gathered from a big amount of data. The frequency distribution, central tendency, and data variability are particularly highlighted. In a frequency distribution, we note how frequently data happens, central tendency depicts the point at which data distribution is centred, and set variability denotes the set's degree of disposition. Supervised, Un-supervised, Re-informed are different machine learning are implemented for business analysis. K-Nearest Neighbour (KNN), Support Vector Machine (SVM). Decision Tree, Regression are different algorithms are used to implement business logic and output. It helps to control the disarray in business growth and creates new business ideas which helps to strategize future business objectives [5]. Hence, we can see that every sector of businesses are now ready to minimize the adversity effects with the help of technologies, because it not only providing futuristic business logic but also providing key concept to monitor the result. This process provided the idea of continuous delivery (CD). CD created the ground for the businesses to Design-

Development-Review process in a continuous manner. It's provided the opportunity to the think tank of the business to consider each large process into sub processes. Each sub process is now in the focus and under review until it fulfils the projected output. The technologies are able to collect the data, pre-process it to form a business data. This business data can go through a business logic to identify the pattern of the business. This pattern can be compared with the pattern of historical data it will indicate a business trends. The decision maker of the business organizations are able to take a decision or predict based on the visualization of business trends. If we consider the activities of each individual or of a small group as a sub process. Group of sub processes collectively can form single module. Each CD can be integrated and this process is called Continuous Integration (CI). Thus, CD/CI process can be iterated to in each phase of business automation. It helps in managing chaos or disturbances in business drastically.

We have seen that predictable and unpredictable challenges in every step of business process are controllable or we can even fix the problem in some cases with the help of business automation technologies. This overall project a concept called Agile. Developers are expected to be able to make minor incremental changes to a service or application using agile, which is a framework for both CD/CI and DevOps. A DevOps method called continuous development and integration and finally delivery (CD/CI) which streamlines Agile development by employing the appropriate technologies.

Fig[1]: The Cycle of Visual Analytics [6]
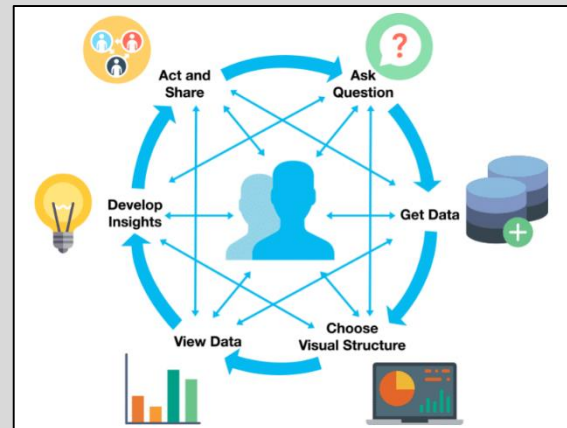
We now have an idea that Agile environment can leads to business automation which helps to control the uncertain and unpredictable deviations in businesses. Data visualization is also an integral part of business automation process. It helps business to identify the check-points in the business process and consider necessary measures to fix the risks or minimize it. Various tools are considered in Data Visualization like Power BI Dektop, Power BI, Tableau. This tools are also used for Data Analytics to predict the business opportunity and threat. Visualization can also adopt Agile process. This concept helps to visualize each process and it creates the opportunity to review each segment of a sub process closely. It enormously helps in analysing Strength Weakness Opportunity Threat of each single sub process of a business. Which is actually the requirement to mitigate the chaos and manage business properly.

We have seen the impact of business automation in chaos management in business. We also have seen that each individual or a small group or sub process contributes enormously to the growth of business process and also interdependent to each other. This interdependency creates the concept of integrating each divisions of business either horizontally or vertically. Vertical Integration creates opportunities of

collaboration among different divisions of an organization. Whereas Horizontal Integration guide to collaborate same division among different organizations having similar perspective. This is very important phenomena other than business automation which enormously helps in mitigating unexpected scenarios in organizations and run the business smoothly. This also revolutionize the business decisions and each sub process can have team leader who can who can guide the team with business decision supported by business logic, data visualization. Output from each sub process can collectively produce a complete business solution which can adjust and react according to unpredictable business situation.

3. Chaos Infrastructure:

We have seen that business process heavily dependent on technology, integration of activities of smaller divisions, visualizations of Data for analyse the risks and predict future prospect of business and last but not the least the business logic which helps in business solution to overcome the unpredicted chaotic business scenario. The business may suffer greatly if unexpected failures or crashes occur in the IT infrastructure, networks, or applications. Customers' unhappiness, lost productivity, a negative brand image, and even disrupted IT careers are all consequences of the effect, in addition to revenue loss and operational expenditures. Whichever metric we use; IT downtime is expensive. Because to the growing complexity and interconnection of today's networked IT systems, it is also generally unavoidable. Because of the numerous moving elements and possible failure points created by cloud computing, micro services designs, and bare-metal infrastructure, those systems are anything from predictable. In distributed systems, there are several moving pieces.

An infrastructure is required to promote collaboration across IT teams in order to proactively manage technical hazards. This chasm is bridged by the chaotic engineering framework. It enables IT teams to include non-functional requirements from the start of the application lifecycle. It allows them to put theories or assumptions to the test in the actual world and assess system resilience.

The architecture enables for accurate and quantified volumes of system failures and faults in order to improve business resilience. It allows businesses to prioritize business services that will benefit from increased resilience. It assists firms in identifying weaknesses in the IT environment and implementing resilience patterns.

Chaos theory might have two major effects on these infrastructures:

1. Changes in how users interact with the system may initially generate inadvertent difficulties with other areas of the infrastructure. However, once the problem was detected, it was very easy to adjust business practices to address the resulting problems.

Fig 2. Explains the enhance application dependability by creating a unified framework for making informed decisions before to, during, and after chaotic trials. In order to imitate real-world consumer traffic, incorporate load testing into your chaotic experiments. Intentionally disrupt your apps to detect holes and create mitigations before your consumers are harmed by an issue. [8]

Fig[2]: Azure Chaos Studio
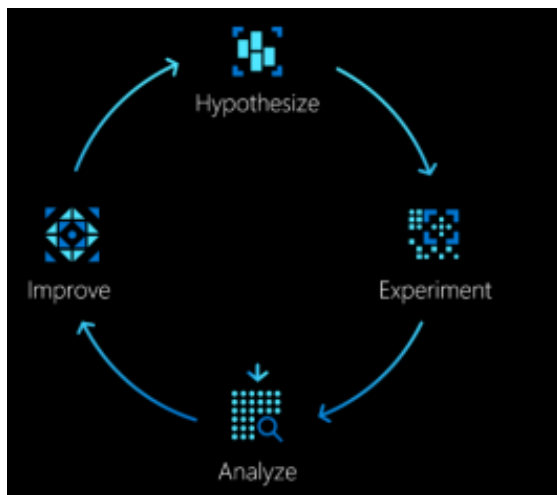
4. Technology related disruptions that impact business outcomes and create chaos infrastructure:

• Resource unavailability

• Misconfigurations

• Vulnerabilities, patches, and updates

• Identity and access management

• Insecure services enabled

• Performance issues

• Dynamic scalability

3.1. Managing the Issues of Chaos in Management

The obvious next question is, how can these concerns be addressed when they arise, or, better still, totally avoided?

Dynamical systems are become a routine aspect of our lives. All technological systems are now dynamic, whether they are big infrastructures supporting banks or little systems like a cell phone. They all have several parts, multipart integrations, and a general lack of knowledge of how they work. Chaos theory thrives in this environment.

3.2. Recommended practices for Chaos Theory

There are several recommended practices that might assist alleviate the problems associated with chaos theory:

a) Reduce the amount of technological infrastructure components. To be fair, saying this is far simpler than doing it because the business functionality required necessitates a significant number of components. It could be feasible, however, to decrease (or combine) duplicate components and/or delete any superfluous components. Remember that having fewer components implies fewer integrations and a lower dynamic level, which eventually minimizes the infrastructure to the problems of chaos theory and makes forecasting behavior easier.

b) Ensure that the most recent versions of the components are installed. For example, by updating to the most recent versions of database software. Some businesses will always utilize the 'last but one' version because they believe the current version will have problems. To be fair, this is a reasonable strategy; nevertheless, if an organization is many versions behind, it may be wise to consider upgrading. Installing the most recent versions ensures that any known concerns are addressed, making behaviors easier to understand and anticipate.

c) Document the whole infrastructure and how it is utilized in as much detail as feasible. This should include all of the components, how they interact with one another, and how the company uses the system. This material should help businesses understand the implications of changing the

configuration of their technological infrastructure and how they might utilize it.

d) Ensure that adequate time and expertise are allotted to testing. Testing is an aspect of technology that is sometimes disregarded, but it should not be. Changes to the technical infrastructure (for example, software updates) should be tested, as should changes in how the business user interacts with the system. Implement strong change control processes across both the technology infrastructure. For example, network upgrades and business usage changes, such as inputting data in a different manner. This will allow all changes to be reviewed by all stakeholders, which should ensure that they both are thoroughly reviewed and that there is general awareness of the change being made. In the event of any problems, the change control log can be reviewed to see if any changes made could have cause problems.

4. Chaos Engineering and Managerial Decisions

Chaos Engineering improve managerial decision-making resilience, such as, IT typically supports and operationalizes business systems through various roles and teams such as application development, infrastructure and operations, testing and quality analysis, security, and site reliability. These teams must collaborate in order for a firm to run smoothly. In fact, we've seen these tasks operating in silos or with very minimal contact (for example, DevOps), but resilience, security, and performance aren't thought to be essential to application development and delivery.

4.1 Key Features:

• Understanding of system modes and dependencies

• Monitoring, tracing, and observing behavior of IT systems

• Checking effectiveness of incident response process in case of emergencies • Testing out stability patterns

• Identifying weakness and bugs that can cause business outages

• Performing blameless postmortems

4.2 IT Collaboration

1. Experiments in chaos engineering cannot be considered a separate function of IT delivery. It entails a coordinated effort between several stakeholders engaged in the application lifecycle (chaos specialists, production support, incident management, domain expert, testing expert, and DevOps teams) as well as a mentality shift.

2. Adopting chaotic engineering is a path that requires systematic and collaborative competency development. A sample maturity model for implementing chaotic engineering is shown below.

3. Unit and nonfunctional testing of application ecosystem

4. Integrated testing

5. Performance testing

6. Penetration testing

7. Chaos testing

5. Chaotic experimental approach

Organizations can begin applying the chaotic engineering framework in tiny steps.

Identifying, prioritizing, and defining a steady state of the business function where resilience is required is a standard chaotic experiment approach [7].

A chaotic team then creates failure scenarios, monitors critical metrics, specifies the final radius of the experiment, obtains business buy-in, interacts with stakeholders, and schedules the resilience testing game day.

On game day, the team runs the experiment and does blameless game day incident analysis and experiment postmortem.

The chaotic team then determines the appropriate action and resilience pattern for the resolution.

They then collaborate with the relevant team to test and validate the resilience pattern in a test or preproduction environment before implementing the modifications in the production environment and planning for the next game day.

6. Conclusion

Chaos and Management is a fascinating subject, which impacts a range of areas in society. For example, trying to predict long and medium-term weather patterns, or trying to model population growth.

As society continues to become increasingly more dynamical, then chaos theory's importance and relevance will also increase as more and more systems will be subject to the challenges of chaos.

However, there are a number of specific issues that are relevant to technology. While there is no 'silver bullet' to address these fully, there are some best practices that can be followed to provide some level of control and mitigation.

Information technology (IT) is at the heart of operations across sectors, and even minor delays in IT services may have a significant impact on an enterprise's overall success. Uncertainty generated by incidents like as the COVID-19 pandemic has driven business models to shift quickly, shedding light on IT's concerns in terms of scalability, security, and commercial sustainability. We've seen how technology hiccups, such as the AWS outage and the Salesforce downtime in May 2021, have resulted in revenue loss and consumer unhappiness in the past.

The dangers described above are dynamic in nature, with intricate interdependence. What should businesses do in the face of these unpredictable technological upheavals to prevent technology-related risks and maintain business resilience?

Many commercial and open-source software are available for doing chaotic experiments. Organizations can select between commercial and opensource tools to carry out these trials, depending on their IT infrastructure and internal capabilities.

Enterprises may create resilience by limiting shocks, disrupting frequency and severity, and enabling businesses to give definite value to their consumers by employing chaos engineering.

Businesses confront a variety of organizational issues as they transition to Industry 4.0. Those that succeed frequently adopt a flatter structure than the hierarchical organizations of past centuries. Where veterans see turmoil, upstarts see collaborative potential. Economic stability is increasingly becoming a balancing act between chaos and order, a never-ending fusion of involving infrastructure and innovation.

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Reference:

[1] Unsal, Y., & Altindag, E. (2021). *The effect of chaos modern strategic management techniques ... - dergipark*. Retrieved March 11, 2023, from https://dergipark.org.tr/tr/download/article-file/1859682

[2] Risktee, R. (2022, March 23). *Harnessing chaos – the antifragile approach to business continuity management*. Risktec. Retrieved March 12, 2023, from https://risktec.tuv.com/risktec-knowledge-bank/business-continuity-management/harnessing-chaos-the-antifragile-approach-to-business-continuity-management/

[3] Corvello, V., & Nocella, I. (2022, March 5). *Thrive during a crisis: The role of digital technologies in fostering ...* Retrieved March 11, 2023, from https://d-nb.info/1259788016/34

[4] Mukherjee, A. (2019). *From chaos to order: A study on how data-driven development can help ...* Retrieved March 11, 2023, from http://www.diva-portal.org/smash/get/diva2:1479938/FULLTEXT01.pdf

[5] Guedez, A. (2022, April 14). *Council post: How to achieve business continuity using technology*. Forbes. Retrieved September 22, 2022, from

https://www.forbes.com/sites/forbestechcouncil/2022/04/04/how-to-achieve-business-continuity-using-technology/?sh=2af05b8745f5

[6] Mannon, N. (2022, January 6). *Data Visualization Techniques: Try An Agile Process: Blast Blog*. Blast Analytics. Retrieved March 12, 2023, from https://www.blastanalytics.com/blog/data-visualization-techniques-agile-process

[7] *Azure chaos studio - chaos engineering experimentation: Microsoft Azure*. Azure Chaos Studio - Chaos engineering experimentation | Microsoft Azure. (n.d.). Retrieved September 22, 2022, from https://azure.microsoft.com/en-us/products/chaos-studio/#features

[8] *The chaos theory of management*. The Black Sheep Community. (2022, September 4). Retrieved September 22, 2022, from https://www.theblacksheep.community/chaos-theory/

SPECIAL ARTICLE

Towards a New Paradigm of Management: Neoliberal Governmentality and Security State

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Abstract: *This paper attempts to open up a frame to locate the contradictory presence of recent authoritarianism with neoliberalism. Firstly, the idea of neoliberalism is unpacked using Foucault's idea of governmentality, as governance of the social based on economic principles of cost and benefit which has led to a transformation of the role of state from active intervener in social life to a detached provider of conditions of existence of the new economic order. Secondly, its co-existence with authoritarianism (seizing economic autonomy or political freedom) is explained using Agamben's idea of security state that shows how constant state intervention is legitimised through management of perpetual crises (or chaos) emanating within the neoliberal order itself. Two implications for such management of chaos are discussed, one through the idea of security, and the other through sharing.*

I. Introduction

There has been a growing concern in recent times about the rise of 'authoritarian regimes'[8] across the world, involving both the developing and the developed countries, where an unmitigated and overbearing presence of an intervening state is located in the political economic governance of these countries. We wish to begin by pointing out two main aspects of this concern. First, relating to the absolute political problem of *sovereignty* itself, where the state comes before the individual subject in governance of society (in a parental relation) holding complete and exclusive control over the subject. The second concerns the *context* within which authoritarian forms of governance have taken root: the context of *neoliberalism.* That is, today what are being understood as 'authoritarian' forms of governance are *in reference to* or *in opposition* to neoliberalism as 'a central guiding principle of economic thought and management' (Harvey, 2005: 2). Neoliberalism then forms the point of reference and departure of the rise of authoritarianism today; for instance, the costly tariff war the United States has launched on China since 2018, has been discussed as an 'authoritarian' move in terms of violation of neoliberalism there.

In light of this we begin our analysis by first re-stressing the terms used to qualify neoliberalism in the above definition. For instance, neoliberalism as a 'central' category needs to be understood in terms of its *universal dominance*, which we can see in two ways. It is the form of governance now universally adopted by countries over the world (beginning its course in the Anglo-American world in the policies of Margaret Thatcher and Ronald Reagan in the 1980s, and then eventually spreading to the world through initiation of structural adjustment programs or SAPs); it is also universal as a system of representation, as a discourse, in theory and practice, involving a range of institutions from the media, universities, financial institutions, capitalist enterprises, and international organisations like the International Monetary Fund (IMF), the World Bank, and the World Trade Organisation (WTO). Also, neoliberalism as *economic* 'thought and management' is equally insightful and refers to its rationale or logic of practical governance of society. It would be our initial task to unpack this logic using Foucault's idea of *governmentality*, and present this rationale in its naked form, whose negation or contradiction is then constituted in the rise of authoritarianism.

However, and this is what we intend to show, that although authoritarianism is an idea opposed to the rationale of neoliberalism based on a competitive market economy (to be elaborated), in the present circumstance we do not observe the former replacing the latter, but rather a co-existence of the two is observed, reshaping the idea of the political. How this takes place needs to be accounted for, and that would be our next task in this paper. From another perspective, one can also read this paper as an attempt to reckon with two completely different styles of managing chaos, where by chaos I refer to

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[8] Erdogan in Turkey, Trump in the USA, Bolsonaro in Brazil, Morales in Bolivia have been identified as some of the authoritarian leaders placing nationalist-populist intervention at the core of their agenda, in violation of neoliberal governance.

continuously arising instabilities, ruptures, and possibilities of crisis –in the body of the economy (which can easily be understood outside the confines of the economy as well). This is about either being oblivious of structural (or persistent) chaos and recognizing only micro-processes of chaos and delegating them to the rationality and responsibility of the individual/self; or using a back-door to the legal-political system, to invite continuous, unchecked, intervention by entities larger than the individual, a higher and more rational self of the government /state. Understanding the exchange or the flux between these forms of managing chaos, is what the paper aims to tease out.

II. Tracing the Lineages of Neoliberal Governmentality

Before we begin that analysis, we can note that the present-day authoritarian policies in a way reflect the *interventionist approach to development*[9], where it is a targeted process carried out primarily by the state in response to a presaged lack or wrong in society: underdevelopment (with its various manifesting forms being the Third World, the Global South and so on). This perceived *lack* obviously rationalises the intervention by the state. The first distinction in our case is the fact that there is no Third World as such where these kinds of intervention are legitimised and confined to, but rather authoritarian intervention appears as a global phenomenon, nevertheless with important distinctions relating to the concrete scenario in which it appears.

Another distinction is that unlike the developmentalist intervention, it is carried out less for upliftment or progress of society; but more for *management or security from crises*, which could be economic or political, representing contingencies in an otherwise well-functioning economy, *albeit contingencies that because of its persistent presence makes the intervention permanent and structural.* The idea of security in the logic of governance (arising say from instability or chaos in the system) it will be shown, consequently entails not preventing the causes of such crises (or chaos) in society, but rather managing them by *letting them happen*, that is by completely encouraging them to occur. In that the exception of dealing with crises is made the rule, it can explain the permanent intervention on behalf of the state that we see all around the economic-political geography of the world right now.

The idea of neoliberalism as political economic *thought and management*, can be developed using Michel Foucault's idea of *governmentality* (or the 'art of government') which concerns two things. First, it is the *representation* of the governing reality by the government[10] in defining a discursive field of knowledge, one that legitimises or rationalises its governance. So it calls for reality to be viewed from a particular perspective (through delineation of concepts, arguments) and hence addressed from that perspective. Thus, at the same time it is also

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[9] Interventionist development is distinguished from immanent development (occurring as a natural process in society) by Cowen and Shenton (1996).

[10] Although today the term 'government' is used purely in a political sense (as a problem of

management by state), Foucault shows that up until the eighteenth century it also had religious, philosophical, or medical connotations. Government was also used to denote self-regulation, control of family/children, or directing the soul, etc. (Lemke, 2001)

about forms of *intervention* as well, 'understood to include agencies, procedures, institutions, legal forms, etc., that are intended to enable us to govern the objects and subjects of a political rationality.' (Lemke, 2001:191) The development of neoliberal governmentality as a specific form of governmentality is traced by Foucault to two dominant traditions: *ordo*-liberalism or the German post-war liberalism, and the later liberalism of the Chicago School or popularly, US neoliberalism which took the earlier ideas and radically transformed them. If we carry out a similar exercise then we can underpin the specificity of the new kind of neoliberalism, that of the Chicago School, in line with Foucault's analysis.

It is important to know however, that both of these variants of neoliberalism, in their different ways present a rationality of governance against dirigisme or too much state interference. Prior to liberalism the concept of the political was based on the idea of the 'sovereign'[11] and the relation between the state and the subjects was considered a parental one; the state did not govern *for* the subjects but governed it *per se*, with its domain and reach infinite and complete. It is this concept of state that was rationalised in the regimes of central planning and welfare capitalism that preceded neoliberalism, and against which it developed. (Chakrabarti, Dhar, and Dasgupta, 2015) In many ways this is the kind of governance which we are observing today again, and so it must be shown how

antithetical it is to neoliberal governmentality.

The early *ordo*-liberal ideas embedded in the 'social market economy' of West Germany maintained that the fundamental economic mechanism of market and competition can function only when bolstered by political regulations and supported by social intervention (unemployment benefits, healthcare, etc.). However, unlike the negative conception of state intervention in the earlier liberal theories, they believed that the market could be sustained only through governmental practice. US neoliberalism, which is the point of our discussion, is different in the sense that it completely *erases* the distinction between the social and economic as such, with economic principles or criteria for economic decisions now transposed into the social. *So first it maintains that the economic domain is not a separate sphere in society but encompasses the entire social totality, with social relations and individual behaviour re-interpreted solely in terms of economic rationality, that is, in terms of a cost-benefit analysis. Second, governmental practices are seen to undergo a critical re-evaluation itself through the lens of market principles.* It leads to governance based on the principle that 'one always governs too much' (Foucault, 2008: 318-19). So while the liberalism of Adam Smith called on the governments to delimit and respect market principles, neoliberalism aims instead to

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[11] Foucault, whose work has been on the 'genealogies of power' that function over and through individuals/ groups, defines sovereign power as power 'in which power was exercised mainly as a means of deduction, a subtraction mechanism'; which are in contrast to the micro-

processes or biopolitical instances of power: 'power that exerts a positive influence on life…to administer, optimize, and multiply it, subjecting it to precise controls and comprehensive regulations'(Foucault 1976: 136-137).

use the same principles as the guiding notion in political practices:

> Neo-liberalism is not Adam Smith; neo-liberalism is not market society…The problem of neo-liberalism is…*how the exercise of political power can be modeled on the principles of market economy.* (Foucault 2008:131)

Witness the fact that there is an increasing trend for privatisation of social programmes all over the world, which hitherto was the prerogative of the state, involving 'transfer of assets, management, functions or responsibilities previously owned or carried out by the State to private actors' (Coomans and Hallo de Wolf, 2005). Consider for instance the privatisation of education extensively carried out in the United States and elsewhere, to concretise the neoliberal logic at the heart of governance. The reasons provided in favour of such privatisation are an unsustainable amount of government expenditure on education or those of 'choice': the tax burden could not be reduced otherwise and individuals could decide whether to buy or not buy the service. It signifies however a broader shift in the discourse on governance, where the state is becoming an economic actor and individuals are being transformed into *human capital* or rational ability-machines, who make education decisions as part of a cost-benefit calculation. Gary Becker believes this provides a 'new theory of subjectivity' of individuals based on the economic and that 'the economic approach is a comprehensive one that is applicable to all human behavior'. (Becker, 1976: 8) Education now following Becker is investment in the self: a higher investment on the self-machine raises productivity, and raises potential returns in the future. Wage workers are then no longer those dependent on the capitalist enterprise, rather they now themselves appear as autonomous *entrepreneurs*. As Wendy Brown has pointed out:

> Human capital's constant and ubiquitous aim, whether studying, interning, working, planning retirement, or reinventing itself in a new life, is to entrepreneurialize its endeavors, appreciate its value, and increase its rating or ranking. (Brown 2015:36)

Thus neoliberalism is just not an economic policy of privatisation or free trade, *it is all about how market metrics are employed in weighing all aspects of social life, including the self.* But it should not be assumed that the state has lost its regulatory role in the neoliberal regime. Rather, there has been a reorganisation of the role of the state in that it instead of interfering directly in the competitive market (for instance leaving investment decisions in education to the 'responsible' and 'rational' individuals), it now alters or provides the conditions of existence of competition (it regulates quality and quantity of the mass of human capital because of its consequences for growth for the economy) through the 'conduct of conduct'.

III. Understanding 'Sovereign' Interventions

While with the aid of the idea of 'governmentality' we have set down the core insights of neoliberal governance, it is time to turn to the central concern of this paper: how can this neoliberalism be consistent with the idea of the return of a sovereign state, in that in recent times we find its ubiquitous presence again as final arbitrator in socio-economic conditioning of life?

The neoliberal order of things has been contradicted by at least two kinds of sovereign interventions. First, those kinds of intervention *that have challenged the autonomy of the economy and of economic entities*, in response to a crisis of self-governance among these entities. Consider for instance the financial crisis that beset the US economy from 2007 to 2010, leading to a deep global capitalist recession. It was observed that from the very heart of the neoliberal managing of the economy that had displaced the state from direct financial management/regulation, and had seen the banks as governing themselves according to the market principles as autonomous entities, arose a 'crisis' where the state had to actively intervene to govern. It indeed points to a paradoxical state of affairs where the functioning of neoliberal economy itself calls for sovereign intervention. This intervention in this case took the form of the *Emergency Economic Stabilization Act of 2008*, a bailout of the US financial system that involved the US state pumping in as much as $700 billion to rescue the failing banks and to reinvigorate the failing capitalist economy. Other recent 'sovereign' interventions in the neoliberal governing of the United States involve measures such as anti-immigration laws (against free movement of labour) or an expensive tariff war against China in 2018 (against free trade) which we would argue presents a regime change. In the Indian case also, we have witnessed such careful and unique *managing*, as we would discuss later in this paper.

Second, *those sovereign interventions that challenge the political*

rights and freedoms of individuals and the democratic order as such. This sovereign intervention is identified in the exercise of the sole right of the state to seize/subtract/deduct autonomy of the political rights of certain individuals and groups, including their right over life and death itself. In Turkey for instance, following the failed military coup of 2016, there has been immense political repression leading to imprisonment of citizens, with suppression of all kinds of dissent and breakdown of democratic institutions (the media for instance). Closer home, co-existing with our right to equality as citizens, there is the *Unlawful Activities (Prevention) Act of 1967*: 'An Act to provide for the more effective prevention of certain unlawful activities of individuals and associations and for dealing with terrorist activities and for matters connected therewith'[12], with the decision of determining the 'certain cases' or 'certain unlawful activities' and acting on them, left to a large degree to the state. And instead of any kind of questioning regarding what it represents, it has only reared multiple heads (as the 2019 Amendment to the Act shows), showing the complexity and creativity involved in even a 'simple' act of subtraction, whether it be economic autonomy or political rights.

In the next part of the paper, I would thus try to provide an account of the co-existence of sovereign power with neoliberal governmentality using the concept of Agamben's *security state*. The very paradoxical state of affairs that we are confronted with is the starting point of Agamben's framework: the fusing together

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[12] Source: The Ministry of Home Affairs. Available at:

https://mha.gov.in/sites/default/files/A1967-37_0.pdf 8
(Accessed on 7 November, 2018)

of the Foucauldian problem of biopolitics, which meant that life as such has become a political issue (through the economisation of the social here), with the political problem of sovereignty. Agamben argues that both of them are conjoined to form one *paradigm*.

IV. The State of Exception and its Changing Forms

The link between the two is provided by the *state of exception*[13], which was initially conceived as a *provisional* measure for suspending or superseding the law to tackle a situation of emergency or calamity. Agamben traces the origin of the state of exception to the Roman principle *Salus publica suprema lex*, which meant that public safety was the highest law, and connected it with Roman sovereignty, that 'necessity does not acknowledge any law' (Agamben, 2014). In the current age, there has been a transformation of the role and scope of the state of exception, in that it has spread globally and does not need to be declared. It is argued that it has become the rule, or part of the normal functioning of governments. This signifies that its use is no longer tied to the period of emergency, or a crisis happening at a point in time. Rather it is something happening continually at all points in time, so it need not be declared by the state today and they can make use of it any time they choose to. A continual state of exception implies continuous sovereign intervention. That is the only way sovereign power can appear in a neoliberal setup. The important question is: how has the 'crisis', the justification for state of exception, become atemporal? For

it is intuitively understood that if the state of exception's political management is to become the rule, then crisis must also become perpetual: 'The crisis, the judgement is split from its temporal index and coincides now with the chronological course of time' and becomes 'just a tool of government' (Agamben, 2014).

The crucial way in which the state as sovereign has been able to use the state of exception as a multiplier of its power is that it alone can decide on the moment of crisis, that is when public safety is at stake; so the current Governments have in their governance either encouraged crises, or have let them happen in the sense that they have not prevented them from happening (as it is difficult and expensive to locate the causes and control them, rather it is easier and favourable to steer or guide the crisis to a desired state once it happens) , and have created (through an extension of the idea of security) a general climate of fictitious emergency or 'a stable state of creeping and fictitious emergency without any clearly identifiable danger' (Agamben 2014), in which sense we can identify crisis to have become 'perpetual'. And it is worth reiterating that this is not because the government is 'evil' or illegitimate by nature, rather that this constitutes only an optimal way of state conduct for addressing the internal objective of *security*.

V. Security as Technique of Government

It is through this concept of *security* deployed by a wide range of Governments, as an extension of the state of exception, dedicated to the principle of 'public safety'

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[13] It could be an economic state of exception to manage capitalist crises (such as the 2008 crisis) or generally, a political state of exception

which held the right to expel individuals/groups from community life, through a complete usurpation of all political rights.

that (the threat of) crisis has become perpetual. This is the *idea of security as a technique of government,* whose genealogy Foucault traces in the Physiocratic tradition led by François Quesnay prior to the French Revolution, which concerned managing the crises of their time: famines. Agamben summarises their approach, one that indicates an epistemological shift in governing crises or emergencies:

> *Since governing the causes is difficult and expensive, it is more safe and useful to try to govern the effects. I would suggest that this theorem by Quesnay is the axiom of modern govern-mentality.* The ancient regime aimed to rule the causes, modernity pretends to control the effects. And this axiom applies to every domain: from economy to ecology, from foreign and military politics to the internal measures of police. (Agamben 2014: 3) (emphasis mine)

Neoliberal governmentality as both representation and forms of intervention, is a consistent framework of perfectly ordered markets and disciplined individuals that precludes any idea of crisis. That is in accordance with the notion of economic security, it makes no attempt to identify and prevent the causes that lead to say economic crises; rather they are 'prevented' by managing them once they appear. The management of the economic crises then involves imposing an economic state of exception to save the neoliberal economy from itself – a sovereign intervention. But this intervention does not transform the neoliberal economy as such; rather it alters further some of its conditions of existence.

VI. The RBI Takeover: Economic State of Exception?

An example out of the Indian economy could potentially be the attempt by the government to take hold of the 'autonomy' of India's central bank, the Reserve Bank of India (although not statutorily independent, it had sufficient autonomy in regulating the banking sector) through an enforcement of a rare provision, Section 7 (of the *RBI Act of 1934*) that reads: 'The central government may from time to time give such directions to the bank as it may, after consultation with the governor of the bank, consider necessary in the *public interest*'.[14] This is an enactment of an 'economic state of exception', declared only on the event of severe economic crisis (which has however never been declared before, not even in 1991 or in 2008); so it can be surmised that the rationale of this measure has shifted. There is probably an attempt to make it perpetually applicable, in *managing mismanagement* (for instance the present problem of fiscal management) arising out of 'free' neo-liberal governance, to be tackled not by imposing prior controls, but acquiring the control and means to manage the imbalances as they appear, serving public security.

To elaborate, neo-liberalism entails that the Government curtails its own active intervention in the economy; one of its manifestations is in maintaining a narrow fiscal deficit (which has found itself in shaping the Fiscal Responsibility Budget Management (FRBM) Act that mandates this), so as the government wishes to finance its active spending (for creation of

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[14] Source: Reserve Bank of India. Available at:

https://rbidocs.rbi.org.in/rdocs/Publications/PDFs/RBIAM_230609.pdf
(Accessed on 7 November, 2018)

growth) it has to turn to the RBI's exclusive capital reserves (worth nearly 3.6 trillion rupees or \$48.73 19 billion)[15], apart from the dividend it already pays. In the event that the RBI refused to run down its reserves for fear of exposing itself to risk, the directive has ensured precisely this, while opening doors to possible future crises. Prabhat Patnaik[16] shows that as per the Tinbergen rule in economics (actually a governing principle) there must be for each policy objective, at least one policy instrument; the objectives of the government with regard to the economy are three-fold: maintain growth, control inflation, and manage balance of payments, and with an already immobilised fiscal policy, the focus shifts on monetary policy to manage these competing goals. This can then be argued as a rationalisation for state control over not only financial reserves, but the monetary policy as such, necessitating a sovereign rule in governing the economy. A breach of democracy is observed here as well in how the government rule of the RBI differs from the social rule, which should 'involve parliamentary oversight, and answerability to the people through the setting up of an appropriate institutional structure' (Patnaik 2018), and it is in these terms that we should outline the RBI's autonomy, and not autonomy in terms of neo-liberal self-governance according to economic rationality alone. Discussions regarding 'demonetisation' have also been carried out along similar lines, and one can but easily connect the dots to the hostile takeover of the liquidity in the economy, to

arrive at yet (although differently argued) economic state of exception.

VI. Back to Chaos and Moving Forward Again

While this intervention might appear temporary (as its only objective is to restore order following a crisis), in the United States and elsewhere we observe that neoliberalism has only produced a series of crises (with an equal propensity towards crises), requiring constant intervention, leading us into positive feedback loops, one giving rise to the other, and one legitimising the other's need and presence: representing systems that only chaoticians have been able to muster.

And if the economy is anything like the systems that they describe, some might even consider this a fitting response. To consider the characteristic of positive feedback loops: 'each step's output provides the material for a new formulation and outcome' (Murphy, 1996); does not the unfettered functioning and self-governance of individuals lead often to a tendency towards crises, countered only by sovereign interventions? And do not crises keep stacking, one on top of another, and are caught up in seemingly endless iterations? And the resistance to such intervention, does it not take place through unbridling the 'unfree' individual yet again? And as Agamben has taught us, that even resistance to sovereign interventions (which in their very conception is unlawful, or at best skirting the borders of the legal-illegal)

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[15] Reuters, November 2, 2018. Available at: https://www.reuters.com/article/us-india-centralbank-government-explaine/why-indias-modi-wants-to-increase-control-over-the-central-bank-idUSKCN1N70A5
(Accessed on 7 November, 2018)

[16] News Click, November 11, 2018. Available at:
https://www.newsclick.in/modi-governments-spat-rbi
(Accessed on 7 November, 2018)

becomes a new conduit through which newer germs of crisis enter the system, making it even more volatile, making sovereign interventions 'inevitable', if they were not before. The continual re-presentation of the politico-economic order in this way, as devoid of chaos, until the very moment that it appears through the cracks in the order (while the chaotic processes of the system seem to be connecting and forming hidden trend patterns in the background); and as that moment can erupt at any time, like a repeated game, the security becomes a matter of the here-and-now and of the everyday, as does sovereign power.

Or for instance if we consider the inherent characteristic of the non-linearity of chaotic systems: 'minuscule changes in some systems' initial conditions may actually amplify exponentially as their effects unfold' (Murphy, 1996): which means that a-priori there is nothing that can be done to identify and alter the root of crises; and even it were possible, there is no way to say a-priori which minute process today might lead to an explosion of the system tomorrow; not to say that similar iterations might lead us each time to different results. And while the act of foretelling and forecasting economic disasters were always fraught with the highest of challenges, given the increased connectivity of the world through resources, information, and digital signals, and the exacerbation of this non-linear property that it leads to, it seems now to be dangerous and immensely costly. Perhaps it is best to delve into the sea of competing (known and unknown) outcomes, and then navigate as good sailors do, when faced with the least and most adverse of conflicts?

Yet it is very difficult to argue for a sovereign strategy, when faced with other alternatives. The sovereign moment is to be problematised not only because it is an act of violence against certain individuals/institutions/groups, but also because it involves an indivisibility of power and action at its heart:

> Even if it multiplies discourses to the point of an endless repetition…sovereignty itself (if there is one and if it is pure) always keeps quiet in the very ipseity of the moment proper to it, a moment that is but the stigmatic point of an indivisible instant. A pure sovereignty is indivisible or it is not at all…*This indivisibility excludes it in principle from being shared, from time and from language*. (Derrida, 2005: 100-101) (emphasis mine)

Hence in opposition to the thinness of sovereignty across the distributions of language and time, can be introduced an idea of sharing – as an elastic concept. The very purpose of sharing (in power and in agency) is to stretch sovereignty to its limit: to democratic (or mass-based) decision and action. This can happen through both time (that is the managing decision could be spread out over appropriate democratic procedures and checks, and floated in 'time' to allow participation and iterative adjustments/corrections to follow) and through language (the managing decision could be floated over words, across immense exchanges of language, across conversations involving diverse subject-positions). And to be able to do this, the sanctity or 'ipseity' of the sovereign act must be broken through.

For that, we cannot continue to retain the force and the immediacy of 'emergency' or 'crisis', and its one-one mapping with immediate sovereign action. Not only is its perpetual or atemporal nature to be revealed, but its strategic use as a political tool of management must also be exposed. Instead of using time as a subtractor of individual autonomy/rights, we can use it as a multiplier: using time to stretch and delay, as precautionary oversight, and for deliberation, discussion. This leads us to the other issue, that instead of the silence, which sovereignty represents (given its subtraction of voice), let us pose and rehabilitate voice; and let us also pose reason: for so soon as I voice an action, I have a certain compulsion to make it 'reasonable' to others (at times even questioning what makes anything 'reasonable' itself), which disturbs the monic construction of sovereign (un)reason, and by extension its necessity and inevitability.

The reader may be quick to perceive that in response to chaos underlying security and the sovereign act, we seem to be advancing our own version of chaos through the act of sharing, and may ask: how is this any different? Given the properties of chaotic systems, instability is more the norm than the exception: then how can it be useful? While it is difficult to point out whether it can be useful (for to be useful, one has to fulfil certain desired objectives, such as governmentality itself generates), but certainly it represents a different approach to things. On the one hand, with respect to the violence of subtraction, it offers a more ethical solution. And, on the other, compared to the exogeneity of processes/outcomes in neoliberal-sovereign governance (because nothing is controlled, nothing adjusted at a macro-level; which allows ironically everything to be controlled, everything adjusted through state action by security) it allows a certain endogeneity[17], since we initiate the checks and controls on our own accord, making us ourselves an active part of its creative reconfiguration. This is far from arguing that we can be sure of outcomes in such a scenario; the non-linearity is very much in effect (perhaps subdued to an extent), and open-enededness still constitutes our ontology. One can only surmise that this provides a route different from rationalisation for intervention by the state, involved in 'not maintaining order but managing disorder' unleashed by the neoliberal system (Agamben, 2014).

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References

Agamben, A. 2014, February 25. „The Security State and a Theory of Destituent Power". Retrieved November 10, 2018 from *Philosophers for a Change*: https://philosophersforchange.org/2014/02/25/the-security-state-and-a-theory-of-destituent-power/

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[17] I am indebted to my friend and colleague Prithwiraj Saha, for raising this critical issue.

Becker, G. S. 1976. *The Economic Approach to Human Behaviour*. Chicago and London: University of Chicago Press.

Brown, W. 2015. *Undoing the Demos: Neoliberal Stealth Revolution*. New York: Zone Books.

Chakrabarti, A., A. K. Dhar, B. Dasgupta. 2015. *The Indian Economy in Transition: Globalization, Capitalism and Development*. New Delhi: Cambridge University Press.

Choudhuri, S. and M. Kumar. 2018. ―Why India's Modi Wants to Increase Control over the Central Bank‖ in *Reuters*, 2 November, 2018. https://www.reuters.com/article/us-india-centralbank-government-explaine/why-indias-modi-wants-to-increase-control-over-the-central-bank-idUSKCN1N70A5 (Accessed 30 December, 2018)

Coomans H., A. H. D Wolf. 2005. "Privatisation of Education and the Right to Education". In *Privatisation and Human Rights in the Age of Globalisation*,

Derrida, J. 2005. *Rogues: Two Essays on Reason.* Stanford University Press: Stanford, California.

Feyter K. D. and F. G. Isa, eds., 229-258. Antwerp-Oxford: Intersentia.

Cowen, M., R. W. Shenton. 1996. *Doctrines of development*. London: Routledge.

Foucault, M. 1976. *The History of Sexuality, Volume I: An Introduction*. Trans. Robert Hurley. Vintage Books: New York.

Foucault, M. 2008. *The Birth of Biopolitics: Lectures at the College de France 1978–79*. London: Palgrave Macmillan.

Harvey, D. 2005. *A Brief History of Neoliberalism*. New York: Oxford University Press.

Lemke, T. 2001. "The Birth of Bio-politics‟: Michel Foucault‟s Lecture at the Collège de France on Neo-liberal Governmentality". *Economy and Society* 30 (2): 190-207.

Murphy, P. (1996). "Chaos theory as a model for managing issues and crises". *Public Relations Review*, *22*(2), 95-113.

Patnaik, P. 2018. ―The Modi Government‗s Spat with the RBI‖ in *News Click*, 11 November, 2018. https://www.newsclick.in/modi-governments-spat-rbi (Accessed 31 December 2018)

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SPECIAL ARTICLE

Casting the outcasts of Caste – A theoretical gaze into the *chaos-management* of caste-violence in India.

Prithwiraj Saha

Abstract

This essay seeks to delve into the system of caste hierarchy in India and promote the chaos of violence against Dalits as a managerial mechanism. To address the issue, the essay attempts to (re)cast a dynamic theory of 'caste' as a process. Under that small theoretical framework, the role of violence against the Dalits in the Indian context is critically analysed, with an emphasis on the management of the power relations operating, right from the micro-units, i.e. the agents/subjects (in a Foucauldian sense). Towards the end, the essay also tries to engage with the possibilities of a new space of ethico-politics evolving from this analysis.

Keywords

Caste system, Caste process, power, violence, chaos, management.

I. Introduction

This paper is a theoretical attempt to address the issue of chaos and management through the portal of caste hierarchy existing in India. The paper takes a stand where it poses management not as a way out of chaos, but a theoretical case of *chaos* reckoning as a managerial mechanism itself for maintaining the stability and sustainability of a system. To explicate this thesis, I seek to foreground my theorization in the concrete situation of caste-hierarchy in India. The paper proceeds with theoretically establishing the system of caste-hierarchy in India as a dynamic system (in Section II); it then introduces a particular chaos in this system in terms of violence (more particularly, the case of violence against Dalits in India) and seeks to understand the role played by that chaos (Sections III, IV); Section V concludes the analysis by theoretically establishing the chaos of 'violence' as a managerial mechanism and demarcating the ethico-politics of this analysis. In that sense, this paper resides in the interdisciplinary interaction of Management, Politics and Ethics.

II. A theory of 'Caste(s)' in India

How does one understand *caste*?

Or how does one understand the caste *system*?

These are the initial questions I seek to encounter in this analysis, and that necessitates an understanding of the social space in which it is to be placed. Especially, to place a heavily contested notion such as 'Caste' in relation to 'power', 'violence' and 'hierarchy', an understanding of the space where these processes are constituted, must be opened. Hence, I intend to shed some light on my understanding of social totality. Social totality, as I understand, is constituted by several mutually co-existing and contradictory processes, constituting and being constituted by one another. In that sense, the 'society' resides in a complex combination of relations- relations between multiple co-existing processes, which impart the element of dynamicity to the 'society'. Each process is distinct in its specific characteristics and hence its coexistence with all other processes is also contradictory. A 'society' hence has to be understood in terms of all its contradictory and interrelated processes. Louis Althusser, borrowing from Sigmund Freud, calls these processes the 'overdetermined and contradictory' processes, whose complex constitutions form the social space. (Althusser, 1969).

The Indian Society, if seen in this context, tends to move beyond the simplistic idea of the homogenous Indian nation and what's foregrounded is a decentred-disaggregated space which is re-presented as 'India'. These heterogeneities are inherent in the Genealogy of India. Indian population space as described by many ethnologists, had historically been a mixture of Aryans, Dravidians, Mongolians and Scythians (Ambedkar, 1917). All of them came to India from different locations with their distinct cultural embodiments, and their actions represented their varied cultural processes. An amalgamation of these distinct cultural processes was, hence, laden with contradictions, by virtue of their distinctiveness. But however, with constant interaction, a mutual coexistence was set up amidst heterogeneities, which evolved as the 'Indian society'.

Given the understanding of the social space in the context of India, the next task is to (re)cast caste into the space I am working, with a discursive advantage provided to the Dalits who are the concern for analysis in this essay. Several scholars have attempted to define the notion of 'Caste' in several ways. Dr B.R. Ambedkar in his work, *Castes in India- Their Mechanisms, Genesis and Development,* provides a well-furnished documentation of some of the important definitions of 'Caste' as put forward by relevant scholars-

(1) Mr. Senart, a French authority defines caste as " a close corporation, in theory at any rate rigorously hereditary: equipped with a certain traditional and independent organisation, including a chief and a council, meeting on occasion in assemblies of more or less plenary authority and joining together at certain festivals: bound together by common occupations, which relate more particularly to marriage and to food and to questions of ceremonial pollution, and ruling its members by the exercise of jurisdiction, the extent of which varies, but which succeeds in making the authority of , the community more felt by the sanction of detrain penalties and, above all, by final irrevocable exclusion from the group ".

(2) Mr. Nesfield defines a caste as "a class of the community which disowns any connection with any other class and can neither intermarry nor eat nor drink with any but persons of their own community ".

(3) According to Sir H. Risley, " a caste may be defined as a collection of families or groups of families bearing a common name which usually denotes or is associated with specific occupation, claiming common descent from a mythical ancestor, human *or* divine, professing to follow the same professional callings and are regarded by those who are competent to give an opinion as forming a single homogeneous community ".

(4) Dr. Ketkar defines caste as " a social group having two characteristics: (i) membership is confined to those who are born of members and includes all persons so born; (ii) the members are forbidden by an inexorable social law to marry outside the group ".

(Ambedkar, 1917)

There have been later scholars, who have tried to interpret and define caste. However, the definitions have maintained many similarities with the given definitions, especially around the purity-impurity logic, heredity, endogamy, etc. Scholars like Dumont, Pocock, Marriott, Leach had attempted to define 'caste' in terms of its Hindu attributes and rationale, applicable to Hindu India or South Asia, whereas, Baily, Barth, Beteille, Berreman, De Vos et al. visited caste systems in terms of structural features which were not exclusively related to Indian societies. (Subedhi, 2013). All such definitions had captured major aspects of caste, however none can be claimed as exhaustive in itself, just as the definition I intend to pose cannot be claimed as all-pervasive and exhaustive.

Given the epistemological position I undertake and with the resultant understanding of the society, I intend to (re)define 'Caste' as *a perpetual process of ascription of an identity and its subsequent reproduction and alteration*. Posing such a

definition of caste as a process places it in the dynamic space of the social totality. The definition itself attributes to caste, the notion of a 'system' as well as the elements of the formation of an identity, which I believe, cannot be reduced to a mere moment of ascription at birth. Rather, that identity evolves over the period of life by continuous reproduction and alterations of the ascription. This evolution of caste identity has been discussed by Gorringe & Rafanell (2007).

This definition of caste doesn't aim to restrict caste as an ascription that is irreversible and hence accounts for the *alterations* along with the continuous *reproduction* of the ascriptive identity. The alterations indicate towards the continuous changes in that identity over time, and the possible chances (if there exists any) of moving out of that process of ascription. These alterations would not be independent and be in constitution with the other processes in action. For example, the class process might affect the caste process in a way that the class identity surpasses the caste identity during the process and vice versa. *Reproduction* and *alterations* here cannot be seen as mutually exclusive processes by virtue of their co-existence. The difference between the two processes majorly gets blurred as reproduction is also a type of alteration. The element of contingency regarding a possible move out of the caste process exists in my theoretical schema in order to avoid totalizing claims.

The reproduction of the caste identity (which evolves out of the caste process) is the thing which has been dealt with to great extent in literature. This is all about the formation of the caste structures in India over centuries with its inherent hierarchies, power relations and violence. I intend to delve into this process of reproduction of the caste identity in the particular context of Dalits in India, and understand how power and violence plays a role in this process. The next section sheds light on the ontological reality regarding the violence over the Dalits in India in recent times, the third section would seek to analyse the relations of power which operate with(in) the Dalits trying to find their role.

III. An investigation into the violence against Dalits in India

The worst patch that the caste system has brought upon the Indian society is probably the problem of untouchability. The evolution of Dalits can be traced in accordance with this problem. Before getting into the ramifications of this bane, it is necessary to know who are referred to as Dalits. There are again contested definitions of this category. However, Gorringe & Rafannel (2007) provides a neat and lucid explanation about who the Dalits are.

> Untouchability is the stigma attached to those at the foot of the caste hierarchy. In 1950, the constitution of independent India criminalized untouchability and referred to Untouchables as 'Scheduled Castes' (SCs) with reference to the list of castes entitled to positive discrimination. Since the 1970's, however, active SCs have called themselves 'Dalit' (downtrodden) in a spirit of pride and militancy. (Zelliot, 1996 as referred to in Gorringe & Rafanell, 2007).

This is a known fact that the Dalits have historically been the outcasts of the *varna*

system in India and have been subjected to brutal violence over a long stretch of time. They have been *inside* as well as *outside* of the caste system by the force or violence which is used simultaneously to *address* them and *exclude* them. The author won't fall into the trap of mind-body division by categorizing this violence into the dual of physical and mental, and keep it just to violence, which in a way confers both. Bulks of literature have elucidated the elements of force and violence inflicted upon the Dalits. Dr B.R. Ambedkar's celebrated speech/essay *Annihilation of Caste* provides a disturbing image of such occurrences of violence against Dalits.

However, with the advent of neo-liberal global capitalism, with its tenants of liberalization, privatisation and globalisation, it was expected that the caste processes, which could be considered as types of non-market, pre-modern legacies, would eventually die up. That would have been a fantastic ending, but just like several other promises of liberalization, this also ended up as an unachieved fantasy. The caste process seems to manifest its cons in severe ways. The recent reports from NCRB (National Crime Record Bureau) shows an alarming increase in the crimes and acts of violence against the Dalits. Anup Sadanandan (2018) in an article in *The Wire* magazine[18], states that India had witnessed a sharp escalation in violence against Dalits during the years 2011-2016. According to him, there had been a six to eight-fold increase in the rate of crimes committed against the Dalits compared to the crime rate in the preceding five years. Violent incidents such as murder, assault

and rape constitute the major share of some 193,000 crimes against Dalits during this period. Figure 1 elucidates this stark rise. A probable reason behind this stark rise might be the increase in recording of the crimes committed due to increase in education and awareness among the victims and their families. However, as the article illustrates, although that might account for a part of the rise in crime rates, there are other reasons which show that there has been an increase. And the absolute number of crimes recorded are also large enough to validate the presence of violence against the Dalits.

Figure 1: Crime against Dalits in India
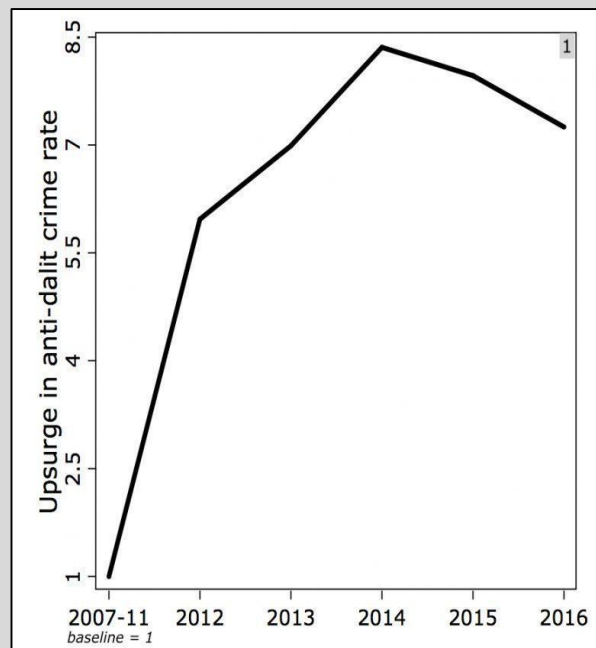
Source: Anup Sadanandan' Article on The Wire (Available at: https://thewire.in/caste/rise-in-violence-against-dalits), who had constructed it from NCRB data.

"Note: Upsurge in anti-Dalit crime rate is the ratio (expressed as decimal fraction) of the anti-Dalit crime rate in the 2011-16 period to the average crime rate during the 2007-11 period. The analysis uses a five-year (2007-2011) average as the baseline to avoid the possibility of an idiosyncratically low annual baseline figure inflating current crime rates." Crime rate is crimes per 100, 000 Dalits.

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[18] Available at https://thewire.in/caste/rise-in-violence-against-dalits : Last viewed: 19/04/2019

An important notion which has led to a lot of violence is the Dalit's access to drinking water. Studies like Tiwary & Phansalkar (2007), Dutta & Sinha (2018) explore the issue of access to drinking water of the Dalits. In most of the cases, the victims of these violence are the women. NCRB data addresses that issue, and there have also been several case examples. To cite one such ironic example in the recent times in the so-called 'modern India', I'll like to refer to a report from *Hindustan Times* dated April 15th, 2016, which stated that a Dalit woman was denied access to drinking water and thrashed in a village in Madhya Pradesh on the Ambedkar Jayanti. Hence, it is evident that the violence against the Dalits are alarmingly existent in today's India. The aim of the essay is to look at the effect of these processes of violence in the power relations within the caste structure.

IV. Violence as a mode of {*Reproduction – Alteration*} of Caste Ascription (?)

The analysis that is to be done next is finding the effect of this process of violence in the hierarchical caste power structures. Such an analysis begins with developing an understanding of the hierarchical caste power structures. The word "hierarchy", as the Cambridge Dictionary suggests, *is a system in which people or things are arranged according to their importance*. The hierarchical caste power structures hence involve people holding a particular position in a caste process granted more importance than the others. The power relations generally work in accordance with the hierarchy. However, given the pre-stated theoretical frame in which I desire to work, these caste structures are in continuous motion and are different from their representations in terms of simple rigidity in popular literature. Hence, the

caste structures in my frame take the form of a dynamic system.

Who would dominate the hierarchical structure? varies with changing relations and conditions of existence. In the Indian context, there have been examples to elucidate the same. Srinivas (1955) viewed the dominant caste in the rural peasant society in India as the one that "preponderates numerically over the other castes, and (…) wields preponderant economic and political power". On the other hand, Dumont (1970) argued that the dominance of a particular caste was based on economic realities rather than numerical preponderance. (Johnson & Karlberg, 2005). Both these notions are theoretically different from the traditional understanding of the hierarchical caste structure in the order of Brahmins dominating the list, followed by Kshatriyas, Vaishyas and Shudras. Concrete examples can be traced from the Indian experience, where these theories are validated. For example, the Marathas traditionally fit the Srinivas' categorization of the dominant caste. The dominant caste in the Maratha peasantries were the landholding elites, who resided in lower strata than Brahmins in terms of the purity logic but dominated the hierarchical relations in terms of numerical preponderance. (Johnson & Karlberg, 2005). Thus, the ontological reality shows that theorization developed earlier as presenting the caste as a diverse process with different nodes has empirical evidence.

But how does one place the element of violence in this theoretical schema? The simplest route would be to posit violence as the moment of force and coercion, which attempts to construct an all-pervasive dominant caste hierarchy by breaking down

any form of resistance. The moment of coercion can be seen as a moment of reproduction of the system of caste hierarchy. But reducing violence **just to** the reproduction of the caste hierarchy system would be a sacrifice in the theoretical gravity of the frame being used.

Violence in my frame can be perceived as a catalyst to reproduction of the hierarchical caste structures by reproducing the operation of the caste process. This is a genuine effect that violence can bring upon, but such an operation of violence has to be subjected to interrogation. An act of violence on the downtrodden involves a specific signalling mechanism. When the oppressor in a caste process performs an act of violence, there's a direct flow of signal from him to the oppressed and her inmates that an act of resilience against the dominant section would be met with an action which would lead to incurrence of severe costs on behalf of the dominated. The response of the dominated is deemed to be her agency. She can either *resist* to such a signal or can *collaborate* to the same. A collaborative signal would lead to the reproduction of the hierarchical caste power relations.

A subtler notion of operation of power can be experienced in the process of how the agency of the oppressed evolves. In this context it is justified to invoke Foucault's conception about the power mechanisms by which bodies are 'disciplined'. (Foucault, 1979) In a Foucauldian understanding, subjectivities of the agents are constituted by continuous interactions between the power holders and their subjects. If the subjectivities of the subjects in the lower strata of the caste hierarchy are **norm**alized in a certain way over their life, they would **norm**ally opt for a collaborative signal. And the collaborative signal would act as a reproductive mechanism for the dominant caste hierarchical relations. What is of importance here is that the reproduction of the hierarchy is not limited to the active agents of the actions, i.e. both the dominator and the dominated. Rather, the power relations and the reproduction of the hierarchy emerges from the interactive collective. The collective is what I interpret as a contradictory consensus of multiple subjects.

However, that's not the role of violence in its entirety. There's another side of it also, which is worth looking at. While defining the caste process, I had referred to the notion of "*alteration*". The response to the signal transmitted by the dominator in terms of an action of violence might not always be collaborative from the side of the dominated. It might be the case that the dominated choses to transmit a countersignal to the signal of violence by an act of resistance. Such an act of resistance provides an *alteration* in the process of caste ascription and prevents the smooth reproduction of the process. This moment of resistance is often instigated by the moments of violence. If the dominated agent considers the cost of collaborating to the signal of violence to be more than that of resisting it, she might opt for the act of resistance. The act of resistance can also be a spontaneous response from the dominated agent without any rational calculation[19]. It

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[19] Kahneman (2011) provides two varied forms of mental actions percolated by neural systems 'System 1' and 'System 2', where the former

lies in the domain of spontaneity and the later in the domain of rational calculations.

should be noted in this context that the cost which is being talked about is not the pre-given cost generated from a-priori individual choice and preferences of main-stream economism. Rather, this cost is a notion of social cost which the agent perceives within the complex social reality in relation with multiple processes.

Concrete instances of such *alterations* in the process of caste are noticeable in the Indian context. There often have been cases where acts of violence by the dominating caste members have resulted into severe resistance and protests from the dominated caste members. One glaring example in this case can be cited. It was in 2016, when some self-proclaimed cow vigilantes stripped, tied and thrashed brutally four Dalit men for skinning a dead cow in Gir Somnath district of Gujrat. The action was perpetrated as an act of 'moral justice', but it triggered the biggest lower caste uprising that the state had seen in the preceding thirty years. The protesters pelted stones and some among them attempted suicide in front of the administrative forces. The news was reported by *Scroll*[20], and many of the protestors reported that it was the result of the frustration that was growing up due to continuous atrocities against the Dalits. This frustration is the cost which surpasses the cost of resistance to the acts of violence. Violence in this case helps in the rise of resistance against itself.

Another issue that is relevant in this case is that the article in *Scroll* reports the agitation stated above to be generated by the social media to a large extent, where the

videos of the Dalit men being thrashed was made viral. This is another notion which has rendered itself with immense relevance in current times. It is often seen that the Dalit movements comprise people from other castes, who are also triggered by the atrocities against the Dalits. Certain upper caste members are found being activists. They, although were not the direct victims of those violence, but somehow the violence inflicted upon others led them to join these protests. This is something which has been described by Chaudhury (1994) as "displacement of contradictions" from one process to another, where the inter-relations between different subjects through the interrelations between different processes come into prominence. This also provides an explanation for the preconceived notion of the social cost. The others from outside the Dalit community entering into their struggles means that the violence over the Dalits affect them in some way, they have to incur some cost because of these atrocities, which promotes them to join the cause. These moves also have some strategic advantages in the political terrain in terms of acceptance of Dalit assertions and claims. The members of the upper strata are bestowed with certain associations with levels of bureaucracy, legislature and academia. They have a relatively better power of bargaining for the rights of the Dalits and their claims. They in the course often become voices of these Dalits. But the initial moment of all these remains at the moment of violence.

V. *Violence*: *Chaos* as *Management*

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[20] Available at https://scroll.in/article/812100/an-assault-on-dalits-may-have-triggered-the-biggest-lower-

caste-uprising-in-gujarat-in-30-years. Last visited: 19/04/2019

Violence thus plays the role of a two-pronged catalyst in the hierarchical caste power structures existing in India. In some cases, it aids in the reproduction of the processes of ascription of caste, thus reinforcing the hierarchy and hindering Dalit assertions and claims. Whereas in some instances, violence acts as the trigger to alterations in the processes, thus bringing in (desired) changes in the social conditions of existence, promoting agitations and resistances against unjust atrocities for the fulfilment of the Dalits' claims and assertions. Which role is stronger? is a matter of contextual enquiry, but at least it can be stated that both these processes developed theoretically, exist in Indian contexts in concrete empirical examples. Both the processes coexist, depending upon the overdetermined and contradictory processes.

Here, I argue that the system of caste-hierarchy embedding caste processes is a dynamic system, and is stable if one follows the dictums of *varna* system in Indian history. Violence in that system is an injection of *chaos*, bringing in an external disruption to the historical stability. My exposition has shown how this chaos results in managing the stability of the system of caste hierarchy itself by reproducing the system. *Reproduction* of the caste system is perceived in my framework to be a form of **regressive management (RM)**. However, given the overdetermined social totality, the hierarchical caste system is a constitutive part of the broader social system, resulting in larger instabilities in the harmony of the social system. *Alterations* in the caste system by violence, as explained earlier, aids in managing the stability of the broader social harmony by resisting the preponderance of the chaotic caste system

within the larger social system. That leads to what I call a **progressive management (PM)**. This later case of progressive management is a strange case of chaos aiding in managing a chaotic system by catalysing its alteration. Thus the chaos of my frame, viz. violence exists in a contingent contradictory dyad of {*reproduction-alteration*} resulting in another contingent contradictory dyad of {*regressive management-progressive management*}. Hence, I seek to put forward the claim of *chaos* being used as *management* as per as the role of *violence* in the *caste system* is concerned in a contingent overdetermined world.

However, just for the sake of elucidating the contradictory contingencies involved in the context of progressive management, there has been a counterargument against the Dalit uprisings by saying that these protests in a way concretise the hierarchical power. When a subject proclaims and fights for her/his caste identity, she in a way conforms to her position in the caste hierarchy. Her struggles tend to become a kind revisionist struggle existing within the broader system of caste. In that case, the form of management here becomes regressive. The scholars with such a view follow the radical solution to the caste system provided by Dr Ambedkar - complete annihilation of caste through exiting Hinduism. Ambedkar's politics of radical exit truly is a revolutionary solution to the problem of caste. But notwithstanding the radicalism of Ambedkarite exit, I cannot denounce the element of progressive management in *alterations* leading to acceptance of demands and assertions of the Dalits. The acts of resistance triggered by violence might be the stepping stones of something

which is about to come. I refuse to be too optimistic to end up being teleological and neither would be pessimist in this cause. The big bang revolution may never arise, but the continuous process of evolution would obviously be a subset of r**evolution**. And that might lead towards possibilities, which always remain an open space to engage with, blooming the spaces of progressive management, making the world a better place. The political intention of my analysis in this paper has been to open such an alternate discursive space, where apparently chaotic processes (with a negative normative underpinning) has been shown to aid management (with a positive normative underpinning) rather than erode it, in turn seeking to preach *for* different outlooks at processes beyond rigid norms.

'You cannot see everything from everywhere', says Althusser;
and the castles of absolute ethics collapse;
hitherto unethical(s), chaotic(s) and abnormal(s) start demanding justice –
*a radical realm of ethico-politics seeks a peek.*

References

Althusser, L. (1969). Contradiction and overdetermination. *For Marx*, *114*.

Ambedkar, B. R. (2004). Castes in India: Their mechanism, genesis and development. *Readings in Indian Government And Politics Class, Caste, Gender*, 131-53.

Ambedkar, B. R. (2014). *Annihilation of caste: The annotated critical edition*. Verso Books.

Chaudhury, A. (1994). On colonial hegemony: Toward a critique of brown orientalism. *Rethinking Marxism*, *7*(4), 44-58.

Foucault, M. (2012). *Discipline and punish: The birth of the prison*. Vintage.

Gorringe, H., & Rafanell, I. (2007). The embodiment of caste: Oppression, protest and change. *Sociology*, *41*(1), 97-114.

Gupta, D. (1984). Continuous hierarchies and discrete castes. *Economic and Political Weekly*, 2049-2053.

Ilaiah, K. (1990). Reservations: experience as framework of debate. *Economic and Political Weekly*, 2307-2310.

JOHNSON, K., & KARLBERG, M. (2005). Rethinking power and caste in Rural India. *International Scope Review*, *7*(12), 1-15.

Kahneman, D. (2012). *Thinking, Fast and Slow*. Penguin Books. New Delhi.

Kothari, R. (1994). Rise of the Dalits and the Renewed Debate on Caste. *Economic and Political Weekly*, 1589-1594.

Resnick, S. A., & Wolff, R. D. (1989). *Knowledge and class: A Marxian critique of political economy*. University of Chicago Press.

Srinivas, M. N. (1987). *The dominant caste and other essays*. Delhi: Oxford University Press.

Subedi, M. (2013). Some theoretical considerations on caste. *Dhaulagiri Journal of Sociology and Anthropology*, *7*, 51-86.

Tiwary, R., & Phansalkar, S. J. (2007). Dalits' access to water: Patterns of deprivation and discrimination. *International*

Journal of Rural Management, *3*(1), 43-67.

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"The 'art' of communication"
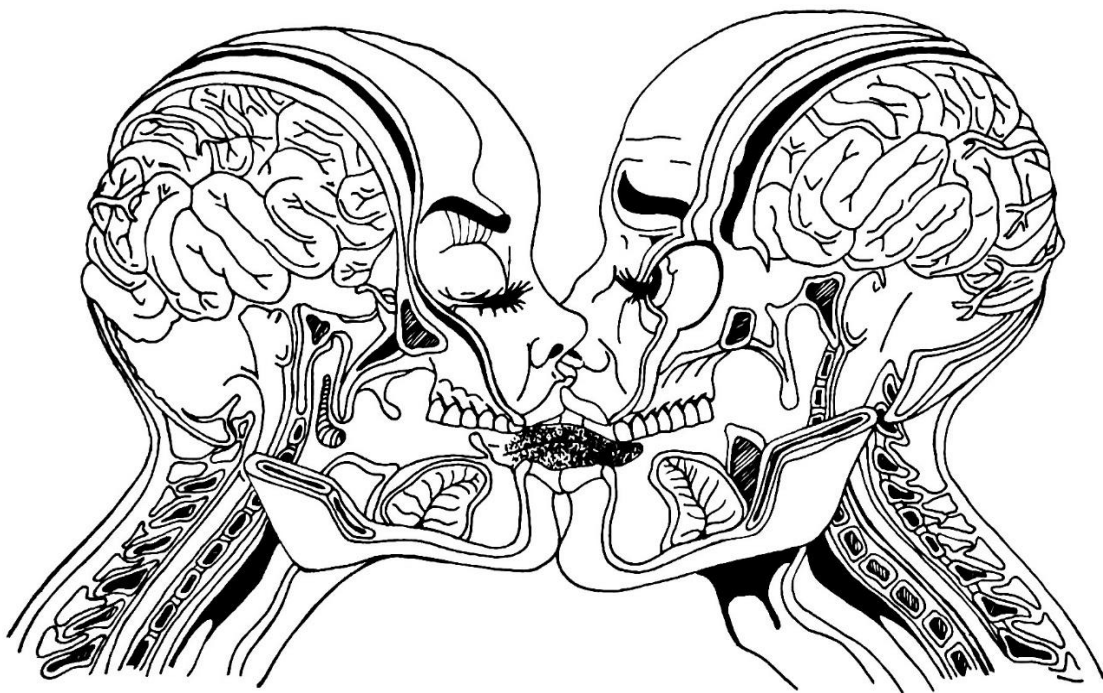
Communication holds together

By Purnima Saha (Student – BBA 1st Year, TIG-SOM)

"Dispersion"

Let the rays disperse to align…

Taken by Subhajit Pal (Student – MBA 1st Year, TIG-SOM)

Self-authority - weaving it into the net of Organization's authority of work relationship in critical incidents

Swati Banik

In today's complex, chaotic and fluid environment, the organization requires employees who can work efficiently and effectively in such a volatile environment. The mapping of competency is not restricted only with the internal environment. It is substantially extended to external environment also. Disruptions which are created from merger, acquisition, change management, extensive lay off, volatility of the market, all can have massive impact on the process of survival, growth and evolution of the company. Nowadays, it is extremely difficult to restrict an organization in a framework of closed system amidst such chaos.

Needless to add to the above list, advancement of technology, rapid changes in global business practices, increasing diversity in workforce – have impact on attitude, belief, self-engagement, decision making process and the dilemma attached with it. In context to the above, line managers have to take issue of authority by understanding the psychological contract and the leadership pattern exists within the organization.

Nowadays, design of organization is more of a flat structure. Hence likelihood is that (a) employee at all level in the organization are expected to be self-managing not just for career enhancement but also so to counter volatility existing in the environment; (b) because of the flat structure, work relationship is more collaborative in nature. Strict bureaucratic organizational design with authoritative relationship that prevents individual to be proactive, innovative and risk taker, is a rare phenomenon. This is truer after the Covid situation. (c) Heterogeneity of the workforce and the globalized market will lead to more self-engagement as chaos will give rise to less prescribed format of operations, absence of standardized routine and not well defined hierarchical relationship.

Henri Fayol in his '14 Principles of management' explains about **Authority and Relationship**. These are the two key aspects of management. Authority facilitates the management to work efficiently, and responsibility makes them responsible for the work done under their guidance or leadership. **Organization authority** is the automony provided to a job role where the occupant of that job role is expected to exercise that power to get the job done. **Personal authority** on the other hand is how an individual irrespective of the job role, exercises her leadership quality to perform a task.

Individual's own sense of authority often has huge impact on how one will visualize her role in the company and act accordingly within the system of work relationship.

A Case:

I was working in a telecom company [name changed and henceforth will be called ABC Ltd] in HR department during 2008. The company had over 70 years of experience operating in radio and mobile communication history. They have a state of art production unit in Sector V at Kolkata. My job role was limited to transactional activities. Workforce was very heterogeneous in nature so far as skill, knowledge, educational background was concerned. The Kolkata office had around 75 employees. 80% of the workforce in the shop floor were those whose association with the company had been more than 20 years. Rest of the employees were being engaged in managerial capacity in the Sales and Marketing, HR, Finance, Service and Commercial department. Attrition was quite high in those departments. Hence, average association of an employee in those departments with the company was not more than 5 years. There was a palpable difference between two groups [Blue collared and White collared employees] in terms of loyalty to the organization, personal and work relationship.

Working hours was from 8 a.m. to 5 p.m. Many of the shop floors employees stayed outside of Kolkata. The travel time for some of them exceeded more than 2 hours in one side. As a part of *Benefit management*, free lunch was provided by the company, considering the fact that many employees had to leave very early in the morning.

On a scorching summer day of 2008, without any notice, the food vendor expressed their inability to supply lunch on the given day, that too at very late hours. My boss, probably considered this as a litmus test for me and did not offer much of a solution. Management was more inclined to offer cash so that employees can go outside and buy food. In those times, not many food joints were available in Sector V, who could offer a decent rice meal within a tight budget. Union leaders were not favouring the cash entitlement amount offered to them. They were asking for more. They started to build pressure on the HR department. Paying out could create a dangerous predicament. Some of the managers were of apprehension that in future lunch will be boycotted on the pretext of bad quality food, and an increased occurrence will be held of this system of pay out which can have unprecedented increase in the operation costs of the company. I, on my personal capacity, began dialogues with the union leaders and decided to arrange food from outside. I would only ask for time and a little more money than the usual rate charged by the food vendor.

It's a different story, how I managed food from a far off place, bring them in a high valued car of the CEO, and ruined his car's seat cover in the process. Food was being served 2 hours later the usual time. I won the hearts of the people and learn a valuable lesson that:

'Leadership is influence founded on the process of continuous self-discovery'.

- Professor Robert E Quinn, Ross school of Business, University of Michigan, Centre for Positive organizations, and Co-author of 'The Economics of Higher purpose [2019] '

Personal authority is expressed when an individual feels entitled to express her passion, creativity and authority for the betterment of environment around herself. One's own self understanding of personal authority decides how will she interpret her job role and help the person to fulfil the organization's objective.

As I was discussing in the beginning of the article, nowadays, employees have significant freedom in their job role. How one will exercise her personal authority depends much on her own personal characteristics - how is one's past, what is the relationship and autonomy one has experienced from her own family, her behaviour, value system – all will contribute and evolve the job role.

Self-authority and it's linkage with *Organization's authority* which leads to an efficient and effective work relationship is more like preparation of Japanese calligraphy ink [sumi ink]. With time and profound experience, one emerges in the leadership role and increases efficiency of the organization.

When I look into various cases which deal with the nature of personal authority and how it can be linked with organizational authority, I always look into the theory what Winnicott (1959 [1965], 1960 [1965]) stated about "false self" and "true self" whenever one accepts any role in the organization.

The company, I mentioned above, had fostered a climate of authorization. It fostered the climate of flexibility and trust, thereby executives no longer required to be dictated about what they should do. On the contrary, as we could exercise personal autonomy, we became fearless in confronting anxiety and conflict. This helped us not to behave in repetitive, non – task orientated, restrictive, non-focused manner which can be self-destructive in many ways.

In conclusion, I would want to go back to the quote of Professor Robert E Quinn. As we advance in our age and with the profoundness of experiences, we can develop a certain form of grace that provides us with increasing sense of robustness, adaptability and personal authority as we develop further to face the chaos of life.

References:

• www.emeraldinsight.com/0048-3486.htm, New directions in the HRM Function, Volume 35, Issue 6, edited by Michael Morley, et al., Emerald Publishing Limited, 2006. ProQuest Ebook Central,

• www.emeraldinsight.com/0048-3486.htm, New directions in the HRM Function, Volume 35, Issue 6, edited by Michael Morley, et al., Emerald Publishing Limited, 2006.

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"The Balls of colour"

Taken by Bilwatosh Chatterjee

Letterbox

Antar – A Journal of Difference and Spontaneity published by TIG- School Of Management seeks to engage critically with all the readers of this issue and expects active interaction from the latter. That it believes, would help it to be a better space of intellectual engagement.

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