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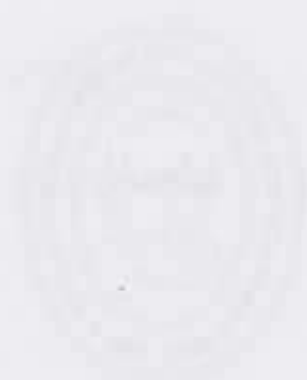
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Contents

Editorial Board

Violence on the Platter: the Bondian way

Antara Mukherjee

1

A Review of Quine's Naturalization of Epistemology

Dipa Chakraborty

9

Dynamics of Familial Changes: Concern and Apprehension

Sreetama Bose and Rupa Biswas

17

Prisoners of Gender: Law Sexuality Interface in India

Molly Ghosh

28

Death and Drama in Mahesh Elkunchwar's 'Necropolis'

Maumita Chaudhuri

41

Discretionary accruals and audit quality: a brief review

Manabendra Sekhar Bhadra

47

The NITI Aayog: a new hope for better financial federalism in India

Debapasad Sarkar

53

Factors of Willingness to Pay for Urban Forestry Conservation: A

Study of Added Area of Kolkata

Laxmi Narayan Saha

61

Regeneration of Ketones from Semicarbazones in Solid State on Wet
Silica Supported Ceric Ammonium Nitrate under Microwave
Irradiation

Nilay Karchaudhuri

73

A new tetrameric Cu^{II} cluster with square topology exhibiting ferro-
and antiferromagnetic magnetic pathways: Which is which?

Mau Sinha Ray

76

Authors' Guideline

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Violence on the Platter: the Bondian way

Antara Mukherjee

Abstracts

While exploring the reasons behind Edward Bond's obsessive preoccupation with the gruesome presentation of violence in his plays, the article argues why this post-War British dramatist had to counteract the Brechtian "Alienation effects" with his own "Aggro effects" as a strategic measure of his theatrical design. In the process, the paper contends, Bond deviates from and improves upon the Brechtian dramatic techniques for and by using violence, which is an inalienable condition of the Post-War society, as an awareness campaign. This strategy, in turn, functions as a means of ensuring the audience's emotional empathetic involvement in the wrongs and evils that they are insensitively used to accepting as "normal". The purpose of using shocking moments in his plays is thus deliberate which, eventually, would serve to promote social change.

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Playwright, theatre director, poet, theorist, translator and screenwriter, Edward Bond (1934 –) is now considered one of the pioneers of post-war British drama. However, almost till the end of 1960s, Bond's reputation in England was on wrong account, for plays banned by Lord Chamberlain. His second play, *Saved* (1965), for instance, was fined for staging without a license and the critical response to it was dismissive. Theatre critic Penelope Gillatt, for instance, adversely commented that: "I spent a lot of the first act shaking with claustrophobia and thinking I was going to be sick" (42). Herbert Kretzmer found fault with the Bondian characters: "The characters who, almost without exception, are foul-mouthed, dirty-minded, illiterate, and barely to be judged on any recognizable human level at all" (45). Bond's next play *Early Morning* (1968) was banned by the Lord Chamberlain's office and it was only after the abolition of censorship that the play could be staged. Thus, tagged as obscure, eerie and bizarre, Bond remained mostly marginal in post-war British theatre despite occasional success.

One of the seminal reasons for this undeservingly cold response to Bond's

plays is his abundant use of violence. He has been generally seen as a dramatist obsessed with frequent display of violence: e.g., the murdering of a pariah in *The Pope's Wedding* (1962), the stoning of a baby in a pram in *Saved*, the slaughtering of innocent priests in *Narrow Road to the Deep North* (1968), the raping of a pregnant woman in *Lear* (1971), the savage attack on a dead body in *The Sea* (1973), the gibbeted woman in *Bingo* (1973), the shooting of a chauffeur in *The Worlds* (1979), to name only a few major incidents in his plays. In "Author's Preface" to *Lear* (1971) Bond tries to explain why his plays are overtly inclined towards violence:

I write about violence as naturally as Jane Austen wrote about manners. Violence shapes and obsesses our society, and if we do not stop being violent we have no future. People who do not want writers to write about violence want to stop them writing about us and our time. It would be immoral not to write about violence. (Lvii)

Violence, as Bond stresses in an interview with Simon Trussler, Roger Hudson and Catherine Itzin, is "the consuming problem" (*New Theatre Voices of the Seventies* 30; original emphasis) of his society which will eventually decide the future of mankind. Explaining further, Bond says that violence in itself is not a danger to any species; what is precarious is the use or the operation of violence. Brought up during the World War II with an experience of being bombed, Bond grew conscious of the violent nature of his

society at a very nascent stage. In his poem "A Writer's Story" (1997) Bond writes: "I was first bombed when I was five / The bombing went on till I was eleven" (*The Hidden Plot* 2). During this torrid time Bond was separated from his parents, working in London, and was shifted to his grandparent's house near Ely. Recounting one of his childhood memories Bond reveals:

[...] I remember walking along a road and seeing two aeroplanes hit each other, and I was terribly excited about this: it was marvellous, these great toys going smash in the air, [...] And I remember running down [...] and suddenly out of the aeroplanes, two men appeared – sort of thrown out, these two little black figures in the sky, before they started to fall, jerked up by the parachutes. It stopped me dead in the road, and made me realize that in fact what one had been talking about was human beings [...]. (*New Theatre Voices of the Seventies* 24)

In fact the colossal inhumanity of the World War II politicised Bond's psyche when he was quite young and before he reached his teens, he joined his friends in taunting a woman canvassing for Churchill: "We knew the class structure was dangerous and vicious" (qtd. in Coult 10). This initiation of the playwright into the adult world which started with bombardments was complemented with the near-fortuitous discovery of the power of the stage. While at school, Bond went to see *Macbeth* at the Bradford Theatre in Camden¹. The performance left such an indelible mark on his artistic and creative

self that Bond later wondered how it was possible for life to go on in the same way after watching this performance. Awareness of the political nature of his society coupled with the discovery of a powerful medium of communicating his vision determined his future as a creative artist. In other words, as a dramatist Bond instinctively sets out to probe the root of social violence and explain its nature. So it would be wrong to conclude that he aesthetized violence or that his theatre is but an extension of the "Theatre of Cruelty"². Bond refuted this irresponsible charge in an interview with K. H. Stoll in "Interviews with Edward Bond and Arnold Wesker" (1976), and asserts:

It wasn't something that I got from Artaud. I'm interested in violence not as an aesthetic preoccupation, but simply as a fact of life. I grew up with violence: I was bombed when I was very young. It's a problem I have to deal with and I think society has to deal with. (415).

It is to be noted that Bond's plays are not particularly violent; rather, his plays are all concerned with the "problems of violence" (*New Theatre Voices of the Seventies* 30). Human beings, in a Bondian play, are not shown as innately evil. In "On Violence" Bond tries to understand why men behave violently in certain condition when he says: "These are situations in which people are at such physical and emotional risk that their life is neither natural nor free" (11). What Bond focuses, therefore, is on unjust situations which threaten human dignity,

compelling men to react violently. So violence in Bond is "contingent and not necessary, and occurs in situations that can be identified and prevented" ("On Violence" 11). Thus, Bondian plays have moments of violence and are not drenched in the same.

The moments of violence are gradually developed, for Bond depicts the situations that lead to violence in order to show the consequent of the same. Significantly enough, Bond describes the violent moments in his plays as "Aggro effects"² to distinguish these from Brecht's "Alienation effects". Rebelling against the distancing method, insisted by Brecht in his "Alienation effect", Bond, through "Aggro effect", demands an emotional involvement from the audience. In "A Note on Dramatic Method" Bond argues that though Brechtian techniques create a new way of approaching experience outside the playhouse, "there is a limit to what this can achieve" (*Plays*: 5 133). This is because mere saying does not "test or prove it in the laboratory of art" (*Plays*: 5 133). What needs to be shown on the stage is the face behind the mask and not the mask on the face. This is the way reality or truth should be revealed. Brechtian techniques, according to Bond, fail to achieve this impact due to their distancing effect. In Brecht, members of the dominant class deny their moral function "while claiming it institutionally" (*Plays*: 5 133). But the exploited create their humanity by "daily experience of resistance" (*Plays*: 5 133), which is but a manifestation of their desire to change their state. They

conscious effort makes their work moral. They function both as individuals and as a united force. If this difference is shown merely as a stage technique and not recorded from reality, then the play's moral statement is not tested or proved "but merely assumed" (*Plays: 5* 133). Bond rather believes in showing the members of the dominant class, for example, in the way they see themselves for the truth is more terrible than what proves to be merely a caricature of it. So he categorically dismisses the alienation formula of Brecht. Since Brechtian devices merely assume reality without testing or proving it rationally on the stage, Brecht, as Bond writes in a "Letter on Brecht", is now a "redundant paradigm of knowledge" (*The Hidden Plot* 173).

In contrast to Brechtian theatre, Bond terms his theatre as "Rational Theatre". In his article "The Rational Theatre" (1978), written for the second volume of his collected plays, Bond justifies his theatre as rational, by claiming that it "demonstrates order in the chaos, the ideal in the ordinary, history in the present, the rational in the seemingly irrational" (*Plays: Two* xiv). For Bond, rationality refers to being sane and behaving as morally and humanely as possible. Bond further rues that if the social environment does not allow one to live humanely, then human emotions "tend to deteriorate into fear, tension, racial and religious paranoia" (*Plays: 4* 89); this leads to aggression and different forms of violence. This condition is irrational and it is maintained by the hegemonic centre to secure its hegemonic rule. Such irrational societies

deny justice and try to control people either by manufacturing false world views or by violence and repression. In such a social condition, man's inherent right to freedom, dignity and pursuit of happiness cannot be achieved without subjugating others. In order to combat social irrationality, Bond believes, art must inculcate "rational objectivity, the expression of the need for interpretation, meaning, order – that is for justice" (*Plays: Two* xiii) that can humanise society. It must also expose the "misinterpretation of experience" (*Plays: Two* xiii). As an artist, Bond feels the need to show the gap between the demand for justice and the false insistence that justice is undeniably there in the society. In his plays Bond sought to develop a "human consciousness" (*Plays: Two* xiv) in order to replace the old one that represses man by propagating false world views. His "Rational Theatre" attacks themisrepresentations and also illustrates and criticises the social force that constitute reality. In other words, it reveals the truth in a rational way and so is optimistic about social reconstruction. This optimism has a rational matrix, for it takes into account the fact that change will be slow and difficult, since the consciousness of an entire society cannot be altered instantaneously. But one should recognize corruption and accept responsibility and the need for action. This explains the repeated insistence on awareness and action in Bond's plays.

Bond's "Rational Theatre", as he argues, requires new ways of demonstrating truth to the audience without simplifying

the complexities of experience by abstracting from it. So he banks upon involvement which alone makes the post-war generation understand themselves, and inspires them to quest for a rational solution. This self-consciousness, Bond hopes, would result in the awareness of both political consciousness and class consciousness. Hence Bond cannot remain frozen within the limits of the methods of a dramatic predecessor who is not "in the maelstrom with you" (*The Hidden Plot* 172; original emphasis). For audience of a different milieu and with a divergent cultural baggage he has to devise new techniques. He admits that the contribution of Brecht to the creation of Marxist theatre has been enormous but the job, he contends, is not yet done. While replying to Peter Holland's article, for example, Bond maintains:

The tragedy of twentieth century drama is that Brecht died before he could complete a last period of plays: the plays he would have written as a member and worker of a Marxist society. The loss is very severe. But we have to write the plays he left unwritten. (34)

To write the unwritten plays, Bond develops his own theatrical techniques and affirms that "[...] I am not Brechtian – and cannot be if I am to write of my own times" (*The Hidden Plot* 173). Living at a time when leap in scientific knowledge has altered the relation of man and his society, Bond feels that adherence to Brecht would be ineffective and therefore unwise. If he is biting the hands that fed him, he is doing so for his

creative freedom, and was inwardly dictated to do so by his commitment to the cause of the social function of his art.

Brecht's "Alienation effect" was a theatrical strategy to compel the audience to respond to the action of the play intellectually, instead of responding only emotionally, so that the disillusioned spectators realise that they are sitting in a theatre. The precondition of "Alienation effect" is, therefore, attenuation of identification of the audience with the character on the stage. But while in Brecht's intellectual theatre understanding of social situations comes from withdrawal and reflection, Bond holds that emotional involvement is more effective in sensitizing our consciousness. In his poem "To the Audience" Bond explains the importance of sympathetic involvement with the stage:

I want to remind you
Of what you forgot to see
On the way here
To listen to what
You were busy to hear
To ask you to believe
What you were too ashamed to admit
If what you see on the stage
displeases
You run away
Lucky audience!
Is there no innocence in chains!
In the world you run to?
No child starving
Because your world's too weak
And all the rich too poor
To feed it?
On the stage the actors talk of life and
imitate death

You must solve their problems in
your life
I remind you
They show future deaths.
(*Theatre Poems and Songs* 4-5)

The importance of audience's involvement with a performance is seminal to Bond because he attempts to strike at the conscience of those people who might read about something grave in the newspaper or have been part of a serious issue without understanding it properly. This happens, as Bond observes in "Drama and the Dialectics of Violence", because people view things from "a partial point of view" (13). Bond does not shy away from depicting the violent nature of post-war society, and so his play doesn't present a partial view of things. Thus, Bond's purpose behind depicting extremely shocking situations is not only to extract emotional responses from the audience but also to make them aware of the nature of their social existence. One understands why Bond dismisses Brecht's "Alienation effect" when he dismissively comments to Holland: "I've seen good German audiences in the stalls chewing their chocolates in time with Brecht's music – and they were most certainly not seeing the world in a new way" (34). To understand the nature of one's social situation in the postmodern world, emotion and reason should function together. Pre-Brechtian theatre was too much preoccupied with illusion of reality, and hardly recognised the necessity to reflect critically outside the theatre on what happens on the stage. Brecht went to the other pole of

brainstorming alienation, ignoring the need for emotional involvement required for aesthetic communication. A post-Brechtian dramatist Bond synthesises the two aspects, emotion and reason, for an existentially sluggish audience to comprehend drama in its totality. Bond thinks that if it is foolish to say that empathy is everything, it is ridiculous to declare that we need no empathy. Brecht criticised Aristotle's catharsis, to quote Bond, as "purging of pity and fear after the act" (*The Hidden Plot* 169); if so, "Alienation effect", according to Bond, is no less guilty of "purging of pity and fear before the act" (*The Hidden Plot* 169).

From the very beginning of his dramatic career Bond has been using violently shocking moments in his plays, as he writes to Calum MacCrimmon, "to make the audience question what they normally accept" (*Edward Bond Letters* 132). By "normally accept" Bond means the sociologically inherited aggressive violence which has become normal to people. In order to expose the fact that what appears normal aggression is in fact a social construct, Bond dramatises the situations unapproved by the society. In other words, his violent scenes, as he explains to Holland, show the "irrelevance of the traditional character-rooted concepts of good and evil" ("On Brecht: a Letter to Peter Holland" 35). For instance, the casual murder of a baby by his own father and his lousy friends in *Saved* is conventionally unacceptable. But the purpose behind depicting this was to strike at the root of social evils that give rise to aggression. Presentation

of violence along with the root of it – for instance, a father watching the autopsy of his daughter in *Lear* – challenges the cherished notion of instinctual violence in men and thereby exposes the camouflaged barbarism of modern civilization. Thus, spectacle of violence is a Bondian strategy to dramatically impel the audience to recognise the societal cause that leads to violence.

The working class community portrayed in *Saved* lacks a moral understanding of their society. Hary and Mary's marital life is long dead. Their daughter, Pam, is casual, careless and lacking in direction. She is treated as an object by Fred, an emotionally, socially and spiritually condemned lout. Len, a lodger in Pam's house, is Pam's dumping ground of her frustration caused due to Fred's indifference. The baby born out of Pam-Fred relationship is illegal and is neglected by Pam. For instance, in Scene Four of the play Pam's baby "starts to cry" (*Saved* 36) while its mother is dressing up. Since Pam pays no attention, the baby "screams with rage" (*Saved* 36). Finally the "baby chokes" (*Saved* 36) as Pam is too "lazy t' get up an' fetch it" (*Saved* 37). Shockingly enough, Pam goes out while the baby "whimpers pitifully" (*Saved* 37). The baby is emotionally starved, long before it is murdered. When Pam leaves the baby in the park and goes away, the socially condemned youths start a game of 'rock-a bye baby' which soon turns into a "competitive test of manhood between its adolescent father and his street gang" (Innes 164). The baby is pushed, pinched, tortured, spitted

and finally stoned to death. After killing the baby, the group departs making a "curious buzzing" (*Saved* 72) suggestive of their complete dehumanization. The audience is doubly shocked to discover that the baby was already drugged with aspirin and so it could not even cry out in pain. This moment of violence is a consequential outcome of inhabiting in an unjust social structure. The characters – stunted, inarticulate, dehumanized and economically impoverished – feel threatened in the fiercely consumerist society. Denial of basic, fundamental rights coupled with their marginalised position has brought them almost to the edge. Unable to behave in a normal way, these young boys become violent and express themselves aggressively. In other words, the stoning of the baby is an effect of being a part of a society where daily competitive striving for inherent rights drives the deprived to the brink of destruction. The shock generated on witnessing stoning is meant to focus on the deadlock in the society. However, the audience are gradually relieved from the shock and are shown the way to deal with the crisis. Len, a passive eye-witness to the stoning of the baby, slowly comes out of the destructive atmosphere and tries to set things right in the family. He addresses the problems persistent within the other and arms the other to create a space for them. He not only saves himself but he manages to keep the disjointed family under a single roof. The play ends not with despair but with a hope of a family re-union as we see Len mending a chair broken in the course of a fight between Hary and Mary. The curtain comes down with the

emotionally estranged daughter sitting in the living room with her parents. True still there are miles to go as Len detects that the 'chair still has a little wobble' (*Saved* 123) but at least he has succeeded in unlocking the deadlocked marriage between the couple who through their fight are now emotionally expressing themselves. Their casual, sex-starved daughter who has lost her child perhaps now can emotionally relate herself to her parents and so participates in the family gathering. Thus, the hallmark of the play lies in the restoration of this equilibrium after the violent eruption of fury.

The unconventional violent scenes of Bond's plays psychologically distance the audience from the plays. Naturally, therefore, Bond has been attacked for employing violent moments. But Bond could ignore the harsh criticism as his real intention was to extract emotional responses – good or bad – from his audience. In fact, Bond welcomes the so-called 'bad' responses, for they appear to him as real emotional outbursts. Bond, rather, argues in his "Author's Note" to *Saved*, that the stoning in *Saved* is a negligible atrocity "compared to the 'strategic' bombing of German towns" (*Plays: One* 310). In other words, Bond means to say that the violent moments have social and historical reference points since the history of the people of the World War II include gruesome violent chapters like the Holocaust, the arms race, third world military actions etc. Bond, therefore, is not stung by any qualms of conscience while writing violent scenes. In fact, he wants to strike at the conscience of contemporary

audience who have taken violence for granted. So instead of condemning violence, the deglamourized spectacle of violence is meant to provide a lesson for the interpellated brains. No matter how much psychologically repelling they might appear, they provide a better insight into the psychology of the killer. Fred, in *Saved*, unable to fit himself into the class-divided social structure, expresses himself in opposition to it. So it is not simply by applying reason and intellect that illusions could be broken, but a proper assessment and understanding of one's social state requires emotional commitment. Moreover, the violent moments are not the concluding statement of a Bondian play. They are extreme situations where from Bond's characters, driven to the brink of destruction, journey through those moments and so interact with their society; rather than standing aloof from it, they finally accept their responsibilities and societal commitments. "Aggro effects" are thus a Bondian strategy to promote social change through emotional involvement.

Contrary to the world of nature, where "aggression functions in a protective way" (*New Theatre Voices of the Seventies* 31), violence, that is triggered off when one is threatened, is destructive. When animals are threatened and have no alternative, they may attack violently, for violence, then, becomes an act of defence, used in a crisis. For human beings, violence may threaten the continuation of the entire species. Bond maintains that human beings, in a consumerist society, exist in a state of

tension, with a feeling of being scared and frightened: "There are H-bombs in the air all the time (*New Theatre Voices of the Seventies* 30)". This endangered state, which leads to aggression, Bond warns, would, eventually, annihilate the entire society, for the dialectic of violence is "I threaten you, you threaten me, and finally you have to carry out your threats, otherwise there is no credence behind them (*New Theatre Voices of the Seventies* 30)". In his plays, Bond, therefore, states clearly the social conditions under which one lives and tries to make audience understand that if such situations are not altered, they must bear the consequence of the sort of life they lead. The moments of violence are, therefore, effective Bondian tool to stress on the wounds that lie unhealed in the bodies of competitive societies. Mere castigating a dramatist for his momentary display of violence without gauging the reason behind it would not change the situations that give rise to violent eruptions. A non-conformist, Bond, no wonder, mocks the moralist poser who would do nothing except for claiming that violence is wrong: "If you don't do that, then you are like somebody who says: 'Well, the children in our village are dying of diphtheria, but we will not do anything about the drains'" (418).

Notes

1. *Bond at Camden*: While studying at Crouch End Secondary Modern School, he went to see a performance of *Macbeth*, given by Donald Wolfit, at the Bedford theatre, Camden. The impact was tremendous: "for the first time in my life

- I remembered this quite distinctly - I met somebody who was actually talking about my problems, about the life I'd been living, the political society around me" (*Edward Bond: A Companion to the Plays* 5).

2. *Theatre of Cruelty*: It is based on the principles of the French dramatist Antonin Artaud (1896-1948). In his book *Le Theatre et son double*, he opines that theatre must disturb the audience to an extent of freeing the unconscious repression so that they can view themselves as they really are. It gives importance to mime, gestures and scenery rather than to words. It is extremely theatrical in essence.

3. "Aggro effect": "Aggro" is the abbreviated form of aggravation or aggression. Bond uses the term in a theatrical context to describe violently shocking moments in his plays. Questioning the detachment method of Brechtian alienation, Bond confronts the audience by using frightening, disgusting and shocking moments in order to extract emotional reaction; the purpose is to start a thought process about the significance of what is shown on the stage. He, thus, involves the audience with the act and demands emotional response from them. Once involved, the audience is compelled to analyse the causes by which the event occurred. At a later stage, Bond modified "Aggro effect" as "Theatre Event".

References

Bond, Edward. "A Note on Dramatic Method". *Plays*: 5. London: Methuen, 1996. Print.

- . "Author's Note". *Saved*. London: Methuen, 1965. Print.
- . "Author's Preface". *Lear*. London: Methuen, 1972. Print.
- . "A Writer's Story". *The Hidden Plot*. London: Methuen, 2000. Print.
- . Interview by A. Arnold. "Drama and the Dialectics of Violence". *Theatre Quarterly*, Vol. 2, No. 5 (1972): 4-14. Print.
- . Interview by Karl-Heinz Stoll. "Interviews with Edward Bond and Arnold Wesker". *Twentieth Century Literature*, Vol. 22, No. 4. Dec. (1976): 411-432. JSTOR. Web. 30 January 2009.
- . "Letter on Brecht". *The Hidden Plot*. London: Methuen, 2000. Print.
- . "On Brecht: a Letter to Peter Holland". *Theatre Quarterly*, Vol. 8, No. 30 (1978): 34-35. Print.
- . "On Violence". *Plays: One*. London: Methuen, 1971. Print.
- . *Plays: 4*. Great Britain: Methuen Drama, 1992. Print.
- . *Saved*. London: Methuen, 1965. Print.
- . "The Rational Theatre". *Plays: Two*. London: Methuen, 1978. Print.
- . "To Calum MacCrimmon". 6 March 1989. *Edward Bond Letters 1*. Ed. Ian Stuart. Vol. 5. Australia: Harwood Academic Publishers, 1994. Print.
- Coult, Tony. *The Plays of Edward Bond: A Study*. London: Eyre Methuen, 1977. Print.
- Gillatt, Penelope. "Saved". *Contemporary Theatre*. Ed. Geoffrey Morgan. London: London Magazine Editions, 1968. Print.
- Hay, Malcolm, and Philip Roberts. eds. *Edward Bond: Theatre Poems and Songs*. London: Eyre Methuen, 1978. Print.
- Holland, Peter. "Brecht, Bond, Gaskill, and the Practice of Political Theatre". *Theatre Quarterly*, Vol. 8, No. 30 (1978): 24-34. Print.
- Kretzmer, Herbert. "Saved". *Contemporary Theatre*. Ed. Geoffrey Morgan. London: Magazine Editions, 1968. Print.
- Trussler, Simon. ed. *New Theatre Voices of the Seventies*. London: Eyre Methuen, 1981. Print.

A Review of Quine's Naturalization of Epistemology

Dipa Chakraborty

Abstract

In Western philosophy there are many different doctrines about epistemology. One of them is that of Willard Van Orman Quine (1908-2000) who is a famous philosopher of the 20th century. He says that epistemology is concerned with the foundation of science. Science has many different branches like physics, chemistry, mathematics, biology, botany etc. Epistemology includes the study of the foundation of mathematics. Many logical positivists have derived a false conclusion about epistemology. The foundation of epistemology is based upon observation terms, logic and set theory on the one hand and on the other all the statements about the world are translatable in to the term of observation, logic and set theory. From this it can be inferred that there is a relationship between foundation of epistemology and the statements about

INTRODUCTION

In Western philosophy there are many different doctrines about epistemology. One of them is that of Willard Van Orman Quine (1908-2000) who is a famous philosopher of the 20th century. He says that epistemology is concerned with the foundation of science. Science has many different branches like physics, chemistry, mathematics, biology, botany etc. Epistemology includes the study of the foundation of mathematics. Many logical positivists have derived a false conclusion about epistemology. The foundation of epistemology is based upon observation terms, logic and set theory on the one hand and on the other all the statements about the world are translatable in to the term of observation, logic and set theory. From this it can be inferred that there is a relationship between foundation of epistemology and the statements about the world.

Many philosophers have failed to translate theoretical statements into observational and logico mathematical terms. Even they are also unable to show the reason for the irreducibility. According to Quine, the real reason is that statements do not have their empirical contents. Some philosophers

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think mistakenly that this irreducibility is the bankruptcy of epistemology.

Against this backdrop the objective of the study is to establish the relationship between science and epistemology through Quine's theory of The Naturalization of Epistemology.

Science and Epistemology

Quine's theory of knowledge is based on naturalistic and behaviorist inclinations. He thinks that epistemology is concerned with the foundation of science. He explained epistemology in the same way as any other department of science is treated. Quine thinks that it is very important epistemology to clarify the fundamental concept of our knowledge. Epistemology, or something like it, is simply included in psychology as a chapter. As psychology is a branch of natural science, so is also epistemology. Thus, knowledge is a natural phenomenon like other physical phenomenon should be studied by natural science. Hence, the study of epistemology might be similar to the study of natural science. Science has its own subject matter. And the relation between meager input and torrential output of the human subject is similar to the relation between evidence and theory of any other science. Thus, there is a similarity between natural science and epistemology.

Old epistemologists and modern epistemologists- the distinction is not clear. Old epistemologists view that natural science is constructed from sense data. And on the contrary, modern epistemologists think that the

formulation of natural science is a chapter of psychology. Though there are differences between two schools of epistemologists, each school is correct so far as its goal is concerned. For modern epistemologists, epistemology is a chapter of psychological research and psychology is natural science. So epistemology is natural science. In Vienna Circle Neurath claimed against old epistemologists that there is circularity in their theory. They admit epistemology as true because physics is true, and believe in either of two. On the other hand there is epistemology to explain physics as true. So, science is understood as an institution or a process, not as a construction out of the sense data.

In 1932 there was a debate about observation sentences in the Vienna Circle. Logical positivist Rudolf Carnap and Otto Neurath called observation sentences 'Protokolsatze' in (*Erkenntnis*, 1932, pp. 204-228). One group was interested to develop the conception of observation sentences by sense impression, and the other group was interested to do the same by the public objects of the external world, for example, by statements like "A red cube is standing on the table". But Neurath and other behaviourists explained observation sentences as reporting the relation between percipients and external things, for example, by statements like 'Otto now sees a red cube on the table'. It expresses the subjective point of view; there was no objective way of settling the context of observation sentences.

In this debate Quine would like to emphasise on the external world. Quine admits that observation sentences are causally closest to the sensory receptors. But here a question will arise: how he will gauge the proximity of observation sentences to the sensory receptors. Quine says ".....the sentence is an observation sentence if our verdict depends on the sensory stimulation present at the time" (Quine, 1969, p.85). But our verdict cannot depend on present stimulation; rather it depends on the real facts. A fact is a thing which is very important for learning a language. There are some objections against the conception of 'verdict', so another definition of 'observation sentence' is formulated. In Quine's words: 'A sentence is an observation sentence if all verdicts on it depend on present sensory stimulation and on no stored information beyond what goes into understanding the sentence' (Quine, 1969, p. 86). But this new formulation of observation sentence creates another problem. The problem is: how to distinguish between information that goes into understanding a sentence and information that goes beyond the sentence. In fact this is the problem of distinguishing between analytic and synthetic truths proposed by Immanuel Kant. An analytic truth depends upon the mere meaning of words whereas a synthetic truth depends upon more than meaning of words. But in Quine's view this distinction is illusory. This is one of the dogmas which is unquestioned by modern empiricists. The notion of 'analyticity' is a vague notion. The definition of analyticity which is given

by empiricists is not well founded. In early empiricism, analytic statements are defined as those statements whose denials are self-contradictory. But the notion of 'self-contradictoriness' itself needs a bit clarification. Thus the new formulation of analyticity is :
'.....a statement is analytic when it is true by virtue of meanings and independently of fact' (Quine, 1953, p. 21). Here, the problem of analyticity remains unsolved because the notion of 'meaning' is as vague as self-contradictoriness. So, no one can give a suitable definition of analyticity. Quine discusses the notion of observation sentence elaborately. If we try to define an observation sentences, we must say, '.....an observation sentence is one on which all speakers of the language give the same verdict when given the same concurrent stimulation' (Quine, 1969, p.86-87). In other words '.....an observation sentence is one that is not sensitive to differences in past experience within the speech community' (Quine, 1969 p.87). From the above definition it can be inferred that all members of a specific community will react in the same way under uniform stimulation. But, here another question arises: what is the criterion of the members who live in the same community? Every community has its own distinctive members. Generally there is no subjectivity in observation sentences; they are rather about physical bodies and not about private mental states. But in the traditional period, there is a tendency to associate observation sentences with a subjective sensory state.

This tendency was due to the drive to base science on something firmer in subjects experience. The same thing is true of the philosophical theories of Michael Polanyi, Thomas Kuhn, Norwood Russell Hanson and late ussell when they discuss the role of evidence and the status of critical relativism. A critic of Quine, N.R. Hanson rejects the notion of observation. He argues that observation of a thing varies from observer to observer. He discusses the point elaborately in his book *Observation and Interpretation*. He gives the following example. A physicist and a neophyte look at the same apparatus of a laboratory. The physicist refers to the apparatus as an X-ray tube while the neophyte describes the tube 'a glass and metal instrument replete with wires, reflectors, screws, lamps and pushbuttons' (Hanson, 1966). So, Hanson concludes that one man's observation varies from another person's. So, we cannot say that the notion of observation is impartial and objective. But Quine says that in spite of this objection; we always try to get a general standard of observation. Observation sentences are related with the conceptual and doctrinal sides of science. Briefly, a concept means knowing what a sentence means and doctrine means knowing whether a sentence is true. Observation sentences are the primary vehicle of the first stage of understanding a language. Observation sentences are situated at the sensory periphery of a theory and they have an empirical content. Observation sentences are the connecting link between a language and the real world

that language is all about. Observation sentences serve in both ways as vehicles of scientific matter and as entering wedge of languages. He prefers it as a vehicle of scientific evidence. From this we distinguish two different roles of observation sentences. Observation sentences have a role both in the sphere of concepts concerned with meaning and in the sphere of doctrines concerned with truth. So, observation will not be impartial source of evidence for science.

A language consists of many type of observation sentences which are at the periphery of the particular language. So observation sentences are the entering wedge of learning of a language. The language may be scientific or may not. So, Quine establishes that observation sentences serve in both ways as vehicle of scientific evidence and as entering wedge of language. Quine asserts this; this relationship is very fruitful for analyzing the scientific nature of philosophical epistemology. He has talked about neural receptors and their stimulation rather than of sense or sensibilia. This is called 'naturalized epistemology'. He admits that all our information about the world come through our sensory receptors or sense organ. Epistemology relates with psychology as well as with linguistics. Quine asserts this, this relationship is very fruitful for analyzing the scientific nature of philosophical epistemology. Like other perceptual norms we can describe epistemology as having a scientific matter. From linguistics we learn that, firstly we form a habit of hearing a minimum variation of spoken

sounds. And this is a way we form an alphabet. With the help of an alphabet we construct words; from words sentences are formed, and finally through sentences we learn a language. In the same way the elements of epistemology are formed. Finally, we can say naturally that epistemology is the resource of natural science.

Conclusion

It is concluded that there is close relationship between science and epistemology. Knowledge is a fact or event like all other facts or events in nature. Just as we seek causes of other events and try to discover the laws in accordance with which they occur. So we must seek the causes of knowledge and the laws in accordance with which it happens. Knowledge does not transcend nature. It is a part of nature. According to Quine the fundamental task of philosophy is to see knowledge develops. Kant says in the second preface to his *critics of pure reason* (1787) that understanding maketh nature. In conscious opposition to Kant, Quine would say that nature maketh the understanding. Who is right, Kant or Quine? Can epistemology be really regarded as science? Most of the philosophers have thought that philosophy is not science because science is description of facts while philosophy evaluates facts. Quine does not ignore the evaluative or justificatory role of philosophy. But he seems to argue that evaluation or justification is derived from description of facts. Those who believe in dichotomy of fact and value may not accept Quine's views. But recently many philosophers who are describing themselves as cognitive scientist would argue that evaluation must be based upon the nature of facts.

References

- Almeder, Robert, (1998), *Harmless Naturalism: The Limits of Science and the Nature of Philosophy*, Peru, Illinois: Open Court.
- Foley, Richard, (1994), "Quine and Naturalized Epistemology," *Midwest Studies in Philosophy*, XIX: 243-260.
- Gibson R. F.: (1982), *The Philosophy of W. V. Quine: An Expository Essay*, University Presses of Florida, Gainesville, FL.
- Haack, Susan, (1993), *Evidence and Inquiry: Towards Reconstruction in Epistemology*, Oxford: Blackwell.
- Hanson, N.R., (1966), 'Observation and Interpretation', in S. Morgenbesser, ed. *Philosophy of Science, Today*, New York: Basic Books.
- Hume, David, (1737), *A Treatise on Human nature*.
- Kim, Jaegwon, (1988), "What is Naturalized Epistemology?" in James E. Tomberlin (ed.), *Philosophical Perspectives*, 2: 381-406 (Asascadero, CA: Ridgeview Publishing Co).
- Maffie, James, (1990), "Recent Work on Naturalizing Epistemology," *American Philosophical Quarterly*, 27: 281-293.
- Quine, W.V.O., (1953), 'Two dogmas of Empiricism', in *From a Logical point of view*, Cambridge; Mass: Harvard University Press.
- Quine W. V.: (1960), *Word and Object*, The M.I.T. Press, Cambridge, MA.
- Quine W. V.: (1963), *From a Logical Point of View*, Second ed., revised, Harper and Row, New York.
- Quine, W.V.O., (1968), 'On an Application of Tarski's Theory of Truth' in *selected Logic papers*, Random House.
- Quine, W.V.O., (1969), 'Replies' in *Words and Objection*, eds. D. Davidson and J. Hintikka, Dordrecht Holland, D. Reidel publishing co.
- Quine W. V.: (1969), *Ontological Relativity and Other Essays*, Columbia University Press, New York.
- Quine W. V.: (1974), *The Roots of Reference*, Open Court, La Salle, IL.
- Quine, W. V.: (1975), 'On Empirically Equivalent Systems of the World', *Erkenntnis*, 9.

Roth, P. A.: (1980), "Theories of Nature and the Nature of Theories", *Mind*, LXXIX, No. 355.

Quine W. V.: (1981), *Theories and Things*, The Belknap Press of Harvard University Press, Cambridge, MA.

Quine, W.V.O.,(1990), 'The pursuit of Truth', Cambridge; Mass:MIT Press.

Dynamics of Familial Changes: Concern and Apprehension

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Abstract

The paper enquires the emerging debate about the familial changes taking place in the contemporary period due to the recent changes and advancements in productive technology on a global scale. The question ultimately boils down to the issue of the claim of family to be a universal social institution. To focus on the claims and counterclaims regarding the legitimacy of family in the contemporary period, attempt has been made here to arrive at a thorough understanding of the anthropological history of family. Through a critical look at the theoretical insights provided by Morgan and Engels in this aspect and other archival anecdotes, the present paper tries to throw some light on the recent trends and the resultant dynamics of the changing pattern of family.

Family is one such primary group and comprehensive social institution that surrounds the human life in its entirety. Every man takes birth in a family, is got opportunity to develop his personality there, is exposed to a primary socialisation through his family members, and being connected to his family throughout his lifespan, end his life within the familial sphere itself. Therefore, it might seem that in the history of evolution, there has been no stage where family is not found to exist. Pointing out the centrality of the family in human social interaction, Burgess et.al. (1963:7) define family as,

"A group of persons united by ties of marriage, blood or adoption; constituting a single household, interacting and communicating with each other in their respective roles of husband and wife, mother and father, son and daughter, brother and sister, creating and maintaining a common culture."

MacIver and Page (1937), in their discussion about family, however, deal with the functions of it which lend it the character of a fundamental social institution. In their opinion, "The family is a group defined by sex relationship, sufficiently precise and enduring to provide for the procreation and upbringing of children" (p. 238).

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Thus, family is one such institution where a man and woman unite in marriage to perpetuate, their succeeding generation through reproduction and thereby the dynamism of the family continues through the upbringing of children. Moreover, social philosophers opine that other important social institutions like economy, education, religion etc. completely find a fulfillment inside family. During the relatively long course of human civilisation we have come across various types of families like the patriarchal, matriarchal, monogamous, polygamous, nuclear, extended etc. Perhaps, all these family types came up to suit the social composition or the dynamics therein, arising in different phases of human evolution. The contemporary period, which has been termed by scholars as 'late modernity' (Beck, 1992; Giddens, 1991; Bauman, 2000) or 'post modernity,' (Lyotard 1984; Harvey, 1989; Jameson, 1984; Eagleton, 1987) has also brought in certain interesting trends in the family structure and function. The gaining in importance of the modern service economy has been stripping off the family some of its important functions like production of goods and services in the economic sphere, sexual, reproduction and socialisational functions etc. (Parsons and Bales 1955) The question arises that the way revolutionary technological advancements in the contemporary time have led to radical social change, has the modern family lost its importance as one of the fundamental social institutions? Precisely has the family simply become

redundant as a primary means to fulfil our basic necessities of life?

To answer such questions one should have a deep and thorough introspection into the historical evolution of family. Since history gives us proof about any subject matter in details, so it is necessary to dip deep into it to know about the primal form of family. L. H. Morgan is, perhaps, the pioneer among the scholars who has enriched us authentically with an expert notion about men's prehistoric condition. We get an idea of man's dominance over the world, beginning with the stage of savagery through the barbaric age, finally to the development of civilisation (Morgan 1887). The history of man's evolution, tales us that the 'gens' formed on the grounds of matriarchal rights, is the primal form. With the subsequent unfolding of human civilisation, the matriarchal 'gens', gradually has given in to the patriarchal 'gens'. During the early phase of social evolution, the primal form of family had been that of a matriarchal type based on the principle of matrilineal form of descent. In the then period, unrestricted sexual union would take place inside the 'gens', where the women exercised her individual choice to physically unite with any male. Engels (1884:28) terms it as "Promiscuous Sexual Intercourse". The child born out of such union would be known by his mother. Although in modern age, kinship bonds of same blood relations are known by different relations like father, brother, sister, cousin etc. there was no relevance of such relationships in the savagery to

barbaric age. Morgan is to be fully credited for bringing forth to us, the primal history of family where women used to have highly dignified status enjoying a considerable degree of individual rights and freedom.

All the changes that took place in the different stages of human life, from the barbaric age to the civilised, were distinct and necessary. During the barbaric stage, the domestic and the workplace for all the members of 'gens' were the same, so in every field, men and women cooperated and worked together. Unrestricted sexual union, followed by reproduction, children's upbringing, were strictly matrilineal and even property acquisition through maternal rights, was prevalent. The father had no role to play in it. Sexual activities were so uncontrolled, that polygamy had been rampant such that each man and woman had multiple partners. The very contemporary notion of family, being based on belongingness, was literally absent then, as every child had multiple parents. The kinship bonds of blood relation were not so strong. Families at that time had no priorities. There was no compulsion for marriage. Marriage just meant the living together of the father and mother since conceiving till the birth of a child. Marriage was not that crucial as any woman could easily enjoy her motherhood beyond marital bond. However, Westermarck, (1891:20) considers it closer to promiscuity which "involves a suppression of individual inclination" and "the most genuine form

of it is prostitution." In criticising such a view Engels (1891:21), argues,

"...any understanding of primitive society is impossible to people who only see it as a brothel." Here distinction between 'Promiscuity' and 'Prostitution' seems necessary. 'Promiscuity' is a "practice of having casual sex frequently with different partners or being discriminate in the choice of sexual partners."

The question of morality rises when the term is viewed in the context of a dominant socio-cultural ideal for sexual activity to take place only within exclusive committed relationship. 'Prostitution,' on the other hand, is the business or practice of engaging in sexual relations in exchange for payment or some other benefit (<http://www.merriam-webster.com>).

Although, both men and women can be engaged in this profession, but in the contemporary patriarchal society it is the women who are largely involved in it. 'Prostitution' may be brothel-based or non-brothel based as in the case of the call girls or many of the flying sex workers. In the contemporary market controlled society, thus, prostitution can be seen as a phenomenon providing necessary underpinning to sexual commodification of woman.

Since marriage was no compulsion in those days, so the disputes regarding property acquisition were also negligible. For this reason, community marriage was found during savagery and

group marriage in the barbaric age. Morgan (1887) has classified different stages of family on the basis of sexual relationship in the following manner: Consanguinous family where sexual relationship between brother and sister was prevalent but the same was barred between parents and children. In the next stage 'Punaluan' cropped up where sexual relationship between siblings was prohibited. About the concept of Punaluan, Engels (1884:53) states,

"According to the Hawaiian custom, a number of sisters, either natural or collateral (that is, first, second or more distant cousins), were the common wives of their common husbands, from which relation, however, their brothers were excluded. These husbands no longer addressed one another as brothers — which indeed they no longer had to be — but as 'punaluan', that is, intimate companion, partner, as it were. In the same way, a group of natural or collateral brothers held in common marriage a number of women, who were not their sisters, and these women addressed one another as punalua. This is the classical form of family structure which later admitted of a series of variations, and the essential characteristic feature of which was: mutual community of husbands and wives within a definite family circle, from which, however, the brothers of the wives — first the natural brothers, and later the collateral brothers also — were excluded, the same applying

conversely to the sisters of the husbands."

'Punaluan' marriage seems to be a higher stage of group marriage where attempt was made to restrict marriage between the blood relatives. Restriction of this sort, perhaps, laid the foundation of the institution of 'gens.' But as a form of group marriage it also did form a family where there was uncertainty about the father of a child. Nevertheless, it was certain who the mother is. Thus, wherever group marriage exists, descent or inheritance can be traced only on the maternal side, leading to the recognition of female line exclusively. Engels argues quite vociferously in this context,

"That woman was the slave of man at the commencement of society is one of the most absurd notions that have come down to us from the period of Enlightenment of the 18th century. Woman occupied not only a free but also a highly respected position among all savages and all barbarians of the lower and middle stages and partly even of the upper stage." (ibid. 1884: 60)

Next, with the domestication of animals and the breeding of herds at the lower stage of barbarism, 'The Pairing Family' emerged. The restriction on marriage between the blood relatives and later on all relatives rendered the practice of group marriage impossible. In this fashion the community marriage gradually gave in to monogamy. It was worked by the relationship claimed over loyalty and trust of the wife towards the husband. However, even then paternal

claims over the offspring were not that pronounced. Strict penalty was administered to the 'promiscuous' wife. But for the husband, paths of polygamy and disloyalty were quit open. Morgan (1887) however, believes that such a step was taken to restrict consanguinity. But the question is why was the prohibition only applied to women? Was it all for the sake of necessities or to save males from moral degradation 'caused by women'? However, in this type of families if there has been conjugal discord between couples, then there was the practice of divorce prevalent as well. With the development of civilisation, a family structure took shape gradually, where monogamy became the rule of the day and the concept of definite fatherhood got incorporated in the laws of inheritance.

But one may ask why such a change took place? Until the lower stage of barbarism human labour power yielded no surplus. Fixed wealth consisted almost entirely of the house. People were busy every day to collect food for daily consumption. But the introduction of cattle breeding, the working up of metals, weaving and field cultivation, changed the entire scenario. The generation of surplus in such economic endeavours introduced the concept of private property. Engels (1884) writes,

"According to the division of labour then prevailing in the family, the procuring of food and the implements necessary thereto, and therefore, also, the ownership of the latter, fell to the man; he took them with him in case of separation, just

as the woman retained the household goods. Thus, according to the custom of society at that time, the man was also the owner of the new sources of foodstuffs — the cattle — and later, of the new instrument of labour — the slaves."
(p. 65)

Hence, the domestication of animals and the development of better agricultural implements and techniques made the status of the males more important than the females in the family. The generation of surplus and the growing control over it by the males made their status more prominent in the family. But the customs of those societies pertaining to the laws of inheritance along the female line created an obstacle to the males to consolidate their property rights by passing it on to their children. Practice seemed fated to demolish and so it did for the sake of change. The increased wealth of the males provided the necessary motivation to successfully overthrow the prevalent system of matrilineal inheritance. Thus, monogamy is integrally linked with the issue of gaining predominance of the males over the females in the social sphere through the substitution of mother's right by that of the father. Bloch (1983: 56) remarks quite aptly in this regard,

"Through monogamy, men obtained a sexual monopoly over individual women by which they ensured that the children of these women were their own."

Hence, as a form of marriage, monogamy is based more on economic

considerations rather than on 'individual sex love.' Its base is erected upon the subjugation of women to men. To Engels (1884: 67), "The overthrow of mother right was the world-historic defeat of the female sex." Perhaps such a defeat of the females has some deeper implication to Engels' theoretical orientation. This is revealed when he says,

"The first class antagonism which appears in history coincides with the development of the antagonism between man and woman in monogamian marriage, and the first class oppression with that of the female sex by the male. Monogamy was a great historical advance, but at the same time it inaugurated, along with slavery and private wealth, that epoch, lasting until today, in which every advance is likewise a relative regression, in which the wellbeing and development of the one group are attained by the misery and repression of the other." (ibid. 73)

Hence, improvement in the techniques of production introduced the notion of private property at the upper stage of barbarism which in its turn necessitated the formation of patriarchal monogamous family which acted as the site of first class antagonism. In the modern family, Engels (ibid. 80) suggested, the husband is "the bourgeois"; the wife represents the "proletariat." Hence, the issue of class antagonism is not substantively different from that of gender. This is particularly so due to the material condition of their historical emergence as rooted in the introduction of private property in the

course of human evolution. Dore (2015: 19) is also of the same opinion and quotes Mark Dyble who comments,

"There is still this wider perception that hunter-gatherers are more macho or male dominated. We'd argue it was only with the emergence of agriculture, when people could start to accumulate resources, that inequality emerged."

Thus, with the progress from savagery to civilisation the concept of family and marriage as important social institutions got consolidated. The strengthening of these social institutions has been squarely linked with the gradual enlargement of patriarchal claim of authority of the males over the females. Engels (1884: 80) has rightly pointed out that, "The modern individual family is based on the open or disguised domestic enslavement of the woman."

Hence, the march of progress from savagery to civilisation is an unfortunate but, perhaps, unavoidable, story of the subjugation of the females by the males. The resultant devaluation of woman has reached such an extent that, now- a-days, males often appear to be hesitant rather reluctant to express feelings of love towards the females while they are nonetheless proactive at the same time to commodify the latter sexually. Therefore, monogamy as a form of marriage exists just in name but 'hetaerism' to use Morgan's terminology signifying extramarital sexual affairs with other women, has been rampant throughout the course of civilisation. The modern family does not appear to do

away with the dark shadow of heterism since males are frequently engaged in sexual relationships with other women including the maid servants as well. As a primal form of civilisation, the monogamous family determines the ontology of modern nuclear family and reflects the contradiction of the contemporary period. As before, even today the assured paternity of the children at best rests on a degree of moral conviction. This is also not free from contestation. To solve such 'insoluble contradiction' Engels believes the Code Napoleon, perhaps has come up. Here Engels (1884: 75) refers to article 312 of the Code which declares *L'enfant conçu pendant le mariage a pour père le mari* — "A child conceived during marriage has for its father the husband." This is the final outcome of 3000 years of monogamy."

Biological and reproductive needs beside the needs for food, clothing and shelter existed since primitive age and still persist. Since change is the fundamental nature of life, so through change, we kept civilising ourselves continuously. Place of work and habitation was at the same venue in the barbaric age but with the further development of system and techniques of production, workplace and residence got separated. To consolidate their existence in the world, the civilised men, like their primitive ancestors, invented tools and instruments, taking the help of natural resources in a congenial environment. Early men didn't confine themselves only within animal-rearing and hunting but kept inventing many a thing. Iron Age and Gold Age

ushered in. Subsequently, men progressed more in the field of agriculture. With this concept of private property crystallized and gradually the amount of private property got enhanced. More man power was required to cultivate the expanding cultivable lands. For this labourers were employed in the fields. Finally, the two classes of capitalists and working class came into being based on property relationships. The attempt of accumulating the entire profit, gave rise to class conflicts leading to revolution. The effects of the twin revolutions of 18th century, namely the Industrial and the French spread over the entire society, family and economy. The replacement of mother right by that of the father within the families gave men unchallenging power in the economic field as well. Work was collective in nature in the pre-civilisation age, where woman's contribution in domestic chores and man's in hunting were equally valued. But patriarchal family, where monogamy is practised, fails to maintain this gender parity. In the capitalistic mode of production, domestic work is no more considered as social but as personal or private service. Engels (ibid. 80) maintains:

"The wife became the first domestic servant, pushed out of participation in social production...Today, in the great majority of cases, the man has to be the earner, the breadwinner of the family, at least among the propertied classes."

Patriarchy completely deconstructed matriarchy in the world, when the husband claimed equal authority in the

professional as well as domestic sphere. To reinstate gender justice or to bring an end to the man's domination over woman or to create real social equality between them, complete legal equality of rights needs to be introduced. The journey of human civilisation so far indicates that the first condition for the liberation of the wife is to bring the whole female sex back into public industry, and following Engels it can be stated that this cannot be achieved without dismantling the entire structure of the monogamous family: the citadel of gender inequality.

Following the line of social evolution, the contemporary period is witnessing certain dramatic, yet fundamental trends of change. The information revolution has converted the world into a global village (McLuhan and Fiore 2005) involving a considerable development of technology influencing and transforming every aspect of our social, cultural, political and economic life (Castells, 1996; Giddens, 1990; Harvey, 1989; Bauman, 2000). There has been distinct change in the earlier even the modernist value system, ethics, customs and the likes. Older forms of inequalities are crumbling down to give birth to the newer ones. Voices about woman's status have been raised in society quit often. Feminist movement has been launched.

The technological advances in the contemporary period have been successfully reintroducing the women in large numbers in the professional domain of the economy. In the

contemporary period, given the fading benchmark of disparity between men and women in terms of profession, the logical and empirical foundation of the so called monogamous family is under scrutiny. Particularly the way woman are reinforcing themselves at present in every walks of social life, can patriarchal family still exist? Would family be re-defined or the very institution of family would cease to exist in the wake of the 21st century?

The analytical insight poured in by Morgan and Engels, as discussed above, is particularly relevant here to answer this questions. Today's world is an online commercial world, where in a click of a mouse, we get every object of our demand, supplied in no time. Technological innovations and the liquidity (Bauman, 2000) of the contemporary period have been breaking down every social barrier to make inter-human relationships quite receptive. The modern nuclear family has been touched rather deeply by these. Closely related to family the institution of marriage is also being influenced. Monogamous marriage nowadays is no more mandatory as a formal institution for a couple to live together under one roof. The matrimonial hymns have lost their sanctity. The ever increasing number of divorce appeals in the courts is proof enough of the degrading institution. People in the contemporary society seem to believe in the motto "love at first sight and divorce at the next". The increasing tendency of having extramarital relationships is quite noteworthy, though they are antagonistic to the waning sense

of morality. Morgan and Engels have noted this tendency as rampantly present among the males, but today the empowered women are not very afraid to exhibit their mark of 'disloyalty' to the husbands by involving in such relationships willingly. During the early phase of civilisation, motherhood was integrally linked with monogamous marriage but today technology has rendered this notion invalid. The upcoming trend of IVF, surrogate motherhood, sperm banks etc. are increasingly taking away the hitherto important function of reproduction beyond the exclusive limits of family and marriage. Today not only traditional heterosexual couples, but also the single women and same-sex couples can enjoy parenthood at their will. Perhaps, these are some of the important signs of the breaking down of the hitherto existing gender discrimination. Riding on the theoretical orientation of Morgan and Engels, thus, it can be predicted that technological changes which have been weakening the hold of discriminatory patriarchal social relations in our everyday lives is destined to mark a severe blow to the monogamous family whose foundation rests on the very working of historically developed gender inequality. Such a prediction finds support in the assertion of Morgan as he says,

"When the fact is accepted that the family has passed through four successive forms, and is now in a fifth, the question at once arises whether this form can be permanent in the future. The only answer that can be given is, that it must advance

as society advances, and change as society changes, even as it has done in the past. It is the culture of the social system, and will reflect its culture. As the monogamian family has improved greatly since the commencement of civilization, and very sensibly in modern times, it is at least supposable that it is capable of still further improvement until the equality of the sexes is attained. Should the monogamian family in the distant future fail to answer the requirements of society, assuming the continuous progress of civilization, it is impossible to predict the nature of its successor." (Morgan, 1877:499)

The foregoing discussion attempts to throw some light into the dynamic nature of the social reality human beings inhabit. Having its theoretical anchor in the anthropological discourse of Morgan and Engels, the analysis tries to unveil the ever changing pattern of social institutions, particularly, family, marriage and economy. The change in these institutions is contingent upon the change in the level of technology characterising the level of human existence in each stage of evolution. The evolutionary sequence of the institutions and the ideas therein points out their mutable character. The institutions of marriage and family are also, perhaps, no exceptions to this. Throughout the course of human evolution we have noticed the changing face of marriage from group marriage to monogamy and a similar change in the family structure from matriarchal to patriarchal. Such a flow of

change makes the claim of immutability of the patriarchal monogamous nuclear family of the contemporary society invalid. The analysis presented here clearly unveils that the monogamous family is not based on certain eternal or inherent truth but is a product of a long historical evolution. Similarly, the historical defeat of the female sex marked by the replacement of the mother right by the father right in the upper stage of barbarism was not obvious or self-evident truth, but product of particular historical circumstances. As it is produced by certain historical and structural configurations, so it is destined to change with the changes in the latter. Such a rhetorical use of anthropological anecdotes negates the transcendental claim of patriarchy or for that matter monogamous nuclear family to be the only possible natural system for civilised man. At this juncture although we are not in a position to project the future of monogamous family, but the technology induced trend of change witnessed in the contemporary society is important enough to affect its persistence in the days to come. The anthropological data presented here since savagery to barbarism and its analysis while may not be pointing at the end of the institution of family altogether, but certainly is a pointer to either the upcoming change in the structure of the monogamous patriarchal family, or to the emergence of a radically different family structure characterised by a different rubric of gender relations if not equality.

Notes

Gens, genos, and ganasin Latin, Greek and Sanskrit have alike the primary signification of kin. They contain the same element as *gigno, gignomai, and ganamia*, in the same languages, signifying to beget; thus implying in each an immediate common descent of the members of a gens. A gens, therefore, is a body of consanguineal descended from the same common ancestor, distinguished by a gentile name, and bound together by affinities of blood (Morgan 1887).

¹ Where descent is in the female line, as it was universally in the archaic period, the gens is composed of a supposed female ancestor and her children, together with the children of her female descendants, through females, in perpetuity (Morgan 1887).

² Where descent is in the male line ... of a supposed male ancestor and his children, together with the children of his male descendants, through males, in perpetuity (Morgan 1887).

³ The Code Napoleon, which came into effect in 1804 and still the law of France, was a brief, clear collection of legal principles. It was based on common sense and experience rather than on theory, and it was animated by no political or religious prejudice. It granted religious toleration and equality, enjoined civil marriage, and permitted divorce; on the other hand, it upheld strongly the value of family life, the authority of the father, the sanctity of private property, and – as was to be expected from a legislator who held that

"all women are slaves"- the subjection of woman (Ketelbey, 1937: 111).

References

- Bauman, Z. (2000): Liquid Modernity. Cambridge. Polity Press
- Beck, Ulrich. (1992): Risk Society. London. SAGE Publications
- Bloch, M. (1983): Marxism and Anthropology: The History of a Relationship. Oxford. Clarendon Press
- Burgess, E.W., Locke, H.J. and Thomes, M.M. (1971): The Family. New York. Van Nostrand Reinhold
- Castells, M. (1996): The Rise of the Networked Society. Oxford. Blackwell
- Davis, K. (1949): Human Society New York, Macmillan Company.
- Dore, M. (2015): "Early humans had gender equality" Times of India. May 17
- Eagleton, T. (1987): "Awakening from Modernity" Times Literary Supplement February 20
- Engels, F (1884): The Origin of the Family, Private Property and State. Chicago, Charles. H Kerr & Co.
- _____(1891): The Origin of the Family, Private Property and State, (Fourth Edition). Chicago, Charles. H Kerr & Co.
- Giddens, A. (1990): The Consequences of Modernity. Stanford. Stanford University Press
- Harvey, D. (1989): The Condition of Postmodernity: An Enquiry into the Origins of Cultural Change. Cambridge. Blackwell Publishers
- Jameson, F. (1984): "Postmodernism or the Cultural Logic of Late Capitalism." New Left Review, 146, 53-92
- Ketelbey, C.D.M. (1937): A History Of Modern Times From 1789, (5TH Edition). New Delhi, Oxford University Press
- Lyotard, J. (1984): The Postmodern Condition. Manchester. Manchester University Press
- MacIver, R.M and Page C.H (1937): The Society, New York, Macmillan Company.
- McLuhan, M. and Fiore, Q. (2005): The Medium is the Massage. Berkeley. Gingko Press
- Morgan, L.H. (1877): Ancient Society. Chicago. Charles H. Kerr and Company
- Parsons, T. and Bales, F.B. (1955): Family, Socialisation and Interaction Process. London: Routledge&Kegan Paul
- Westermarck, E. (1891): The History of Human Marriage. London. Macmillan

Prisoners of Gender: Law Sexuality Interface in India

Molly Ghosh

Abstract

In India there is now politicization of transsexuals with demands for the recognition of their social, political and economic rights. The politics of gender and sexuality has become intertwined with other politics resulting in the increasing demand for the recognition of the LGBTs (lesbian, gay, bisexual, transgender) as marginalized communities. Conceptual clarity of the term transgender and transsexual is an essential prerequisite of any demand for their inclusion. LGBTs is also not an amorphous group who can be covered under a single comprehensive law. The present paper would like to highlight the problems that still exist in India in conceptualizing transgender. It would also point out how the existing laws in India are conditioned by normative heterosexuality and thereby insufficient to deal with the concerns and interests of these communities.

Introduction

The Pinki Pramanik¹ case of 2012 in West Bengal raised in the public sphere certain questions on law, sexuality and the role of the state in this regard. It questioned the relevance of our legal system to issues of gender that defy the established binary logic or the cases of non-heteronormative sexuality. Pinki was subjected to gross human rights violation and the charges against her along with the concomitant responses of the state highlighted the emerging dimensions of gender identity and the lacunae of our laws on issues of gender or sexuality. The Pinki Pramanik case is not an exception. There have been several similar such instances earlier also where individuals who do not fit into the modernist binary perception of gender, i.e. male/masculine and female/feminine have been subjected to massive infringement of rights. Our legal system is conditioned by normative heterosexuality and binary gender division and except a few piecemeal legislative measures by way of judicial decisions, the entire framework has remained insufficient to deal with the rights of these marginalized people. Any attempt to address the issues and concerns of these people needs a conceptual clarity regarding who comprises these groups. This conceptual

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clarity is again difficult to arrive at considering the prevalent fluidity and multiplicity of gender identity categories. There has been politics of sexuality for ages with heterosexuality asserting its position as normal designating others as deviant. From mid twentieth century onwards sexuality got increasingly politicized with the second wave of feminism of the 1960's and 1970's including it in their agenda. From 1990's onward postmodern feminism and the subsequent queer studies revolutionized the idea of gender identity and sexuality. An understanding of the problem of defining alternate sexuality is crucial to examine the prospect of law sexuality interface.

The Idea of Sexuality

If we make a historical review of the idea of sexuality, we will find that it is a modern phenomenon. Sexual activities existed since time immemorial but the way people experienced them have been different. Sexual culture was never a homogenous one in the ancient world and there were substantive historical and regional variations. The ways in which sex was conceptualized and the cultural meanings attached to it were radically different from that which exists today (Mottier, 2008:4). This period has been referred to as "before sexuality" by Michel Foucault, David Halperin and others. Male to male sex and relationships were in many instances socially acceptable and such instances are often reflected in the literature, art and philosophy of classical antiquity. Greek poetry represented and even promoted the idea of armies composed

of male lovers. There was also the practice of 'paederastia' whereby a pedagogic and erotic mentoring relationship prevailed between an adult male and a young boy. Mottier says that it was conceived as a normal part of the education of a young man through which the latter was mentored for his citizenship role. Sex between women was not much referred to other than the works of the 7th century B.C poet Sappho from Lesbos. From the early medieval period sex came to be associated with Christian morality. Christian ethics devalued any form of non-procreative sex. It idealized sexual abstinence, procreative sex and fidelity within monogamous marriage. The Catholic Church authorities approved procreative sex within marriage and suppressed any form of non-procreative sex. 'Sodomy' was used as an umbrella term to refer to a horde of non-procreative sexual practices that were designated as "unnatural". Concomitant to the religious dictums in various places of the west there developed provisions of legally prosecuting sodomy".

The Enlightenment logic of science and rationality and its critique of any sort of religious dogma led to new ways of thinking about sex. There developed research on the science of sex or 'sexology' and gradually there came the modern idea of sexuality which was no longer viewed as a universal biological phenomenon but one with a social and cultural connotation. It was realized that a structure of power operates through sexuality. Scholars like Anne Fausto-Sterling argued that it was by the end of

middle ages that biological hermaphrodites were compelled to choose an established gender role and stay within that limit. Penalty for any sort of deviation and transgression was also introduced. But before this, sex was not necessarily fixed into a binary model. It rather existed as a vast continuum (Fausto-Sterling, 2002; 469). From the ancient Greeks till the late 18th century, male and female bodies were understood by medical texts to be fundamentally similar. From 18th century onwards, biomedical discourse began to emphasize differences between sex rather than their similarities. The feminine essence that was perceived as the basis of differentiation between women and men was sought to be located in different parts of the body in different times. In the 18th century, the uterus was perceived as the basis of femaleness, in the 19th centuries it was the ovaries and by the 20th century the essence of femininity became located in the hormones (Menon, 2008; 231). From the 19th and 20th centuries the biological model of sexuality became popular. In this model, reproductive instincts were perceived as biologically natural and any deviant instinct was designated as abnormal. Heterosexuality was regarded as the norm and homosexuality as an abnormal departure from the norm that needed medical advice. Thus, sexuality was mainly associated with heterosexuality. This biological model of sexuality was challenged from within the sexological discourse and also from the Freudian ideas of sexuality (Mottier, 2004; 46). The categories like natural sexual instincts, normal and

abnormal sexuality, heterosexuality, peripheral sexualities became problematized. The emergence of anti-essentialist perspectives in various disciplines of social sciences since the 1970's posed another challenge to the biological model. The idea of sexuality as natural or biological was rejected and it came to be conceived in terms of social and cultural nature of sexual experience. The work of Michel Foucault made landmark change in the way sexuality was conceived. He explained how categories like homosexuality came to be defined as perversion, deviant or other. His genealogy of the sexed subject in the West showed how the structure of power operates through sexuality and how one's sexual desire and its acting through everyday routine life leads to one's subjecthood. It is now understood as a historically and culturally situated domain of experience shaped by other relations of power like class, caste, race, gender. Sexual identities are not merely conditioned by natural instincts; rather they are now understood as social and political constructs. Some variants of the second wave of feminist theory and activism politicized issues like the right to sexual pleasure, right to say no to conception, political lesbianism, right to decide on contraception and abortion. They criticized obscenity and anti-homosexuality laws and argued for legalization of abortion, popularization of birth control information and free love between equal partners within a freely chosen bond. Whether this sexual revolution and the resultant permissiveness brought more changes to

the field of heterosexuality or homosexuality is debatable but it undoubtedly opened up possibilities of conceiving sexuality outside the binary view and delinked from procreation.

Sexuality has been a criterion found in Indian pre-modern texts and laws also. Homosexuality was never an unknown feature in ancient Indian society. Vatsyana in his '*Kamasutra*' referred to homosexuality. Transgender characters were found in ancient epics like '*Shikhondi*' and '*Brihonnola*' of Mahabharata. *Shikhondi* was a male caged in a female body, who later with the assistance of '*Yoksha*' changed himself into a male. So, *Shikhondi* can be called a transsexual. Male homosexuality was also referred to by Kautilya and Manu. Both of them treated male homosexuality as one of the cognizable offences but none of them made the offence heavily penalized. Sexuality got represented in Islamic thought also. Zia-ud-din Barni, a political thinker during the era of the Delhi Sultanate gave several moral strictures on sexuality like severely penalizing male homosexuality and womanly male indulging in prostitution. But interestingly he argued that there should be moral strictures in law but if anyone practices anything prohibited by law privately and secretly not making it a public issue then there should not be investigations on such activities. The Sufi and Bhakti traditions also drew upon notions of androgyny and often reject the binary model of sex. The following lines of a 12th century Shaivite

poet, Basavanna, makes it more evident (Menon;2008;226)

*Look here, dear fellow
I wear these men's clothes
Sometimes I am man,
Sometimes I am woman....*

Defining Transgender

Transgender became the most popular term used to refer to people who do not fit into binary man-woman or masculine-feminine conception or people outside normative heterosexuality or people who seek cross identification or who want to change one identity into another. It is mostly used as a generic term to refer to a wide variety of people with different social and physical orientations but who defy the conventional binary sex/gender distinctions. Chris Beasley points out that until 1990's people who sought recognition for cross - identification, identity migration or ambiguous identification were medically and socially divided into two groups. On one hand, there were people who sought recognition for a sexed identity/gender different from the sex/gender assigned to them by birth. They were designated as transvestite, transsexual or transgender, and as people with some psychological problem. They can be further categorized in terms of the extent and kind of change in their sexed identity/gender that they seek for. Transsexuals are those who want a change in their bodily sex through medical intervention whereas transgender refers to people adopting a sexed identification different from that assigned at birth but without any medical intervention. Transvestites undertake

more temporary identity migration without any medical intervention. (Beasley, 2005;152).Gay and lesbians can be found within the transgender and transvestites and they go for cross dressing also. They seek "erotic pleasure derived from dressing in the clothing of opposite gender or to a more general wish to adopt the social role of opposite gender. It is linked with relatively temporary dress/gender role change with psychiatricdiscourses." (Beasley,2005; 159).On the other hand, there are the people who are physically ambiguous in their sex at birth or later. They are hermaphrodites or intersex people or people having a physical problem. Intersex is also now a broader level for a range of bodily possibilities in which chromosomal sex, gonad sex, genital sex or secondary sex characteristics are inconsistent with one another. Since 1990's in the field of transpolitics, there were overlapping of these categories as all of them had in some way or other a sexed category crisis or crisis of gender boundary crossing. But all of them do not question the idea of fixed identity. Rather on the question of identity there is a debate within the field of transpolitics. The transsexual theorists like O'Hartiganⁱⁱⁱ and Prosser^{iv} argues for male to female or female to male category .They don't undermine normative binary distinctions. They seek to provide the body a gender 'home' other than that assigned by birth. Queer theory, on the other hand dismantles the normative binary gender division .They delegitimize the notion of fixed gender identity and views it as socially constructed and internally unstable and

incoherent. Instead of promoting inclusiveness within the traditional binary gender order, queer theory seeks to transform the social order by destabilizing the heterosexual norms as well as the stable gay or lesbian identity.

Inspite of all the debates, multiplicity of differences and fluidity of these categories, in popular parlance use of the generic term transgender is widely prevalent. The impossibility of accommodating all within the binary division has given rise to a tri-nary perspective, where whoever does not fit into the binary division is referred to as transgender or third gender. Coalition politics between different sexual minorities are symbolized by the label LGBTI (Lesbian, Gay, Bisexual, Transgender and Intersexual community).The LGBTI is also not a amorphous group and any issue of rights must take serious note of the differences within this group. Even within each of these categories there can be further difference on lines of race, caste or class. Black homosexual activists claim that racism persists in the gay and lesbian rights movement and black lesbians or gays are underrepresented within this movement. There are multiple differences among the lesbians, gays, bisexuals and transgender. In the process of evolving a true collective lesbian identity in India, there have been many tensions and undercurrents during the 1980's and 1990's. Different categories of lesbians like butch lesbians, femme lesbians, lesbian mother, academic lesbian faced the dilemma over who would represent the lesbians

(Biswas,2007;276) .The lesbian activist Ashwini Sukhthankar has narrated the path of lesbian politics in India moving from understanding of secure self-evident lesbian identity to more multiple, fractured and indefinite sexual identities.

Law and Sexuality in India

Since 1990's the assertion of rights of sexual minorities became intense in various places of the world including India. Any discourse on rights must take cognizance of the legal framework for rights cannot be ensured without legal reforms. Indian laws are, like elsewhere, shaped by the norms of heterosexuality. Heterosexual norms are implicit in the provisions of civil as well as criminal laws like laws relating to inheritance, marriage, domestic violence, rape and other forms of sexual offences. The legal system of ancient India, represented by *Manusmriti*, and the *Mitakshra* and *Dayabhaga*^{vi} system of medieval India were also dictated by normative heterosexuality though any deviant norms were not as strictly punishable as it was under the law codified by the British colonial rulers. *Manusmriti* mentions the prevalence of homosexuality and prescribes light penalization for homosexual relations between men with the objective of censuring such relations. These penalties include measures like bathing with one's clothes on, one night fast or consuming cow's urine or dung. Sexual relations between women were subjected to harsher terms. It was the British colonial administration that criminalized the non-procreative sexual practices.

The Constitution of independent India guaranteed Right to Equality (Art 14 &15) and the Right to Freedom (Art-19-22) whereby discrimination on the ground of sex of a person was prohibited. Right to Life guaranteed under Art 21 was further interpreted by the courts as inclusive of the Right to live Life with Dignity^{vii} and Right to Privacy^{viii}. The Universal Declaration of Human Rights(1948) also guarantees the right to privacy (Art 12) and so does the International Covenant on Civil and Political Rights of which India has been a signatory. Any attempt by the state to intrude with a person's sexual orientation is an encroachment of his/her privacy. In spite of all the provisions for equal treatment in the eyes of law, the legal system itself did not entail such equality. There existed Sec 377 of the Indian Penal Code(IPC), a legacy of the British colonial administration that stood in contravention to all constitutional provisions of equality. Apart from that heterosexuality is implicit in several other provisions of the civil code as well as the criminal code.

The most important response of the Indian legal system to deal with sexuality was the decriminalization of Section 377 IPC in 2009. Section 377 of the IPC criminalized sodomy between consenting adults. It penalized all sex other than the heterosexual penile-vaginal with an imprisonment up to ten years. This article was a colonial product and the history of anti-sodomy laws can be traced to Great Britain. Inspired by the Christian idea of sexual purity, the first records of sodomy as a crime under

common law in England was chronicled in the Fleta 1290 and Britton 1300. Both of the texts prescribed that sodomites should be burnt alive. The Buggery Act of 1533 penalized sodomy with hanging. Queen Elizabeth I reenacted it in 1563 and it became the charter to be followed by all British Commonwealth nations later. The British introduced the anti-sodomy laws in India in 1861. Section 377 criminalized anyone who "voluntarily has carnal intercourse against the order of nature with a man, woman or animal". So sexuality was perceived as a having a natural orientation and those not pertaining to that natural normative orientation were liable to be penalized for being deviant. There was a clear cut line of division between procreative and non procreative sex with the latter being designated as unnatural. The use of the term "voluntarily" in this section makes it imperative that consent of the individuals concerned was not to be treated as a defense under this section and there was no provision regarding age also. Apart from Section 377, during the colonial period eunuchs were also criminalized when the Criminal Tribes Act, 1871 was amended in 1897 to include the eunuchs. This provision was later repealed but the stigmatization continued.

It was only in 2001 that the legal framework in this respect was questioned when Naz Foundation, a non-governmental organization (NGO) working on acquired immuno-deficiency syndrome (AIDS) related issues filed a petition in the Delhi High Court

challenging Sec 377 as violative of the constitution and demanding decriminalization of homosexuality (Frontline, December 20, 2003). However, earlier also a petition on the same issue was filed in Delhi High Court questioning the constitutional validity of this section¹⁸. Through these petitions and other subsequent related activism, the right to have different sexuality was asserted. The NGOs challenged the legality of Sec 377 on the ground that it targeted homosexuals as a class and thus violated the rights of LGBT guaranteed under Art 14, 15 and 21 of the Indian Constitution. The law has been draconian in the sense that it has been misused by police to harass people with alternative sexualities. The Delhi High Court, in its order, decided to decriminalize Section 377 in 2009 as it found the section violating the Right to life under Article 21 of the Indian Constitution and also the Right to privacy guaranteed under an expanded view of the same article. The Delhi High Court order however was challenged in the Supreme Court in 2012 and the latter said that decriminalizing Sec 377 could have a bearing on other sexual offences enumerated under the IPC.

The state has also made some initiatives, though not very significant ones, to move away from the binary understanding of gender identity through some legal and administrative actions. In April, 2014 the Supreme Court of India recognized transgender as the third gender and asked the centre to include them as socially and educationally backward class. It also considered

nonrecognition of gender identity as violative of Art 14,15,16,19 and 21 of the Constitution of India³. The Census also for the first time included the transgenders. The private member bill on Transgender rights have been passed by the Rajya Sabha in 2015 guaranteeing provisions for social and financial inclusion of transgenders. It provides for job reservation of transgenders and also recommends commission for transgenders in every state. But still now only West Bengal and Tamil Nadu has formed transgender welfare board. Keeping the issue under the purview of state governments makes it a federal subject with the possibility of leading to inter-state disparities in future. The Central Government has earlier decided to include the category of 'other' gender apart from the male and female category in passports and voter identity cards and claims to give legal recognition to the transgender community through this measure. But who comprises this 'other' category is not at all clear. For the definition we have refer to the Supreme Court. The Supreme Court says, "Transgender is generally described as an umbrella term for persons whose gender identity, gender expression or behavior does not conform to their biological sex. TG may also takes in persons who do not identify with their sex assigned at birth, which include *Hijras*/Eunuchs who, in this writ petition, describe themselves as "third gender" and they do not identify as either male or female. *Hijras* are not men by virtue of anatomy appearance and psychologically, they are also not women, though they are like women

with no female reproduction organ and no menstruation. Since *Hijras* do not have reproduction capacities as either men or women, they are neither men nor women and claim to be an institutional "third gender". Among *Hijras*, there are emasculated (castrated, nirvana) men, non-emasculated men (not castrated/akva/akka) and inter-sexed persons (hermaphrodites). TG also includes persons who intend to undergo Sex ReAssignment Surgery (SRS) or have undergone SRS to align their biological sex with their gender identity in order to become male or female. They are generally called transsexual persons. Resultantly, the term "transgender", in contemporary usage, has become an umbrella term that is used to describe a wide range of identities and experiences, including but not limited to pre-operative, post-operative and non-operative transsexual people, who strongly identify with the gender opposite to their biological sex; male and female."⁴

Considering that transgender is not an amorphous group it can be said that this measure can benefit more the hermaphrodites or intersex people. Whether if the other categories of people who are often included within the transgender can claim their identity as transgender based on self-endorsement is not clear and obviously they don't always demarcate them as 'others'. Moreover, while claiming a particular sexual identity should the statement of the person concerned will be enough is a critical question. Since law is trying to include alternative sexualities, one's

sexual identity can be the determinant of various other legal safeguards or welfare entitlements in future. In this context, whether it is possible for the state to ensure authenticity of sexual identity before ascertaining it through official documents like voter identity cards or passports is doubtful. The Pinki Pramanik case in West Bengal has even shown that how complicated it is even for the medical establishment to ascertain the gender of a person. The state recommended medical boards took prolonged time to decide on a single issue. Whether the state machinery can officially authenticate sexual identity of a person is also questionable.

Decriminalization of Sec 377 was interpreted as a legal recognition of homosexuality and was hailed by lesbian and gay activists groups. Concomitant to the question of legitimizing a sexual relation there comes the issue of sexual offences. If consensual non-procreative, non-penile sex can be allowed and treated as private sphere of an individual not to be intruded by the state, any such act without consent deserves to be treated as sexual offence. To accommodate this as well as the recommendations of 172nd report of the Law Commission of India, the Union Cabinet approved the proposal for introduction of the Criminal Law (Amendment) Bill, 2012 in the Parliament. This amendment seeks to substitute the term 'rape' by 'sexual assault' in Sec 375, 376, 376A, 376B, 376C and 376D of the CrPC to widen the scope of sexual assault and making it gender neutral.

Under the proposed amendment, non-consensual non-penile sex is to be treated as sexual assault and such assault is no longer to be understood as perpetrated by male to female. Male, female and transgender all are to be covered under this inclusive term of 'sexual assault'. Since the government is providing for legal identification of third gender through its inclusion in passports, application forms and voter identity-cards, whether claiming justice under the proposed sexual assault laws will require prior confirmation of transgender identity by the state is a crucial question.

Sec 497 of IPC defines adultery as another sexual offence. Consensual sexual intercourse with a wife of another man without the consent and connivance of her husband amounts to adultery which is a punishable offence. Adultery law is conditioned by heterosexual and patriarchal norms. Adultery is also dealt with under matrimonial law where it is treated as a ground for divorce and entitles the wife for maintenance. Here also adultery is defined by heterosexual norms. If sexual offences are to be made gender neutral and inclusive of alternative sexualities then adultery law needs to be amended so that any homosexual liaison of a married person pursued simultaneously with his/her marital relations also falls under the purview of adultery. Such liaison and sexual intercourse is common in case of bisexual persons or in case of homosexual persons coerced into a marriage and often lead to complications, violation of marital rights and even suicide.

Rights of people with alternative sexualities can never be ensured without due legal recognition of same-sex partnerships. A measure of decriminalization through repealing Sec377 is a piecemeal provision in this regard. If the court held that restriction of homosexual unions is an infringement of their basic fundamental rights guaranteed by the Constitution, there should also be proper legal safeguards to ensure multiple other issues that are associated with sexual partnerships. Rights does not merely mean noninterference of the state; rather protection of rights also need positive interference of the state. Presently the Indian state has assumed the role of non-interference in matters of alternative sexualities. Heterosexual unions are recognized and protected within the framework of monogamous marriage acts²¹. But there are no such protections in case of same-sex partnerships. If you legalize same-sex union you must also allow any battered or estranged partner to claim the rights of divorce, alimony, maintenance, custody rights of children and other measures of state support in case of dispute. There are many issues that are associated with long-term sexual partnerships. Among these are the right to be defined as next-to-kin for purposes of visiting and making medical decisions when a person is hospitalized; to inherit property; to claim custody of co-parented child after divorce or a partner's death; to share a partner's benefits provided by the employer; to share and inherit social security and welfare payments (Vanita,2007;351). Marriage can no longer be linked to

procreation particularly with the development of the practice of adoption of children and the evolution of IVF technology and child-bearing through surrogate motherhood. All of these are legally recognized in India. If a same-sex couple opt for children through any of these measures there are no guidelines for the guardianship of the children, their inheritance rights, their custody issue on dissolution of such partnerships. There also comes the pertinent issue of maintenance rights of same sex partners from their children. Same sex marriages in various parts of India have been chronicled by Ruth Vanita, which shows that such marriages are often recognized by customs. She raises the question that if Indian marriage laws recognize as valid any marriage performed according to prevailing customary rites in any partner's community even if such marriage is not registered under civil law, then why same-sex custom approved marriages are not recognized as valid (Vanita,2007;349).

In popular parlance as well as in academic literature there is confusion in the definition of transgender, transsexual, and transvestities. Following Chris Beasley's categorization, pointed out earlier, we can treat transsexual as those persons who want a change in their bodily sex through medical intervention or who went for getting their gender affirmed by undergoing a change of sex through medical intervention. This intervention is termed as Gender Affirmation Surgery (GAS). Though GAS is legally recognized in U.K, U.S.A, Netherlands and various other countries,

in India there are no laws governing the surgery or provisions to address the concomitant social and legal issues that the person undergoing GAS faces. But the number of GAS is also gradually increasing in India. A combined package of hormone therapy, cosmetic surgery and genital surgery, GAS is usually guided by Harry Benjamin International Gender Dysphoria Association's (HBIGDA)^{xiii} Standards of Care. There are several essential conditions of opting for a GAS and a person has to go for a series of consents including filling up spousal consent form whereby spouse of the concerned person gives his/her consent for the surgery. But the law is silent on several issues that a gender reassigned person would have to cope with. The Labour and Industrial Laws, Service Acts, Income Tax Act have different provisions for man and woman and whether a person can shift status is not clear. Different civil laws like the Hindu Marriage Act, Succession Act, Adoptions and Maintenance Act also need to be changed to accommodate these people. Since uniform civil code has not yet been materialized in India, change in civil laws would need to address all categories of existing civil laws. Spousal consent is required for GAS but post-surgery this incident cannot be a ground for divorce though logically speaking the definition of marriage as a heterosexual marriage no longer fits in. The state is not disallowing GAS treating it as personal sphere of the individual. But when to make the person eligible to enjoy entitlements is concerned it can no longer be aloof treating these issues as

part of personal sphere. To make a transgender or transsexual person enjoy different entitlements, the state need to take special care of undertaking policies with special focus and legal reforms in different sectors. Equality in terms cannot be attained without an active role of the state. It cannot be done without their political inclusion. If the state remains detached from the gender choice of a person, the person is deprived from the entitlements that he/she is supposed to enjoy as citizens. Gender categories existing outside the binary concept are recently covered by Census. It would be difficult to include them completely in the Census considering the 'personal' and 'private' character of this identity and the social stigmatization attached with it. But inclusion in Census is undoubtedly a prerequisite to their inclusion in developmental policies.

Conclusion

What should be the position of the law and the state in the matter of sexuality is a difficult question to answer. As we have seen that we still lack conceptual clarity of the different types of alternative sexualities. LGBTI has a broad spectrum comprising of different sorts of people. If the state needs to address their issues, it has to be inclusive of the needs of each of these categories. It is problematic to bring them under a single umbrella. The possibility of designing laws covering such multifarious categories is problematic. Alternative sexual identities have certain intricacies which the modern system of law with its homogenizing tendency cannot deal with. But at the same time in

a modern democratic system the state needs to be sensitive to divergent sexual minorities and this can never happen without making the laws sensitive. And therein lies the paradox. Without the law being sensitive you cannot guarantee rights and rights cannot be ensured unless there is conceptual clarity of the identity issues. Sexuality is a rather fluid and fuzzy concept and providing it with a legal definition is a critical endeavour. Perspectives like Queer theory dismantle the very idea of gender identity. If gender identity is dismantled you cannot claim rights on that basis. The modern state system, its institutions and legal framework are all influenced by post-enlightenment western concepts. This idea of state is based on the edifice of European modernity. State is an outcome of modernity and homogenization is inherent in its structure. The origin of the modern state lies in the development in

post-enlightenment Europe of a concept of a powerful centralized rule that subordinated all other institutions and groups in the society. This state always intends its citizens to follow the binary gender division and heterosexual life. The legal system is so much conditioned by heterosexual norms that to address these issues the entire framework needs to be revamped and reoriented. How far the prevalent structure of state with the logic of its foundation can accommodate demands that defy that logic is also questionable. A few piecemeal measures can only complicate things. Should the state adopt a position of noninterference in matters of sexuality or take a positive role in their political inclusion is the first and foremost thing that needs to be decided. And if a positive role is to be taken how that is to be accommodated within the existing structure is another pertinent question.

¹ Pinki Pramanik, a female Asiad gold medalist was arrested by Kolkata Police on June 2012 on alleged charges of rape made by a woman. Unable to ascertain her gender or sexual identity, the police kept her in custody for 25 days in a male ward. During this period different medical boards at the state tried to ascertain her identity through gender verification tests the reports of which were inconclusive. She had to go for gender determination tests in two government hospitals. Finally it was ascertained through karyotyping. The report said she had male chromosomes but not compatible genitals so she was not capable of committing rape.

² The Buggery Act was enacted in Britain in 1533 which prosecuted sodomy. In 1432, Florence created the Office of the Night, a magistracy whose objective was to prosecute sodomy. Augsburg, Venice, Geneva also enforced sodomy as a punishable offence.

³ Margaret O'Hartigan, 'Changing Sex is not changing gender', SoundOut, May 1993. Hartigan

argues for male to female transsexuals and she does not believe in gender crossing.

⁴ J. Prosser, *Second Skins: The Body Narrative of Transsexuality*, Columbia University Press, New York, 1998. Prosser argues for female to male transsexuals and upholds gender as an essential category of identity.

⁵ Mitakshara of Vijnaneshwar of 11th century was one of the most distinct and dominant schools of law which later became an important source of Anglo-Hindu law. This system of law was widely prevalent in most of the parts of British India. There were several regional schools that were categorized as sub-schools of Mitakshara like Mithila, Benares, Bombay and Dravida schools. [Agnes, 1999; 13].

⁶ Dayabhaga of Jimmutavahana of the 12th century was the other school of law which was the leading authority in Bengal. [Agnes, 1999; 14].

⁷ In *Francis Coralie Mullin vs Union Territory of Delhi*, the Supreme Court of India explained the right to dignity as right to live with human

dignity where bare necessities of life are ensured like adequate nutrition, clothing and shelter, facilities for reading, writing and expressing oneself in diverse forms, freely moving about and mixing and commingling with fellow human beings.

¹ In *Kharak Singh vs the State of UP* in 1964, the Court held "Right to Privacy" as an integral part of the "Right to Life" under Article 21. The same view was reinforced again in 1975 in *Govind v. State of MP*. Right to Privacy was defined as "right to be left alone" with the citizen having the privacy of his own, his family, marriage, procreation, motherhood, childbearing and education. Privacy is a broad concept encompassing right of protection against intrusion into private life and control of sexual and reproductive rights.

¹ In 1994, the Aids Bhedbhao Virohi Andolan (ABVA), a human rights organization, filed a petition in the Delhi High Court challenging the constitutional validity of Section 377. But the petition was never heard as the ABVA became defunct soon after. After the Naz foundation case, the high court clubbed both of the petitions. [Frontline, Dec 20, 2003]

¹ www. <http://supremecourtindia.nic.in/outtoday/wc40012.pdf> accessed on 24.12.2014

¹ www. <http://supremecourtindia.nic.in/outtoday/wc40012.pdf> accessed on 24.12.2014; pp 9-10

¹ Hindu Marriage act 1956; Special Marriage Act 1954; The Parsi Marriage and Divorce Act 1988; Indian Christian Marriage Act, 1872.

^{1,2} Harry Benjamin established the scientific management of transsexualism. HBGDA was formed in 1979. This association formed the transsexual standards of care and established the criteria for diagnosis and scientific management of this condition as well as the process of surgery. This standard was periodically revised and the latest one was published in 2001. The HBGDA is presently known as World Professional Association for Transgender Health. [<http://www.ncbi.nlm.nih.gov/pmc/article/PMC845370> accessed on 5.9.12]

References

- Mottier, V., *Sexuality A Very Short Introduction*, (2008), pp 4-18, 46, Oxford University Publications, New York
- Fausto-Sterling, A., 'The Five Sexes: Why Male and Female Are Not Enough' in Christine L. Williams and Arlene Stein eds, *Sexuality and Gender* (2002), pp 479, Oxford, Blackwell
- Menon, N., 'Gender' in Rajeev Bhargava and Ashok Acharya eds *Political Theory An Introduction* (2008), pp 227, Pearson, New Delhi
- Beasley, C., *Gender and Sexuality* (2005), pp 152, 159, Sage, New Delhi
- Biswas, R., 'The Lesbian Standpoint' in Bose, B and Bhattacharya, Seds *The Phobic and the Erotic Politics of Sexualities in India*, (2007), pp 276, Seagull Publications, Calcutta
- Agnes, F., *Law and Gender Inequality*, (1999), pp 16-18, 46, Oxford University Publications, New Delhi
- Vanita, R., 'Same Sex Marriage in India' in Bose, B and Bhattacharya, Seds *The Phobic and the Erotic Politics of Sexualities in India*, (2007), pp 349-351, Seagull Publications, Calcutta

Death and Drama in Mahesh Elkunchwar's 'Necropolis'

Maumita Chaudhuri

Abstract

Aasakta's stage reading of Mahesh Elkunchwar's essay Necropolis uses the power of the spoken word to conjure vivid images of the writer's memories and musings. His personal essays on the other hand, untrammelled by the demands of theatre, luxuriate in words. Necropolis positively bursts with memories, speculation and sentiment, expressed fulsomely in supple, lyrical prose, sonorous with echoes from the 700-year-old history of Marathi literature. This paper will eventually analyze each and every aspect of Necropolis.

Keywords: Theatre, Literature, Aasakta, Theatrewallahs

Introduction

This new piece from Aasakta is a theatrical presentation of an article by renowned playwright Mahesh Elkunchwar. This article titled Necropolis had appeared in a magazine a few years ago. In his visit to Pakistan, Mr. Elkunchwar went on to visit Makli (near Karachi), the world heritage town of tombs. The article is the outcome of the psychological movement witnessed by Elkunchwar in his trip in the arid town of the dead from the Sindh region. Necropolis, beginning as a plain, dry narrative, steadily progresses to unfold a kaleidoscopic memoir of the playwright in an autobiographical manner. Sometimes it takes you to the emotional landscape of the mind and at others it talks to you candidly about past events and people. Three actors unfold the entire spectrum before us in the theatrical presentation. This is not a conventional drama piece nor is it an abstract representation of the article. The tone and narrative style of "reading an article" is maintained throughout the performance and yet several interactions take place to depict scenes from past, present and in the virtual space of the mind or the imagination.

Director ohitTakalkar's *Necropolis* was first performed as a birthday gift for playwright Mahesh Elkunchwar, who

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turned 71 in October 2012. Elkunchwar wrote *Necropolis* as an essay for the Marathi journal *Mauj* in 2007, unsettled by the lifelike memories of people he had forgotten, which were unearthed on a trip to Makli, a city of tombs in Pakistan. The dramatized reading performed by Takalkar's Pune-based experimental theatre group Aasakta, will be staged in the city this fortnight and does much to evoke the playwright's legacy. While the text remains unchanged, Takalkar has decided to layer the mental universe of *Necropolis* with references from his own works. "All the Elkunchwar plays are the guide to this piece," said Takalkar, who has previously directed Elkunchwar's *Garbo* and *Pratibimb*. The dramatized reading is performed by three actors, Anita Date, Omkar Govardhan and Ashish Mehta, in the guise of three characters from Elkunchwar's *Yuganta*, a trilogy based on his childhood memories of living in a mansion. (Ancheri, 2013)

Theatre historian and critic Shanta Gokhale said that some of Elkunchwar's relationships recur in his writing, particularly those with his mother and the domestic help who was almost a childhood guardian. The deep emotional impact of Elkunchwar's autobiographical writing allows theatre wallahs and audiences to relate to his world, like the essays in *Maunraag*, which were presented as monologues by director Chandrakant Kulkarni at a revival of Elkunchwar's plays in 2009. "*Maunraag* is about his village, and a lot of people have this kind of nostalgia in

their own lives," Gokhale said. "They are also thinking back to their childhood and the people that they left behind." Elkunchwar faced a blizzard of memories about people he had forgotten in his past in *Necropolis*, but Gokhale said that the work holds more than sentimental appeal. "The quality of writing in *Necropolis* is much more cerebral," Gokhale said. "The characters are sometimes real and sometimes symbols." (Ancheri, 2013)

The Drama

The stage is set with a low, tomb-like structure standing in the middle of a wide square of dried leaves. A heavy silence pervades the air, intensified by the persistent whistling of the wind. Two men in black and white walk around the tomb speaking of remembered people, characters, sounds and scents. They are, interchangeably, the narrator and the men of his memories. A woman enters frequently dressed in different garbs. She embodies the women from the narrator's past and from his readings of literature and myth. (Gokhale, 2010)

The narrator in real life is playwright Mahesh Elkunchwar. The men and women brought to life on the stage, are people who lay buried as memories deep in the recesses of his mind till he visited Makli, the city of tombs outside Karachi. In that surreal setting, they rose unbidden from the subconscious, bringing with them questions about life and death. Are the dead more alive than the living? Do they rest with eyes open or closed? Do they dream? Do memories and dreams turn life into an inescapable

trap? Are we alive when we are remembered and dead when we are forgotten? Elkunchwar has written a contemplative essay called *Necropolis* mulling over these questions.⁴

While the actors in *Necropolis* are often describing the relationships they identified with, Takalkar also focused on the writing. He mirrored the masterful structure of Elkunchwar's scripts by allowing the action to unfold neatly around a tombstone in the centre of the stage. "Mahesh briefly states that dry leaves were just strewn around the tombstone but Mohit made a perfect square with the dry leaves around the tomb, and all the movements were choreographed accordingly," Gokhale said. *Necropolis* differs from other Aasakta productions in its emphasis on the spoken word. "I usually avoid working extra on the way the actors speak because of the danger of having everybody sound the same," said Takalkar. "But with *Necropolis*, the words were all we had."⁵

Mohit Takalkar, director of Aasakta, found the essay profoundly moving and decided to transpose it to the stage. The performance was staged at the Literature Live Festival on Sunday, following on from Elkunchwar's witty, enlightening speech about his journey as a playwright. *Necropolis* is arguably the biggest test Takalkar has set himself to date. It is pure narration with little or no dialogue. Elkunchwar's language is literary, resonant with references from multiple sources. The actors Ashish Mehta,

Omkar Govardhan and Anita Date have obviously worked very hard to absorb its rhythms and turn it into the spoken word. Their performance was spell-binding. They caressed every word, savoring its sound and meaning, allowing Elkunchwar's sinuous sentences to flow with the natural ease of daily speech, while their literary quality was kept intact.⁶

Gokhale said that older members of the audience often preferred the original productions of Elkunchwar plays written three or four decades ago, as recent productions like Aasakta's *Garbo* didn't seem to rediscover the script or comment on contemporary times. But she was impressed by the chaste enunciation and effortless delivery in *Necropolis*. "A lot of people today don't speak any language as it should be spoken on stage," said Gokhale. "*Necropolis* has a much crafted, literary language and Mohit theatricalised the language without diluting the literary quality of the words." *Necropolis* has run longer than Takalkar expected. "I was very apprehensive as the play has a kind of morbid quality and Elkunchwar's language is a bit heavy," said Takalkar. While some audience members approached the group after shows "with eyes welled up and full throats", others said it was his best production. "I was a bit surprised because I consciously didn't use the sets, music and projection that is usually part of my staging; it's a bare, simple presentation," the director said.⁷

Earlier, Elkunchwar had confessed that he was at a point in his playwriting career when he ruthlessly pared down words, allowing much that was significant to remain unsaid. Cut all the flab was the rule. Sonata for instance, had very little dialogue, much of it non-sequential; but its sub-text was heavy with meaning. It is courageous of MohitTakalkar to have ventured to put this difficult piece of writing on stage. Necropolis is a radical departure from his earlier work which has been dominated by visual virtuosity and kinetic energy. In Necropolis he tackles speech as pure speech, restricting movement to the bare minimum.⁸

But the one feature that made Elkunchwar reportedly want to stand up when he saw the piece, was a song composed by classical singer PrachiDublay and Takalkar, based on Elkunchwar's description of a song that he imagines emanating from the mythical character Medusa. "In the essay, he says the voice brings him to a standstill; there's no language, we don't know if it's crying or singing," said Takalkar. Elkunchwar said, 'No one can sing what I have written.' But when he heard the song he said he almost had goose bumps.⁹

Playwright Mahesh Elkunchwar speaks to SebantiSarkar on his creative process and why 'hot topics' don't interest him as an artist. A few hours before retreating to his favorite corner of the world, Mahesh Elkunchwar explains why he has deliberately stayed away

from the hurly-burly of large metros. He has watched many great talents destroy themselves trying to keep pace in Mumbai and though Calcutta has been like a second home, he prefers Nagpur above all else:

It is so cosy, I have been lucky, had a cushy job (he has retired as a professor of English), so I was able to experiment without worrying about public appreciation. My audience strength varies from 1 to 500 but that also means you can afford to fail as no huge investment is at stake. Writing has been like a leisurely canoe ride where one waits for the beauties and joys of the journey to reveal themselves in unexpected turns.¹⁰

Born in 1939, the SahityaAkademi Award-winner has to his credit plays like *Holi, Party* (made into films by Ketan Mehta and GovindNihalani respectively), the *Wada* trilogy and some others, including *Vasanakand, Yatanaghar, Aatmakatha, Pratibimb, So nata* and *An Actor Exits*. Unlike most dramatist-actor-directors of Calcutta, Elkunchwar has never sought direct involvement in the production of his plays. He is even exasperated by "the number of agencies involved in theatre, it is like cricket" — so he has taken to writing essays, which is "like swimming, with just the water and me". "My essays can be as literary as they like, they are free to touch anything: personal experiences, philosophy, culture, metaphysics, psychoanalysis..." But even some of these essays, such as *Necropolis* and the

anthology *Maunraag*, are inspiring productions.¹¹

The plays have often come to him as "images". *Virasat*, for example, was sparked off by an image described by SatyadevDubey — of an unused tractor owned by a feudal family slowly sinking into the courtyard as the family is being destroyed. *An Actor Exits*, which may be staged for the first time in December, resulted from his efforts to explain a dream of an actor screaming out in horror on seeing an unidentifiable heap covered in cobwebs. According to Elkunchwar:

One image that keeps reappearing nowadays is that of an old well — the kind we had in our village, where I, like many others, took my first swimming lessons. This well in my vision has remained unused for over three decades and people have dumped torn shoes and all kinds of rubbish into it. Even the walls of the well are broken.... Who knows, someday this may grow into a play or an essay?¹²

Issues or hot topics of the day don't interest him as an artist. "Contemporary reality demands we take a stand on issues from time to time, and I do, but as an artist, I aspire to go beyond topicality. I seek to address the basic human issues, the indefinable human experiences beyond the grasp of intelligence, the world of instinct that is not transient but continues to throb under our daily reality. I avoid being judgmental." "One is so limited and life is so complex. Politics, all religions, all isms have never

been able to comprehend it — they just remain as little things under the umbrella called life. So I prefer to deal with the umbrella instead." The playwright was in Calcutta to deliver the first ShyamanandJalan Memorial Lecture on "The Art of Play Writing" on March 20 at the PadatikBuildwell theatre. He also presented the first ShyamanandJalan National Youth Theatre Award for playwriting to Bangalore-based theatre worker Ramneek Singh.¹³

Elkunchwar saw his first play during college, a Vijay Tendulkar play, directed by Vijaya Mehta. He went back to "to see how a playwright makes the point he does". Yet, when he took to writing plays, he made a deliberate effort not to mimic Tendulkar, who then dominated the theatre scene. "There is no such thing as a born playwright, though. A playwright needs to do as much *riyaz* as a dancer or musician," he warns. Even though "there can be no *guru-shishyaparampara* for playwriting because theatre is always in a state of flux and one must learn to deal with complexities alone".¹⁴

Elkunchwar feels it is essential to have a course on playwriting (something that even the National School of Drama has ignored) because "one would like to share the discoveries one has made after many years of negotiation with the medium". Elkunchwar has many friends in Calcutta, his plays have been staged repeatedly in Bengali, English and Hindi, but he has regret. "Fifteen years ago, I used to come so often. I knew what everyone was doing.... but now I

have lost touch and it seems to me that there has been a lull in significant playwriting, nothing to touch the achievements of seniors like BadalSircar, MohitChattopadhyay, ManojMitra..." he signs off.¹⁵

Conclusion

To deliberately cut all available options and concentrate on a single element to see if you can pull off a piece of theatre is almost reckless experimentation. But Takalkar and his team not only succeed, but do so with rare aplomb. What makes Necropolis work is the actors' absolute conviction in what they're doing, their ability to be intensely still on stage, the unfaltering inward focus of their gaze, and above all, their clear, chastely enunciated speech. The music helps to bring references alive. Mostly quiet, fading in and out of the prevailing silence, it wells up at one point in a full-throated ululation of rejection and pain, expanding the acoustic space to include the unseen beyond. This is a moment for goose-bumps. To say Necropolis has problems would be nit-picking in the context of what it has done. At a time when words have lost their luster in theatre, it has brought speech back to the stage, demonstrating its dramatic possibilities in the process. It is an act of defiant resurrection. At a time when words have lost their luster in theatre, Necropolis has brought speech back.¹⁶

References

1. Ancheri, Saumya. *Dead Men Walking*. 4 February 2011. Web. Retrieved on 20 January 2013.

2. Ibid.
3. Gokhale, Shanta. *The Drama in Death*, 18 November 2010. Web. Retrieved on 15 January 2013. <http://www.mumbaimirror.com/printarticle.aspx?page=comments&action=translate§id=57&contentid=201011182010111802071152166822426&subsite=>
4. Ibid.
5. Supra 1.
6. Supra 3.
7. Supra 1.
8. Supra 3.
9. Supra 1.
10. 'A playwright needs to do as much *riyaz* as a musician'. *The Telegraph*. n.d. Web. Retrieved on 22 January 2013. http://www.telegraphindia.com/1120408/jsp/calcutta/story_15345391.jsp#.UPWCG-Q4tow
11. Ibid.
12. Ibid.
13. Ibid.
14. Ibid.
15. Ibid.

temporarily financial position as well as financial interest of stakeholders.

Objective

Assets generate income, provide cash flow but assets are finite lived resources and in the cash flow it is not disclosed. While earning the cash flow the firm has also lost some value from the finite lived assets. Cost of the assets spread across all the cash flow streams that it generated but a great deal of manipulation can be exercised in this area. An inflated or deflated consideration of depreciation can change the reported earning to a great extent. In this context the study may be directed to explore inter relationship between discretionary accruals and audit quality.

Research hypotheses

It is argued that firms have incentives to avoid large variability in reported income numbers and engage in income smoothing, it is immaterial whether they are publicly or privately held. Then, conditional on whether firms have an incentive to engage in income increasing or income decreasing earnings management strategies hypotheses are developed on two variable constraints on earnings management behavior, namely audit quality and public ownership (Bauwhede, Willekens, Gaeremynck, 2000).

(i) Avoidance of deviations in reported earnings as an incentive for earnings management

In the agency system of separation between ownership and control inherent in corporate ownership structure, publicly listed companies are very much

prone to earnings management opportunism (Francis et al. 1999).

It is believed that avoidance of large variability in reported income numbers is also a valid incentive for earnings management in non-listed privately held firms. The belief is based on Trueman and Titman's (1988) argument that firms may avoid deviations in reported earnings to influence stakeholders' perception of the variability of the underlying economic earnings, and so their assessment of the probability of bankruptcy of a firm.

In non-listed firms smoothing occurs as an attempt to influence relations with various stakeholders, whereas in listed firms it also, or mainly, happens to influence market value.

(ii) The impact of audit quality and public ownership on earnings management

The income smoothing incentives for firms will engage them in income-increasing earnings management when pre-managed earnings are below last year's reported earnings. The opposite will occur when pre-managed earnings are above last year's reported earnings. Monitoring and governance mechanisms may work as constraints on both income-increasing and income-decreasing earnings management.

Prior studies (Becker et al 1998, Francis et al, 1999) indeed report evidence that is supportive of the constraining impact of audit quality on earnings management, as a lower level of discretionary accruals can be observed for firms that appoint

Big 6 auditors. The underlying rationale is that Big 6 auditors are more competent and/ or independent as compared to non Big 6 auditors, and therefore are less tolerant vis-à-vis the level of discretionary accruals adopted by firms.

Public ownership may work as an incremental constraint on earnings management due to increased scrutiny by market participants on the reported income figure. However, public ownership may also provide an additional incentive to manage earnings opportunistically. The rationale is that earnings are managed such that stock market expectations about earnings are fulfilled. Not meeting stock market's expectation may have a negative impact on market value through decline in stock prices, which may in turn increase a firm's cost of capital. Overall it is believed that the impact of public ownership on earnings management differs dependent on whether firms have an incentive to smooth income upwards or downwards. Hence, separate hypotheses are formulated for below and above target firms (Bauwhede, Willekens, Gaeremynck, 2000).

(a) Hypotheses on constraints on earnings management in above target firms

The income smoothing incentive induces firms having pre-managed earnings above prior year's reported earnings (both listed and non listed) to adopt a negative discretionary accruals strategy. If audit quality indeed works as a constraint on this instance of earnings management, less negative discretionary accruals are expected for above target

firms that are audited by a Big 6 auditor, irrespective of whether they are listed or not. However, it is also likely that public ownership in itself constrains negative discretionary accruals strategies, meaning that listed firms will be more reluctant to decrease earnings than non-listed firms (irrespective of audit quality). There are at least two good reasons for this. First, because stock market scrutiny increases the probability that opportunistic earnings management is detected for listed firms. Second, because listed firms may want to avoid that earnings expectations are not met as a result from adopting a negative discretionary accruals strategy. This is not unlikely, as investors tend to expect a certain growth in annual earnings. As a result, it is expected that listed firms will engage less in income decreasing earnings management than non-listed firms.

With this reasoning it results in the following two hypotheses about constraints on earnings management for above target firms (Bauwhede, Willekens, Gaeremynck, 2000).

HYPOTHESIS A: Audit quality is a constraint on earnings management in firms (both listed and non-listed) that have smoothing incentives to adopt a negative discretionary accruals strategy.

HYPOTHESIS B: Public ownership is a constraint on earnings management in firms that have smoothing incentives to adopt a negative discretionary accruals strategy.

(b)Hypotheses on constraint on earnings management in below target firms

The income smoothing incentive enhances both listed and non-listed firms to adopt a positive discretionary accruals strategy when their pre-managed earnings are below prior year's reported earnings. If audit quality differentiation indeed exists between Big 6 and Non Big 6 audit firms, it is expected – as in the above target case –that audit quality constrains earnings management irrespective of ownership type. It is, therefore hypothesized that audit by a Big 6 auditor will result in less earnings management, and thus for below target firms in less positive discretionary accruals. The impact of public ownership on earnings management is however not so unambiguous in the below target case. Again, two forces are likely to have an effect- increased scrutiny on earning numbers by the market and the firm's concern to meet stock market expectations- but they seem to result in conflicting predictions as to the earnings management behavior. First, greater scrutiny on the quality of earnings numbers reported by listed companies enlarge the probability of detection of earnings management and the costs that come with it. *Ceteris paribus*, the effect here is that listed firms engage less in positive discretionary accruals strategies than non-listed firms. Second-and on the contrary- listed firms face additional earnings expectations from the stock market which could motivate them to adopt more pronounced positive discretionary accruals strategies as compared to non-listed firms. Since

public ownership can work both as an incentive and as a constraint on earnings management in below target firms, it is expected that it has no net observable impact.

The above reasoning results in the following two hypotheses about constraints on earnings management for below target firms (Bauwhede, Willekens, Gaeremynck, 2000).

HYPOTHESIS A: Audit quality is a constraint on earnings management in firms(both listed and non-listed) that have smoothing incentives to adopt a positive discretionary accruals strategy.

HYPOTHESIS B: Public ownership both works as a constraint on and an incentive for earnings management in firms that have smoothing incentives to adopt a positive discretionary accruals strategy, and therefore has no net impact on earnings management.

Estimation of discretionary accruals

The discretionary accruals may be estimated using the cross sectional variation of the Jones (1991) accruals estimation model used by De Fond and Jaimbalvo(1994).Subramanyam (1996) finds that parameter estimates in cross sectional Jones model are more precise than their time series counterparts, due to large numbers of degrees of freedom available to estimate such a model. Recently, Bartov et al. concludes that the cross sectional Jones model and the cross sectional modified Jones model perform better than time series counterparts in detecting earnings management. Other

expertise, resources and incentive to separate the information component from noise, they can enhance the informativeness of discretionary accruals by constraining aggressive and opportunistic reporting of accruals by managers. This is consistent with Francis et al. (1999) who find that firms with greater propensity to generate accruals are more likely to hire Big 6 auditors to enhance the credibility of their earnings (Krishnan, Gopal V., 2002).

It is suggested that the accounting reform or major revisions in accounting standards are required keeping in mind the fact that business models change, new type of transaction emerge, which cannot be addressed fairly by existing accounting rules and estimation models stabilize. It is also suggested that the pace of change should go through full due diligence process. What is to be appreciated that cultural and regulatory mechanisms are primarily local even after globalization of product and capital markets (Bhattacharya, Sept.3, 2012).

References

- Bauwhede, Heidi Vander, Willekens, Marleen, Gaeremynck, Ann, (2000), Audit Quality, Public Ownership and Firms' Discretionary Accruals Management, Catholic University of Leuven, Department of Economics, Belgium.
- Becker, C.L., DeFond, M.L., Jiambalvo, J. and Subramanyam, K.R., (1998), The Effect of Audit Quality on Earning Management, *Contemporary Accounting Research* 15, 1-24
- Bhattacharya, Ashish., (2012), Discretion and subjectivity in accounting rules- necessary evil, *Business Standard, Business Law*.9
- Cloyd, B.C., Pratt, J. and Stock, T., (1996), The Use of Financial Accounting Choice to Support Aggressive Tax Positions: Public and Private Firms, *Journal of Accounting Research* 34, 23-43.
- De Angelo, L., (1986), Accounting Numbers as Market Valuation Substitutes: A Study of Management Buyouts of Public Stockholders, *The Accounting Review* 61, 400-420
- De Fond, M.L. and Jiambalvo, J., (1994), Debt covenant violation and manipulation of accruals, *Journal of Accounting and Economics* 17, 145-176
- Francis, J.R., Maydew, E.L. and Sparks, H.C., (1999), The Role of Big Six Auditors in the Credible Reporting of Accruals, *Auditing: A Journal of Practice & Theory* 18: 17-35
- Krishnan, Gopal V., (2002), Audit Quality and the Pricing of Discretionary Accruals, Department of Accountancy, City University of Hongkong.
- Penno, M. and Simon, D.T., (1986) Accounting Choices: public versus private firms, *Journal of Business Finance and Accounting* 13, 561-569.
- Subramanyam, K.R., (1996), The pricing of discretionary accruals, *Journal of Accounting and Economics* 22, 249-281
- Trueman, B. Titman, S., (1988), An Explanation for Accounting Income Smoothing, *Journal of Accounting Research* 26 Supplement, 127-139.

Fiscal Federalism in India

Federation refers to a multi-level system of government. India is a unique example of modified cooperative federalism where union, state and several tiers of local government are jointly responsible with for different economic and social development programme. It has been modifying constantly with the requirements and now in Indian federal system various tiers of governments have shared and overlapping responsibilities though they are not treated as equal partners. The Indian federation has built with a bias in favour of the union govt. with huge vertical imbalances in the resource allocation and responsibilities at the state and local govt. level. The stability of a federal system depends on the arrangement of effective, efficient and equitable allocation of resources and responsibilities among different tiers of government. The multi-layered character of Indian federation comprising with three tiers Panchayati Raj Institutions (PRIs), the municipalities and corporations within the state and union and the complex multiple channels of transfer arrangements made the situation more complex. The 73rd and 74th constitutional amendments have initiated to rectify the historical deficit and local government a constitutional status and power.

Fiscal federalism deals with the division of expenditure responsibilities, fiscal assignments, inter-government transfer arrangements and different fiscal relations within the federation. The fiscal decentralization of a government is

needed for the empowerment of the local governments with enough endowment in delivering economic development and social justice as the 'institutions of self government'. The Articles 243G and 243W of Indian Constitution has given mandate in favour of this. A vibrant fiscal federalism should take care off about the responsibilities and regulatory role of all tiers of governments. Everything about 'who should do what or who should tax what and where' should have to be specified. The planning commission has served the nation for the long period almost from the start of federal base by providing necessary support and crucial policy advice wherever needed. The planning commission has worked as the 'interalia' for the resource allocation function but there has been a huge vertical imbalance in the revenue and expenditure responsibilities of the union and the states. The creation of Union Finance Commission (UFC: Article 280) and State Finance Commission (SFC: Articles 243I and 243Y) has initiated to rectify the vertical and horizontal imbalances among union, state and different tiers of local governments. Even the formula based schematic transfer and resource allocation has modified several times, the planning commission has given a special power by Article 282 for a residual provision to accommodate grants for public purposes in unusual situations. Thus, the genesis of restructuring has been reflecting in the major role played by the planning commission in policy making and project evaluation.

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Perspective of change of Indian Federal Institutions

Mahatma Gandhi had said: "Constant development is the law of life, and a man who always tries to maintain his dogmas in order to appear consistent drives himself into a false position". The one-size-fits-all approach, often inherent in central planning, has the potential of creating needless tensions and undermining the harmony needed for national effort. Dr. Ambedkar had said with foresight that it is "unreasonable to centralise powers where central control and uniformity is not clearly essential or is impracticable". Keeping true to this principle our institutions of governance and policy must evolve with the changing dynamics of the new India, while remaining true to the founding principles of the Constitution of India, and rooted in our Bharatiyata or wisdom of our civilizational history and ethos. This changing reality and growing mismatch with "one-size-fits-all" has been recognized for years now; with experts, including many from within the former Planning Commission, recommending appropriate changes. Firstly, at the eve of the liberalisation of 1991, the 8th Five Year Plan document categorically specified that the role of Government should be reviewed and restructured and the role and functions of the Planning Commission too needed to be rethought. The Planning Commission needed to be reformed to keep up with changing trends; letting go of old practices and beliefs whose relevance had been lost, and adopting new ones based on the past experiences of India as well as other nations. Secondly, the

Standing Committee on Finance of the 15th Lok Sabha observed in its 35th Report on Demand for Grants (2011-12) that the Planning Commission "has to come to grips with the emerging social realities to re-invent itself and to make itself more relevant and effective for aligning the planning process with economic reforms and its consequences, particularly for the poor". Thirdly, Former Prime Minister and noted economist, Dr. Manmohan Singh - in his farewell address (April, 2014) to the Commission, also urged reflection on "what the role of the Planning Commission needs to be in this new world. Are we still using tools and approaches which were designed for a different era? What additional roles should the Planning Commission play and what capacities does it need to build to ensure that it continues to be relevant to the growth process?"

Reasons why Planning commission became obsolete

Centralized planning was the goal of the Planning Commission. It was a Socialist Era institution based on the Russian model of five-year plan. The main function of Planning Commission was to formulate and review five-year plans, and review and monitor their progress.

1. The year 1991 changed the economic policy of India completely. India adopted the LPG (Liberalization, Privatization, Globalization) policy. As the view of the government changed, the role of planning also changed. It became indicative of the planning in a world of free market institutions.

2. Allocation of scarce resources has been the biggest problem before the Planning Commission as different states have more knowledge about their local requirements. Allocation of resources by the central government and dictating terms to the states was not liked by them.
3. The Planning Commission suffered from accusations of discrimination if different parties which has governed at the state and central levels.
4. The role of private sector has become crucial in increasing the growth rate as it can provide new knowledge and technology to develop the infrastructure.
5. Most of the 5 year plans failed to achieve their target, thereby raising questions against the Planning Commission.

Functions of NITI Aayog

NITI Aayog is a replacement to the Planning commission. Prime Minister Narendra Modi scrapped planning commission in August 2014 and NITI (National Institute for Transforming India) Aayog to put in place from 1st January, 2015. NITI Aayog is to be the institution to give life to these aspirations. This has been constituted after deliberate consultations across the spectrum of stakeholders, including chief ministers, governors, subject experts, cabinet ministers, relevant institutions and the people at large.

According to the vice-chairman of NITI Aayog on 24.02.15 to Times of India (TOI), the Cabinet resolution (No. 511/2/1/2015-Cab) of creating NITI

Aayog, has given mandates to look after the promotion of cooperative federalism, serving as the think tank of the central and state governments and evaluating government programmes. The first objective would involve creating regional councils for specific purposes and working closely with states on issues of common concern. The second objective would be to respond to any requests of advice on policies and programmes from central and state governments. The NITI Aayog would also serve as the depository of knowledge on best practices in various areas so that states can learn from them. The NITI Aayog would also promote research and discussion in areas of future policy agenda. But the fulfilment of first two mandates effectively would require internal restructuring of the NITI Aayog, which is under discussion.

As Indian nationhood has matured and deepened, we have embraced a greater measure of pluralism and decentralization. This necessitates a paradigm shift in how the Central government approaches governments at the State as well as local levels. They must be made equal partners in national development. Their developmental needs and aspirations understood as well as supported. And their varied local realities incorporated into national policies and programs, with the required flexibility. According to the Government of India document "from planning to NITI transforming India's development agenda" (8.2.2015) NITI Aayog will try to actualize the following principles.

1. Cooperative and Competitive Federalism: States to have active participation in the formulation of national policy, as well as achieving time-bound implementation of quantitative and qualitative targets through the Cooperative Federalism with combined authority of the Prime Minister and Chief Ministers. This systematic and structured interaction is needed to better understand developmental issues, as well as build a consensus on strategies and implementation mechanisms in the joint pursuit of national development instead of one-way flow of policy from centre-to-state.

2. Shared National Agenda: The framework 'national agenda' would be evolving with a shared vision of national development priorities and strategies, with the active involvement of States.

3. State's Best Friend at the Centre: Support States in addressing their own challenges, as well as building on strengths and comparative advantages by championing their ideas at the centre, providing consultancy support and building capacity wherever needed.

4. Decentralized Planning: Restructure the planning process into a bottom-up model, empowering States, and guiding them to further empower local governments; in developing mechanisms to formulate credible plans at the village level, which are progressively aggregated up the higher levels of government.

5. Vision & Scenario Planning: Design medium and long-term

strategic frameworks of the big picture vision of India's future - across schemes, sectors, regions and time; factoring in all possible alternative assumptions and counterfactuals. These would be the drivers of the national reforms agenda, especially focussed on identifying critical gaps and harnessing untapped potentialities.

6. Domain Strategies: Build a storeroom of specialized domain expertise and an in-house sounding board for refining government positions through objective criticisms and comprehensive counter-views, both sectoral and cross-sectoral; to assist Ministries of the Central and State governments in their respective development planning as well problem solving needs by some needful structural reforms.

7. Network of Expertise: Main-stream external ideas and expertise from outside world, roping in academia, private sector expertise, and the people at large, would involve into government policies and programmes through a collaborative community of national and international experts, practitioners and other partners.

8. Knowledge and Innovation hub: Be an accumulator as well as disseminator of research and best practices on good governance, through a state-of-the-art Resource Centre which identifies, analyses, shares and facilitates replication of the same.

9. Harmonization: NITI Aayog will also act as a catalyst to the government machinery at large across

different layers of government to filling gaps, enhancing capabilities and de-clogging bottlenecks, as and where required, through communication, coordination, collaboration and convergence amongst all stakeholders.

10. Conflict Resolution: NITI Aayog would provide a platform for mutual resolution of inter-sectoral, inter-departmental, inter-state as well as centre-state issues; facilitating consensus acceptable and beneficial to all, to bring about clarity and speed in execution.

11. Coordinating interface with the World: Be the nodal point for strategically harnessing global expertise and resources coming in from across nations, multi-lateral institutions and other international organisations, in India's developmental process.

12. Internal Consultancy and Capacity building: NITI Aayog offers an internal consultancy function to central and state governments on policy-program design and capacity building through technology up-gradation across government. This would provide frameworks adhering to basic design principles such as decentralization, flexibility with the inclusion of specialised skills such as structuring and executing Public Private Partnerships.

13. Monitoring and Evaluation: NITI Aayog would endorse monitor the implementation of policies and programmes, and evaluate their impact; through rigorous tracking of performance metrics and

comprehensive program evaluations. This will not only help identify weaknesses and bottlenecks for necessary course correction, but also enable data-driven policy making; encouraging greater efficiency as well as effectiveness.

Planning Commission is now 'Niti Aayog'

The NITI Aayog, which has replaced the Planning Commission, will be responsible for formulating what the government described as "a Bharatiya approach to development". The new organisation - NITI Aayog is being seen as a think tank that will foster "cooperative federalism" rather than take a top-down approach.

Similarities between NITI Ayog and planning commission are:

- 1) Prime minister is the chairperson for both the commissions.
- 2) Objective of both is to have a inclusive growth.
- 3) Both are setup with government resolution.
- 4) Both are non constitutional and non statutory.
- 5) Both have fixed tenure.

Differences between NITI Ayog and planning commission are:

- 1) Planning commission insisted on top to bottom approach of development whereas NITI Ayog is concentrating on Bottom to top approach.
- 2) Planning commission works on principle of "One size fits all" where as "NITI Ayog" will be tailoring policies according to states.

- 3) All the members of the planning commission are permanent in the fixed tenure. NITI Ayog comprises of permanent members and part time members.
- 4) For planning commission governing body will be National development council. NITI Ayog contains governing council and regional council.
- 5) Planning commission contains 8 full time members whereas NITI Ayog has 2 part time members.
- 6) Provision for inclusion of eminent persons, specialists and practitioners with relevant knowledge in NITI Ayog but not in planning commission.

According to Arun Maira, former member of the Planning Commission, the structure of NITI Aayog may not be entirely new but getting the chief ministers involved in formulating the country's development vision is the right way to go. "The idea to create an institution where states' leaders will be part and parcel of the collective thinking with the Centre and other stakeholders in formulating a vision for the development of the country is right on as compared with the previous structure, where a handful of people formulated the vision and then presented it to the National Development Council (NDC)," he said. "This was not entirely absorbed and adopted by the latter."

Raising some issues

"In the context of governance structures, the changed requirements of our country point to the need for setting up an

institution that serves as a think tank of the government - a directional and policy dynamo," the government said. "The proposed institution has to provide governments at the central and state levels with relevant strategic and technical advice across the spectrum of key elements of policy." Any reforming or restructuring should be structured in such a way that the loopholes of the previous one need to be eliminated. Firstly, up to now any specific form of blue print of NITI for economic development based on elaborate reviews of macroeconomic objectives and strategies are not visualised. Secondly, why NITI do replaces planning commission in the name of decentralised, dynamic, cooperative and competitive federalism as there is a lot of evidence of restructuring of Indian fiscal federalism by the creation of Union Finance Commission (UFC by article 280), State Finance Commission (SFC by article 243I & 243Y), the special power of planning commission for unusual situation (by article 282) etc. Thirdly, planning commission played a crucial role in major policy making and project evaluation but if NITI Aayog is going to be only think tank. Thus, who will do the planning commission's job? Fourthly, the Planning Commission is long known as a "super cabinet", using the NDC to rubber stamp its proposals which are mostly top down and a 'one size fits approach'. Thus, a revamped institution does seem necessary placing more emphasis on cooperation and in tune with the post liberalized world. Fifthly, the composition of planning commission has experts and full time

experienced people even from outside government has made organization more transparent and accountable. Are those experiences being in the part of the NITI? Sixth, reforming existing institutions can be cost effective and be faster. It could avoid conflict over the nature of new bodies, and build upon its reputation to attract talent.

But sometimes a new body has been associated with certain features for so long that it becomes imperative to totally remove it to avoid its historical baggage. Lastly, would the directional change from the Centre-to-state one-way flow of policy, towards bottom-up planning be enough to grantee the beginning of the era of cooperative and competitive federalism in true sense?

Conclusions

NITI Aayog will seek to facilitate and empower the critical requirement of good governance, which is people-centric, participative, collaborative, transparent and policy-driven. NITI Aayog will provide critical directional and strategic input to the development process, focussing on deliverables and outcomes. This, along with being as incubator and disseminator of fresh thought and ideas for development, will be the core mission of NITI Aayog. The Centre-to-state one-way flow of policy, that was the hallmark of the Planning Commission era, is now sought to be replaced by a genuine and continuing partnership of states towards bottom-up planning. Thus, NITI Aayog will also act as a catalyst to the government machinery at large; filling gaps,

enhancing capabilities and de-clogging bottlenecks, as and where required.

An increasingly mature Indian population has steadily increased the focus on, and demand for, actual delivery and results. To keep up with such enhanced aspirations, NITI Aayog's directive will have to go beyond mere planning and strategizing, to facilitating implementation of the development agenda as well. This would be a transition from the isolated conceptualisation of merely 'planning', to 'planning for implementation'. Which would involve making implementation central to the planning process, through an emphasis on tangible outcomes, realistic targets, strict time lines and robust monitoring and evaluation effectively. Otherwise it will be just "Constructive reform of Planning Commission vs alteration of identity and basic structure cos of anti nehruvianism & congism". The constitutional task of implementing the planning for economic development and social justice by the PRIs and urban local governments need different emphasis. Bottom-up planning even if can be done effectively it will have no meaning if the panchayats have only schematic funds for their disposal. The NITI Aayog could immediately make a country-wide status report on the debate of the causes of failure of planning commission which is needed to prepare a comprehensive frame that can capable of accommodating local variation as much. In doing so the NITI Aayog might inculcate the effective, potential and technically empowered role of district planning committees (DPC) in delivering policies at the sub-state level.

A good Cooperative federal polity is the essential to put the fiscal assignments and transfer rational, effective and equitable. Thus, NITI Aayog will have a mammoth task to accord them in the diverse channels of objectives and conditionalities in the huge jurisdiction of Indian fiscal and political federalism. In this respect the unilateral announcement of schemes and imposing them on the states would be misleading. NITI Aayog should also look forward to enhance the fiscal capacity of the local governments so that all sections of the citizen can avail a comparable level of public service.

India is a unique cooperative federalism in which local governments are the integral part. They have tremendous potential of bottom-up planning. The only thing is missing that they need a proper impartial guidance to make viable. The budget memorandum 2015 and other recent federal activities have not placed enough footprints towards the implementation of potential of bottom-up planning. A golden opportunity is now that the NITI Aayog can give the right direction to the democratic government. If in true sense the bottom-up planning can be realised in terms of inclusive prosperity under the guidance of NITI Aayog then every "Bhatarbasi" will feel what true essence of "cooperative federalism" is. And according to great china economists Deng Xiaoping "It doesn't matter whether a cat is white or black, as long as it catches mice."

References

- Ambirajan, S. (1978 & 2008): Classical Political Economy and British Policy in India; Cambridge University Press.
- Arora, B. and Verny, D.V. (1995): Multiple identity in a single state-Indian federalism in comparative Perspective (eds); Konark Publication, New Delhi.
- Bosch, N. and Durán, M.J.(2008): Fiscal Federalism and Political Decentralization: Lessons from Spain, Germany and Canada; Edward Elgar Publishing Limited.
- Deng Xiaoping (1978): "It doesn't matter whether a cat is white or black, as long as it catches mice, it is a good cat."
- Dua, B.D. and Shing, M.P. (2003): Indian federalism in the new Millennium; Monohar Publication, New Delhi.
- ET Bureau, (2015): Planning Commission is now 'Niti Aayog' (2.1.15).
- Government of India (2011): Report of the Committee on Restructuring of Centrally Sponsored Schemes (CSS); Planning Commission; New Delhi.
- Government of India (2013): Report towards holostic Panchayat Raj Twentieth Anniversary of Expert Committee on Leveaging Panchayat for efficient delevery of public Goods and Services, Ministry of Panchayat Raj; New Delhi.
- Government of West Bengal (2008): Report of the Third state Finance Commission, Tantuja Bhaban, Salt, Leck, Kolkata.
- Government of Kerala (2009): Report of the Committee for Evaluation of

- Decentralised Planning; comparative Perspective (eds); Thiruvanthapuram. Konark Publication, New Delhi.
- GovindRao, M. and Singh, N. (2005): The political Economy of Federalism, in India; Oxford University Press, New Delhi.
- Joshi, P. (2015): Planning Commission Vs Niti Ayog; in Business World.
- Kincaid, J. (2011): Federalism (eds.); Vol-2; SAGE Publication, London.
- Mahajan, A. (2004): 'The changing political economy of the federalism in India- A historical institutionalist Approach', *Indian Review*; vol. 3 no. 1 pp-25-63.
- Majeed, A. (2010): Cloweds over Federalism- *The Real Working of the Indian Polity*; Manak Publication, New Delhi.
- Majeed, A. (2004): Federalism within the Union- Distribution of Responsibilities in the Indian system; Manak Publication, New Delhi.
- Mehra A. K. and Kueck, G.W (2003): The Indian Parliament- a Publishing Limited
- Mishra, V. (2015): Cooperative Federalism in India, Conteses and Contradictions; Joyana; A development monthly; Februry.
- Oommen, M. A. (2015): Fiscal Federalism, Local Government, Joyana; A development monthly; Februry. Panagaria, A. (2015): Plan about NITI Aayog; A email interview (24.2.15) to Times of India.
- Singh, M.P. and Sexsena, R. (2013): Federalising India in the age of Globalisation; Primus Books, Delhi.
- Thomas, T. M. I. and Frank, R. (2000): Local democracy and development; People campaign for Decentralised planningin Kerala; Left Word; New Delhi.
- Wallace, S (2010): State and Local Fiscal Policy: Thinking Outside the Box? (Edited) Edward Elgar

Factors of Willingness to Pay for Urban Forestry Conservation: A Study of Added Area of Kolkata

Laxmi Narayan Saha

Abstract

The green areas located in the added area of Kolkata are facing with critical questions of development against conservation. Major issues that are facing by city government as well as city communities are development, maintenance, preservation of the quality of urban forest. This paper comprises the analysis of citizens' preferences studied by the use of valuation techniques which is mainly used by ecological economists for analysis of peoples' preferences for environmental goods and services. Here goods and services are places in a hypothetical market and attempts to find whether people reveal their preferences for such goods. To assess citizens' preferences for urban forestry, visitors to parks and gardens have been randomly selected from the parks under study. The contingent valuation method (CVM) is a stated preference method that has been widely accepted by ecological economists and conservationists. Here, it seeks to know willingness to pay (WTP) of park visitors for conservation of urban forestry in Kolkata. Indirectly, they place a value upon it by stating their WTP. This is an anthropocentric approach to assist for estimation of value of ecosystem services. This paper attempts to analyse peoples' preferences regarding conservation by assessing the park visitors' willingness to pay and to evaluate the factors of their preferences which are associated with socioeconomic as well as environmental parameters.

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Introduction

Urban forestry have played significant role which balance the need for city conservation against degradation of urban environment while keeping with rapid urban development. Development, maintenance and preservation of the urban forestry are tough issues for Govt. as well as for different communities. Recently, urbanization in many cities forwarded the need for more greenery to serve for various objectives like environmental protection, recreation, physical activities etc. Urban forestry has omnipresent appeal. Estimate the value urban forestry can help to match public expectations as well as to inform and rationalize relevant planning decisions. The contingent valuation method (CVM) is a commonly used technique in environmental analysis. It uses survey questions to elicit people's preference expressed in monetary terms. This approach is increasingly adopted due to its relatively simple implementation and applicability to a wide range of value categories, especially the non-use type. Various empirical studies have examined and estimated the monetary value of non-priced benefits from urban forests. For example researchers estimated the value of urban green spaces to the residents of Guangzhou, China using the CVM. All the studies found that a

majority of respondents were willing to pay for the use, protection and preservation of urban forest resources. All the studies, however, focused on estimating value of urban green spaces solely to urban resident. With the passage of time and the increasing pressure of urbanization, the city of Kolkata witnessed large-scale conversion of land for different urban uses. This is the reason why urban forestry have given more concern towards sustenance of the vital forest based ecosystem which imparts different market and non-market benefits for the city. The main objective of the present study is to assess the monetary value of non-priced urban forest benefits to city dwellers.

Methodology

Valuation method is used in this study to assess willingness to pay (WTP) of park visitors for conservation of urban forest in the added area of Kolkata Municipal Corporation (KMC) which seeks to place a value on recreational sites or in other words, this is a non-market procedure whereby a value for a recreation site is obtained by considering how much people are ready to pay to estimate the values of ecosystem services. There after linear regression analysis is used to analyse the factors determining the willingness to pay.

A. Respondents' Preferences on Contingent Valuation Method; (CVM): Contingency valuation method or CVM has been widely accepted as being able to adequately identify WTP. The

questionnaire used in the survey was designed to extract information on demographic data along with visitors' perceptions on environment, willingness to pay for urban forest resource conservation in the study area. In the present study, Contingent Valuation technique has been used to obtain responses to analyse the nature of people preferences by asking respondents to pay value contingent to their being in a market for the environmental good and here it is parks and squares. The contingent valuation method (CVM) is a valuation method that has been accepted to identify WTP. This is an anthropocentric approach to assist for estimation of value of ecosystem services. The WTP values indicate about the individual's preferences for conservation of urban forestry.

B. Technique of Analysis:

Ordinary least square method is applied here or more specifically linear regression analysis to know the nature of relation between dependent variable i.e., WTP for urban forestry conservation and independent variables such as age, occupation, level of education, family size, monthly Income, whether respondents have their own garden / green space, whether respondents feel local green area is deteriorating, whether area experiences environmental problems for absence of greenery. The data were analyzed using the SPSS (Version-20) software. Linear regression models were constructed to identify the factors associated with the stated WTP.

The Study Area

The city of Kolkata was originally developed on the natural levee of the Hugli River and physiographically restricted by River Hugli in the west and by numerous wetlands in the east. Initially the expansion of KMC was in north-south direction but by the passage of time and with increase in population, KMC has witnessed large scale conversion of land for urban expansion and development in the eastern portion.

KMC has an area of 187.33 sq.km. It has 141 wards arranged within 15 boroughs. The total population of KMC as per 2011 census is 4496694. The added area where survey works were carried out located within ward no. 101 to 141. Selected parks are Baisakhi Park, Jora Park, Gitanjali Park, Samar Roy Choudhury Sishu Udyan and Benubanachaya. The reasons behind selection of survey sites are given in the following tables.

Table: 1 Survey Sites

Sl. No.	Parks Surveyed	Reasons Behind Selection	Ward No.	Sample Size
1	Jora and Baishali Park of Bansdroni	Small scale residential park.	112	50
2	Gitanjali Park and Samar Roy Choudhury Sishu Udyan at Behala and Barisha	Well maintained parks of added area mainly for children and local residence.	123,126	50
3	Benubanachaya at Baisnabghata Patuli	First well maintained park in this township.	101,110	50
				150

Source: Prepared by author

Determinants of WTP for Urban Forestry Conservation

Parks and gardens in cities are selected as the best representative sites for conservation of urban forestry. Development, maintenance, conservation and preservation of the parks and squares are important challenges for a city planner. Citizens preferences go a long way in prioritizing the need for preservation, expansion and restoration of urban forestry.

Willingness to Pay among Respondents

Parks and squares played significant role to maintain urban environmental balance

while keeping up with rapid urban development. Presently cities of different countries forwarded the need for more greenery to serve the various objectives like environmental protection, recreation, physical activities etc. Development, maintenance, conservation and preservation of the parks and squares are tough issues for Govt. as well as for different communities. A questionnaire was framed to collect data on socio-economic profiles, demographic characteristics, environmental awareness along with WTP. Park visitors were approached randomly and a total of 150 questionnaires were used. The important

findings of WTP by payment group are summarized in Table 2.

Table: 2 Willingness to Pay by Payment Groups

Payment for conservation (WTP in `/Year)	Proportion of Respondents (%)	Number of Respondents
0	21.33	32
1-100	29.33	44
101-200	21.33	32
201-300	2.67	4
301-800	16	24
801-1000	4	6
>1000	5.33	8
Total	100	150

Source: Computed by author based on primary data

Here, 21.33 % of respondents were not willing to pay and the largest number respondents is likely to pay Rs.1-200 per year (50%). The payment range is from Rs.50 to Rs.1500. The mean payment is Rs.243.67. The total WTP is Rs.36550. The fact that people are willing to pay for conservation ensures preferences. However, it is important to analyse the determinants that affect payment.

Analysis of Determinants of WTP

The linear regression analysis is attempted here to find out the determinants of their willingness to pay. Different scenarios have been tested with WTP as the key dependent variable:

- WTP for the whole sample (N=150)
- WTP of non-zero bids of the sample (N=118) to find determinants only amongst those who confirm payment.
- WTP as a proportion of income

Independent variables considered which are likely to indicate rational scenario about the probabilities and constraints of

sample population in making actual payment of urban forestry conservation were expressed as follows:

1. AGE: Age of the respondent
2. OCCU: Occupation of the respondent
3. EDULEV: Level of education of the respondent
4. FLSIZE: Family size of the respondent
5. INCOME: Monthly family income of the respondent
6. OWN_G: Whether respondents have their own garden / green space
7. LOCAL_G_D: Whether respondents feel local green area is deteriorating
8. ENV_PROB: Whether area experiences environmental problems for absence of greenery
9. WTP_INC: Willingness to pay as a ratio of monthly family income
10. LOGY: The logarithmic value of income

As the range of income data is too large, therefore log linear form of income

instead of actual income has also been used. The simple model applied here is:
 $WTP = f(\text{AGE, OCCU, EDULEV, FLSIZE, INCOME, OWN_G, LOCAL_G_D, ENV_PROB})$
 The following sections contain the analysis made on the three different scenarios.

WTP across All Payment Groups:

Regression analysis has been conducted on the 150 respondents in three different parks. Payment is sought for conservation of urban forestry for recreation benefits and or retention of urban forest for its aesthetic or environmental values, which will be better for the people of Kolkata. Income and level of education are assumed and expected to be the most important determinants of WTP. Other variables such as age, occupation, whether respondents have their own garden / green space, whether respondents feel local green area is deteriorating, whether area experiences environmental problems in absence of greenery are also significantly determine the WTP.

Table 3 shows finding of the Regression Analysis where 3.A, 3.B and 3.C reveals the following:

- Important variables for Table 3.A. are age, education, monthly income, whether respondent have their own garden, whether respondents feel local green area is deteriorating, and whether area experiences environmental problems for absence of greenery. Adjusted R square is .351. The F statistics shows that the model is significant. Coefficient of
- determination shows that 35% of the total variation in WTP is explained by above variables.
- In Table 3.B. income variable is replaced by log value of income. In this case also, the important variables are education, log value of income, whether respondent have their own garden, whether respondents feel local green area is deteriorating, and whether area experiences environmental problems for absence of greenery. They together explain 32% of the variance. The F statistics shows that the model is significant.
- Finally the Table 3.C. attempts to explain the determinants of WTP if income is not considered. In such case education, whether respondents feel local green area is deteriorating, and whether area experiences environmental problems for absence of greenery turn out significant. Coefficient of determination shows that 28% of the total variation in WTP is explained by above variables. The F statistics shows that the model is significant.
- The results imply that for the whole sample, higher the monthly income and education level, then higher is the tendency to pay for conservation. That means with the increase of education level people are more aware about the importance of forestry in urban area and hence they would like to pay more towards urban forestry conservation. As expected, income

is a significant independent variable which directly influence the amount of payment for urban forestry conservation.

Analysis using WTP as a Proportion of Income

- An important consideration in the case of understanding peoples preferences is the proportion of the individuals income that

he/she is willing to part with – this further reveals their payment preferences. Therefore, this set of analysis considers WTP as a proportion of Income to reveal intensity of preference. Table 4 tests casual relationship between willingness to pay as a proportion of income along with other explanatory variables.

Table: 3. Determinants of WTP for Urban Forestry Conservation

Independent s	A. Use of all variables			B. Results of using LOGY in place of Income			C. Results of removing the Income variable		
	Coefficien t	t	Sig.	Coeffici ent	t	Sig.	Coefficie nt	t	Sig.
(Constant)	-20.861	-0.218	0.828	-1041.72	-3.385*	0.001	-80.890	-0.812	0.418
AGE	-3.538	2.499*	0.014	-2.391	-1.631	0.105	-2.480	-1.688	0.094
OCCU	15.723	1.364	0.175	12.662	1.058	0.292	14.703	1.210	0.228
EDULEV	42.660	2.911*	0.004	39.279	2.274**	0.025	59.378	3.997*	0.000
FLSIZE	-19.771	-1.576	0.117	-13.207	-1.032	0.304	-10.613	-0.815	0.416
INCOME	0.002	4.120*	0.000						
OWN_G	124.061	2.604*	0.010	119.529	2.392*	0.018	89.625	1.812	0.072
LOCAL_G_D	122.262	2.818*	0.006	122.979	2.747*	0.007	114.471	2.504*	0.013
ENV_PROB	31.284	3.223*	0.002	33.384	3.338*	0.001	35.037	3.437*	0.001
LOGY				102.619	3.248*	0.001			
R Square	0.386			0.354			0.312		
Adjusted R Square	0.351			0.317			0.278		
F		11.073*	0.000		9.396*	0.000		9.916*	0.000
N	150			150			150		

*Significant at 1% level ** Significant at 5% level

Source: Computed by author based on primary data

The above results imply that for the whole sample, higher the monthly income and education level, then higher

is the tendency to pay for conservation. That means with the increase of education level people are more aware

about the importance of forestry in urban area and hence they would like to pay more towards urban forestry conservation. As expected, income is a significant independent variable which directly influence the amount of payment for urban forestry conservation.

Analysis using WTP as a Proportion of Income

An important consideration in the case of understanding peoples preferences is the

proportion of the individuals income that he/she is willing to part with – this further reveals their payment preferences. Therefore, this set of analysis considers WTP as a proportion of Income to reveal intensity of preference. Table 4 shows the casual relationship between willingness to pay as a proportion of income along with other explanatory variables.

Table:4Determinants of WTP as a Proportion of Income

Independents	Dependent Variable: WTP/Income		
	Coefficient	t	Sig.
(Constant)	0.015	1.822	0.071
AGE	0.000	-2.528*	0.013
OCCU	0.001	0.760	0.449
EDULEV	-0.001	-0.799	0.425
FLSIZE	-0.002	-1.826	0.070
OWN_G	0.005	1.187	0.237
LOCAL_G_D	0.008	2.163**	0.032
ENV_PROB	0.003	3.896*	0.000
R Square		0.224	
Adjusted R Square		0.185	
F		5.689*	0.000
N		150	

*Significant at 1% level ** Significant at 5% level

Source: Computed by author based on primary data

The results show that age, whether respondents feel local green area is deteriorating, and whether area experiences environmental problems for absence of greenery turn out to be significant. The entire significance of the regression estimation is shown by F

statistics. The F statistics shows that the model is significant.

WTP of Non Zero Bids Sample

Table 5 shows determinants of WTP for Non-Zero bids only, that leaves out those who are not willing to pay or in other

words, covers those samples who are willing to pay.

The result of the analysis of linear regression of the determinants of WTP for the non-zero bids responses also shows overall significance through F statistics in the given area. Age, occupation, education, income, whether respondents feel local green area is deteriorating, and whether area experiences environmental problems for absence of greenery remains are significant variables in Table 5.A. Adjusted R square is .371. Coefficient of determination shows that 37% of the total variation in WTP is explained by above variables. In Table 5.B. where log income is used instead of actual income and the significant determinants are occupation, education, log value of

income, whether respondent have their own garden, and whether area experiences environmental problems for absence of greenery. Adjusted R square is .351 i.e. the above mentioned significant determinants together explain 35% of the variance. The Table 5.C. shows WTP/Income as a dependent variable. Here age, whether respondents feel local green area is deteriorating, whether area experiences environmental problems for absence of greenery remains are significant. The F statistic shows that the model is significant.

Therefore it can be said that WTP is directly related to occupation, level of education, per month income, whether respondent has their own garden and consciousness about environment.

Table:5 Determinants of WTP for Non-Zero bids only

Independents	A. Use of all variables except LOGY with WTP as Dependent Variable			B. Results of using LOGY in place of Income			C. Dependent Variable: WTP/Income		
	Coefficient	t	Sig.	Coefficient	t	Sig.	Coefficient	t	Sig.
(Constant)	-12.310	-0.118	0.906	-1217.718	-3.591*	0.001	.018	1.872	.064
AGE	-4.017	-2.190**	0.031	-2.947	-1.546	0.125	.000	-2.151**	.034
OCCU	29.692	2.274**	0.025	27.095	2.007**	0.047	.002	1.382	.170
EDULEV	44.980	2.704*	0.008	42.991	2.204**	0.030	-.002	-1.197	.234
FLSIZE	-23.949	-1.650	0.102	-18.446	-1.249	0.215	-.002	-1.640	.104
INCOME	0.002	3.998*	0.000						
OWN_G	68.094	1.253	0.213	120.789	3.407*	0.001	.001	.220	.826
LOCAL_G_D	171.750	3.311*	0.001	65.330	1.149	0.253	.012	2.627*	.010
ENV_PROB	30.043	2.673*	0.009	161.134	3.023*	0.003	.003	3.110*	.002
LOGY				35.168	3.039*	0.003			
R Square	0.414			0.397			0.226		
Adjusted R Square	0.371			0.351			0.175		
F	9.628*			8.646*			4.421*		
N	118			118			118		

*Significant at 1% level ** Significant at 5% level

Major Findings

Major findings of the present study are:

- That a substantial number of respondents are not willing to pay for conservation (21.3%).
- That there is a substantial number of persons willing to make higher payments i.e. >Rs 801 (9.3%).
- That WTP would be higher among respondents with higher level of education and
- That income is the key determinant of WTP.

Concluding Remarks

This study may fills this gap in the literature of urban forestry and park visitors by examining park visitors' behaviour towards urban forests and by providing monetary value estimates of urban forests' a non-price benefits to them. WTP for urban forests conservation by park visitors was estimated using the contingent valuation method (CVM). The influence of park visitors' demographic characteristics was also examined in this regard. We know Urban forestry resources enhance quality of life of city dwellers but majority of the respondents in this study reported very low WTP for urban forest conservation. The results highlight that, given all other factors occupation, education, monthly income, whether respondent have their own garden, whether respondents feel local green area is deteriorating, and whether area experiences environmental problems for absence of greenery play significant roles for urban forestry conservation.

The variables like income and level of education has emerged significantly, as the level of education and income become higher then higher will be the willingness to pay. This conclusion implies that as the level of education become higher along with monthly income and environmental awareness then the city dwellers are ready to pay more for the conservation of urban forest on account of multifarious roles of trees in sustaining city environment. The results of this study would be useful for urban resource managers and planners in making efficient land use and management decisions. This study, however, is preliminary in nature and therefore, not free from limitations and thus the WTP estimates should be used with caution.

References

- Bandyopadhyay, S., Narayanan, K. and Ramanathan, A. (2005): Determinants of Willingness to Pay for Wetland Conservation: A study of Kolkata wetlands. *Pacific Journal of Regional Sciences*. Vol.35, No.4, pp.983-995.
- Bolund, P. and Hanhammer, S. (1999): Ecosystem Services in Urban Areas, *Ecological Economics*, Volume-29, pp.293-301.
- C.Y. Tim. and H.T. Liu. (2001): Pattern and Dynamics of Urban Forests in Relation to Land Use and Development History in Guangzhou City, China, *The Geographical Journal*, Vol.167, No.4, pp.358-375.

- Dwyer, J.F., McPherson, E.G., Schroeder, H. W. and Rowntree, R. A. (1992): Assessing the Benefits and Costs of the Urban Forest, *Journal of Arboriculture* Vol:18, pp.227-234.
- Jim, C.Y. and Wendy, Y.C. (2009): Ecosystem Services and Valuation of Urban Forests in China Cities, *Urban Forestry and Urban Greening*, Elsevier, Vol.26, pp.187-194.
- Kawagoe, K. and Fukuna, N. (2001): Identifying the Value of Public Services by the Contingent Valuation Method (CVM), *Nomura Research Institute*, Vol.39.
- Konijnendijk, C.C., Ricard, R.M., Kenney, A. and Randrup, T.B. (2006): Defining Urban Forestry-A Comparative Perspective of North America and Europe, *Urban Forestry and Urban Greening*, Elsevier, Vol.4, Issue.4, pp.93-103.
- Lo, A.Y. and Jim, C.Y. (2010): Willingness of Residents to Pay and Motives for Conservation of Urban Green Spaces in the Compact City of Hong Kong, *Urban Forestry and Urban Greening*, Elsevier, Vol.9, pp. 113-120.
- Randrup, T.B., Konijnendijk, C.C., Kaennel, D.M., Pruller, R. (2005): The Concept of Urban Forestry in Europe in Konijnendijk, C.C., Nilsson, K., Randrup, T.B., Schipperijn, J. (Eds.), *Urban Forests and Trees*, Springer, Berlin, pp.9-21.
- Sanesi, G. and Chiarello, F. (2006): Residents and Urban Green Spaces: The Case of Bari, *Urban Forestry and Urban Greening*, Elsevier, Vol.4, Issue.3 and 4, pp.125-134.
- Spash, C.L. (2000): Ecosystems, Contingent Valuation and Ethics: The Case of Wetland Re-Creation, *Ecological Economics*, Elsevier, Vol.34, pp.195-215.
- Spiegel, M.R. and Stephens, L.J. (2009): *Schaum's Outline of Theory and Problems of Statistics*, Third Edition, Tata McGraw Hill Education Private Limited, New Delhi.
- Tyrvaenen, L., Silvennoinen, H. and Kolehmainen, O. (2003): Ecological and Aesthetic Values in Urban Forest Management, *Urban Forestry and Urban Greening*, Elsevier Vol-1, Issue-3.
- Yang, J. and Zhou, J. (2005): The Failure and Success of Greenbelt Program in Beijing, *Urban Forestry and Urban Greening*, Elsevier, Vol.6, Issue.4, pp-287-296.

Regeneration of Ketones from Semicarbazones in Solid State on Wet Silica Supported Ceric Ammonium Nitrate under Microwave Irradiation

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Abstract

Microwave irradiation of ketosemicarbazones on wet silica supported ceric ammonium nitrate (CAN) under environmentally benign solvent-free condition provides a fast, efficient and simple method for regeneration of ketones in high yields.

Protection of carbonyl compounds as semicarbazones is of great importance to organic chemists, as they are readily prepared and highly stable compounds¹. Semicarbazones are extensively used for purification and characterization of carbonyl compounds^{2,3}. Moderate works have been done for the regeneration of carbonyl compounds from semicarbazones. Some of the methods reported include pyruvic acid, sodium nitrite/glacial acetic acid, mercury (II) acetate, thallium (II) acetate, lead (IV) acetate, clayfen, nitrous acid, Dowex-50, Amberlyst 15/aq. Acetone, tetrakis (pyridine) silver dichromate/benzene, copper chloride, 3-carboxypyridinium chlorochromate/ CH_3CN , zirconium sulphophenyl phosphonate. These methods require either higher temperatures or longer reaction times or invoke toxic metal ion catalysts which are detrimental to the environment. Consequently, the discovery of newer efficient and fast methods using readily available safer reagents is the goal of the organic chemists.

Recently, the growing interest in the application of microwave irradiation in

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chemical reaction enhancement⁴ is due to high reaction rates and formation of cleaner products. The solvent-free reaction condition is especially appealing

for providing an environmentally benign system. Herein we wish to report a solid state method for regeneration of ketones from semicarbazones using wet silica supported ceric ammonium nitrate (CAN) under microwave irradiation. The reaction proceeds efficiently in high yields at ambient pressure within a few seconds (Table-1). Although CAN⁵ is a useful reagent in organic synthesis, to the best of our knowledge this is the first report of the regeneration of ketones from semicarbazones using CAN under microwave irradiation in solid state. Among several mineral supports examined, silica was found to give best results. The optimum ratio of the substrate to the reagent is found to be 1:2 (mole/mole). The reaction remains incomplete if lower amounts of the reagents are used. The dry reagent decomposes under microwave irradiation. By conventional heating method (oil bath) at 110°C, the semicarbazones are mostly converted to ketones after 20 hr. the reagent has wide applicability for regeneration of ketones from aliphatic, aromatic ketosemicarbazones and disemicarbazone of diketone. However, semicarbazones of aldehydes under similar reaction conditions result in a complex mixture of products with consumption of all the starting materials.

In conclusion, we have developed a solvent-free method for the facile cleavage of a variety of ketosemicarbazones in solid state on wet silica supported ceric ammonium nitrate

under microwave irradiation providing an environmentally benign system.

General Procedure

The reagent was prepared by adding silica gel (20 g, 230-400 mesh, SRL) to a stirred solution of CAN (12.5 g, 22.8 mmol) in water (30 mL). After removal of water, the dry reagent (2.85 g) was moistened with water (0.5 mL) and was mixed the neat ketosemicarbazone (1 mmol) in a Erlenmeyer flask. It was then placed in an alumina bath (heat sink) inside a domestic microwave oven operating at minimum power level for the specified time (Table 1). After the completion of the reaction (monitored by TLC) the product was extracted with dichloromethane (3x10 mL).

References

- Fieser L F & Fieser M (1967) *Reagents for Organic synthesis*, vol.1, p 1000, J. Wiley & Sons, New York
- Vogel A I (1978) *Textbook of Practical Organic Chemistry*, 4th edn, ELBS & Longman, London
- Hershberg E B (1948) *J Org Chem* 13, 542
- Siddiquil R, Srivastava A, Singh A, Shamim S. & Rai P. (2015) *RSC Adv* 5, 5256-5260;

- Zhang Z, Macquarrie D. J, Bruyn M. D. Budarin V. L, Hunt A. J, Gronnow M. J, Fan J. S (2015) *Green Chem* 17, 260-270
5. Li J., Liu M., Li Q, Tian H. & Shi Y. (2014) *Org Biomol Chem* 12, 9769-9772;
- Atar A. B, Lim K. T, Jeong Y. T. (2015) *New J Chem* 39, 396-402

Table 1: Microwave-assisted regeneration of ketones from semicarbazones using wet silics supported CAN

Entry	Semicarbazone	Product	Time (sec)	Yield ^a (%)
1	Isobutyl methyl ketone semicarbazone	Isobutyl methyl ketone	8	90
2	Cyclohexanone semicarbazone	Cyclohexanone	15	91
3	Acetophenone semicarbazone	Acetophenone	10	98
4	4-Methylacetophenone semicarbazone	4-Methylacetophenone	8	96
5	4-Methoxyacetophenone semicarbazone	4-Methoxyacetophenone	37	88
6	4-Nitroacetophenone semicarbazone	4-Nitroacetophenone	11	96
7	2-Hydroxyacetophenone semicarbazone	2-Hydroxyacetophenone	12	86
8	6-Methoxytetralone semicarbazone	6-Methoxytetralone	15	85
9	2-Acetylnaphthalene semicarbazone	2-Acetylnaphthalene	12	89
10	Benzil disemicarbazone	Benzil	20	94

^aYields refer to pure isolated products

A new tetrameric Cu^{II} cluster with square topology exhibiting ferro- and antiferromagnetic magnetic pathways: Which is which?

Mau Sinha Ray

Abstract

The rational synthesis of polynuclear coordination complexes, aiming at understanding the structural and chemical factors that govern the exchange coupling between paramagnetic centers, are of continuing interest in biology, chemistry and physics.¹ Particular interest has focussed on the development of single molecule magnets (SMM).² A variety of ligands have been employed for preparation of these clusters with the carboxylate being one of the most widely used.³ The use of amino acids e.g. aspartic acid, glutamic acid etc. are still limited although they have the potential to be used as ligand for the synthesis of such complexes. The solution state-behavior of the copper(II)-aspartate complexes has been extensively investigated, as well as that of their ternary complexes with imidazole (im) or 2,2'-bipyridine (bpy),⁴ which were suggested to enhance the affinity of copper(II) for the oxygen donor sites of anionic ligands.^{5,6} Further interest in those works derives from their biological implications since the ternary complexes containing a heteroatomic N base moiety and O donors is the preferred combination of donor atoms dominating in many naturally occurring complexes of low and high molecular weight.⁶ In the solid state the complexes also show interesting structural

diversity.⁷ The diaqua(L-aspartato)copper(II), [Cu(L-asp)(H₂O)₂], crystallizes in a one-dimensional polymer-like structure where a pair of adjacent aspartate molecules are bridged by a Cu(II) ion. In this complex the Cu(II) ion is in a distorted tetragonal pyramidal coordination.^{7a} The structure of (L-aspartato)(imidazole) copper(II) dihydrate, [Cu(L-asp)(im)]·2H₂O, consists of a polymeric two-dimensional network in which each copper atom is coordinated in a distorted square pyramidal geometry by three aspartate ions and one imidazole molecule.^{7b} Aqua(L-aspartato)(2,2'-bipyridine) copper(II) trihydrate, [Cu(L-asp)(bpy)(H₂O)]·3H₂O, consists of a monomeric [Cu(L-asp)(bpy)(H₂O)] molecule with three water molecules in the lattice. The geometry around Cu(II) is five-coordinated distorted square pyramidal.^{7c}

Here we provide the first report of a tetranuclear Cu(II) complex, [Cu₄(L-asp)₂(bpy)₄(H₂O)₃](ClO₄)₄·2.5H₂O (I). The synthesis, crystal structure, spectral and magnetic properties and theoretical DFT/B3LYP calculations of this interesting compound are described in this paper.

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$[\text{Cu}_4\text{L}_2(\text{bpy})_4(\text{H}_2\text{O})_3](\text{ClO}_4)_4 \cdot 2.5\text{H}_2\text{O}$, a new tetranuclear Cu^{II} cluster showing square planar geometry, formed with aspartate bridging ligand (L) has been synthesized. The global magnetic coupling is ferromagnetic but theoretical DFT/B3LYP calculations are necessary to assign which Cu-L-Cu side is ferro or antiferromagnetically coupled.

The rational synthesis of polynuclear coordination complexes, aiming at understanding the structural and chemical factors that govern the exchange coupling between paramagnetic centers, are of continuing interest in biology, chemistry and physics.¹ Particular interest has focussed on the development of single molecule magnets (SMM).² A variety of ligands have been employed for preparation of these clusters with the carboxylate being one of the most widely used. Aspartate is known to form versatile polymeric structures with Cu^{II} .³ Here we provide the first report of a tetranuclear Cu^{II} complex $(\text{Cu}_4\text{L}_2(\text{bpy})_4(\text{H}_2\text{O})_3)(\text{ClO}_4)_4 \cdot 2.5\text{H}_2\text{O}$. Its crystal structure indicates that there are two centrosymmetric, $[\text{Cu}_4\text{L}_2(\text{bpy})_4(\text{H}_2\text{O})_3]^{4+}$ tetrameric cations in the unit cell together with perchlorate anions and solvent molecules. The two tetramers A and B have similar coordination spheres (Fig. 1 for tetramer A). In both tetramers the two independent copper atoms Cu(1) and Cu(2) have different environments. Cu(1) forms a square pyramidal environment with O(51) in the axial position. Of the water molecules, O(10) was refined with full occupancy while

O(20) was refined with 50% occupancy. This reduced occupancy, taken with the fact that the Cu(1)-O(20) bond is very long at 2.465 Å suggest that it might be more appropriate to consider Cu(1) as five-coordinate with the square pyramidal environment. This is definitely the case for Cu(2): the five-coordinated pyramidal structure is completed by a water molecule, O(10), in an axial position. Main distances and angles for part A are given in Fig. 1. Each ligand therefore is bonded to three different copper atoms giving *syn-anti* L bridges, which will be described below.

The magnetic behavior of this complex was measured on a SQUID susceptometer from 300 to 2 K. $\chi_M T$ value is $1.70 \text{ cm}^3 \text{mol}^{-1} \text{K}$ at 300 K, first increases and then decreases to $1.43 \text{ cm}^3 \text{mol}^{-1} \text{K}$ at 2.03 K (Fig. 2). The curve of the reduced magnetization ($M/N\beta$) vs H (Fig. 2 inset) lies slightly below the theoretical Brillouin curve for a ground state $S = 2$ and $g = 2.12$ (epi measurements). A very similar curve has been recently reported for $[\text{Cu}_2(\text{mal})_2(\text{py})_2]_2 \cdot 2\text{H}_2\text{O}$, in which J value is $+5.62 \text{ cm}^{-1}$ and J' (intermolecular) is -0.284 cm^{-1} .⁴

Structurally one distinguishes along the sides (J_1 , J_2) and along the diagonal (J_3). It must be emphasised that this complex is the first Cu_4 complex with three such different carboxylato pathways reported to date. A full-diagonalization formalism⁵ through the Clumag program,⁵ has been carried out using the Hamiltonian $H = -J_{ij} \sum S_i S_j$ (Model 1). The best-fit

parameters obtained are: J_1 (or J_2) = 8.38 cm^{-1} ; J_2 (or J_1) = -1.27 cm^{-1} ; J_3 = -0.5 cm^{-1} , g = 2.12 and R = 1.1×10^{-5} . J_3 corresponds to the diagonal pathway, because the coupling through four carbon atoms is either zero or very small and antiferromagnetic.⁶ But a question immediately arises: which side of the square corresponds to J_1 and which to J_2 . It contains one side as a *syn-anti* (*basal-basal*) carboxylato bridge and the other side as a *syn-anti* (*basal-apical*) carboxylato bridge. Weak ferro- or antiferromagnetic coupling are reported for these two modes.⁷ For the *basal-basal* mode the sign and magnitude of J depends on the planarity of the Cu-O-C-O-Cu skeleton as characterized by the dihedral angles between two adjacent copper planes.^{7,8} It is known that at 180° the interaction is AF while close to 90° is F. In this complex these dihedral angles are 159.5 and 153.4°. For *basal-apical* coordination mode, the Addison parameter⁹ (τ) of each square-pyramidal copper(II) center, represents the mixture of the magnetic x^2-y^2 and z^2 orbitals: for τ = 0 (pure sp), the greatest F coupling and for τ = 1 (pure tbp) the greatest AF coupling. In this complex τ values are 0.14 and 0.25. Indeed, J_1 and J_2 can be ferro or antiferromagnetic.

We can add to the previous model the effect of J' (intermolecular interactions) and/or the molecular Zero-Field-Splitting (D parameter) of the hypothetical $S = 2$ ground state (Model 2). Simulating with J' and D (considering both J_1 and J_2 ferromagnetic, which is possible) several

curves with very similar shape to the experimental, has been drawn (Fig. 3). Thus, the problem of the assignment of the J values does not have a clear solution. The only definitive feature is that J_1 and J_2 cannot be simultaneously antiferromagnetic.

In order to establish the right model for it, we have carried out DFT/B3LYP calculations¹⁰ on $\text{Cu}_1\text{-L-Cu}_2$ dimers of one of the tetramers to determine unequivocally the nature of the J_1 , J_2 , and J_3 . The dimers employed to compute J_1 and J_2 are obtained by taking from the tetramer the Cu_1 and Cu_2 atoms, their bpy, the dicarboxylate ligand that connects the two copper atoms and the water molecule bound to $\text{Cu}(2)$. The water molecule with 50% occupancy in the crystal structure bound to $\text{Cu}(1)$ was omitted, although its inclusion would have negligible effect on the calculations. The other dicarboxylate attached to the Cu atom was simulated by an acetate (due to the similar local geometry at the Cu-L coordination point). In the case of J_3 , the two dicarboxylates has been employed without truncation. We then computed the total energy of the $\text{Cu}_1\text{-L-Cu}_2$ dimers, in their triplet and singlet states, using the B3LYP gradient-corrected density functional^{11,12} and an enlarged Ahlrich's pVDZ basis set.^{13,14} The broken-symmetry procedure was used to evaluate the singlet state energy. The value of the J_1 parameter was obtained by direct subtraction of the energy for the triplet and broken-symmetry singlet state, without further correction. The

results thus obtained for the J_1 , J_2 and J_3 are 11.4, -3.8, and -1.5 cm^{-1} , respectively, in reasonably proximity with the fit values. Without considering the exact value, it is clear that, now, we can assign the *basal-basal* pathway as

the ferromagnetic and the *basal-apical* pathway as the antiferromagnetic. This allows a proper analysis of the magnetism of this system.

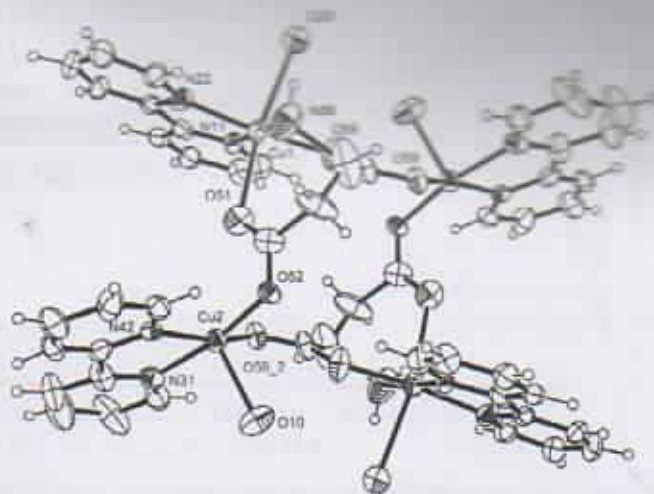


Fig. 1. The centrosymmetric structure of $[\text{Cu}_4(\text{bipy})_4\text{L}_2(\text{H}_2\text{O})_4]^{4+}$ with ellipsoids at 20% probability. Tetramer A is shown. Tetramer B has an equivalent structure. The hydrogen atoms bonded to oxygen were not located and are not included.

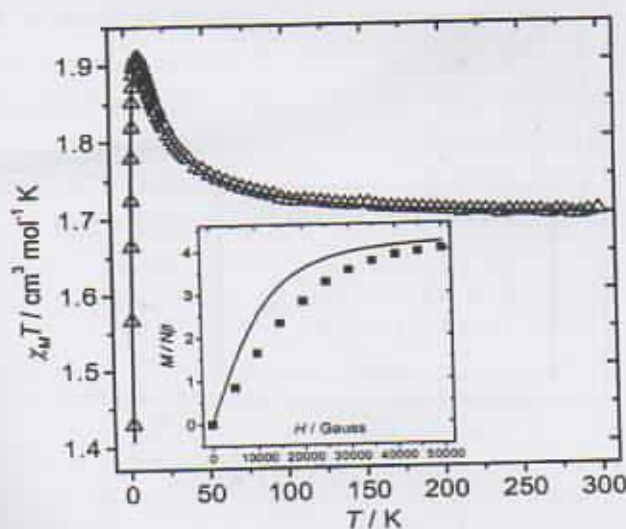


Fig. 2. A plot of $\chi_M T$ versus T for the tetramer. The solid line represents the best fit and the points the experimental data. Inset: plot of the $M/N\beta$ vs H compared with the Brillouin formula for $g = 2.12$ and $S = 2$.

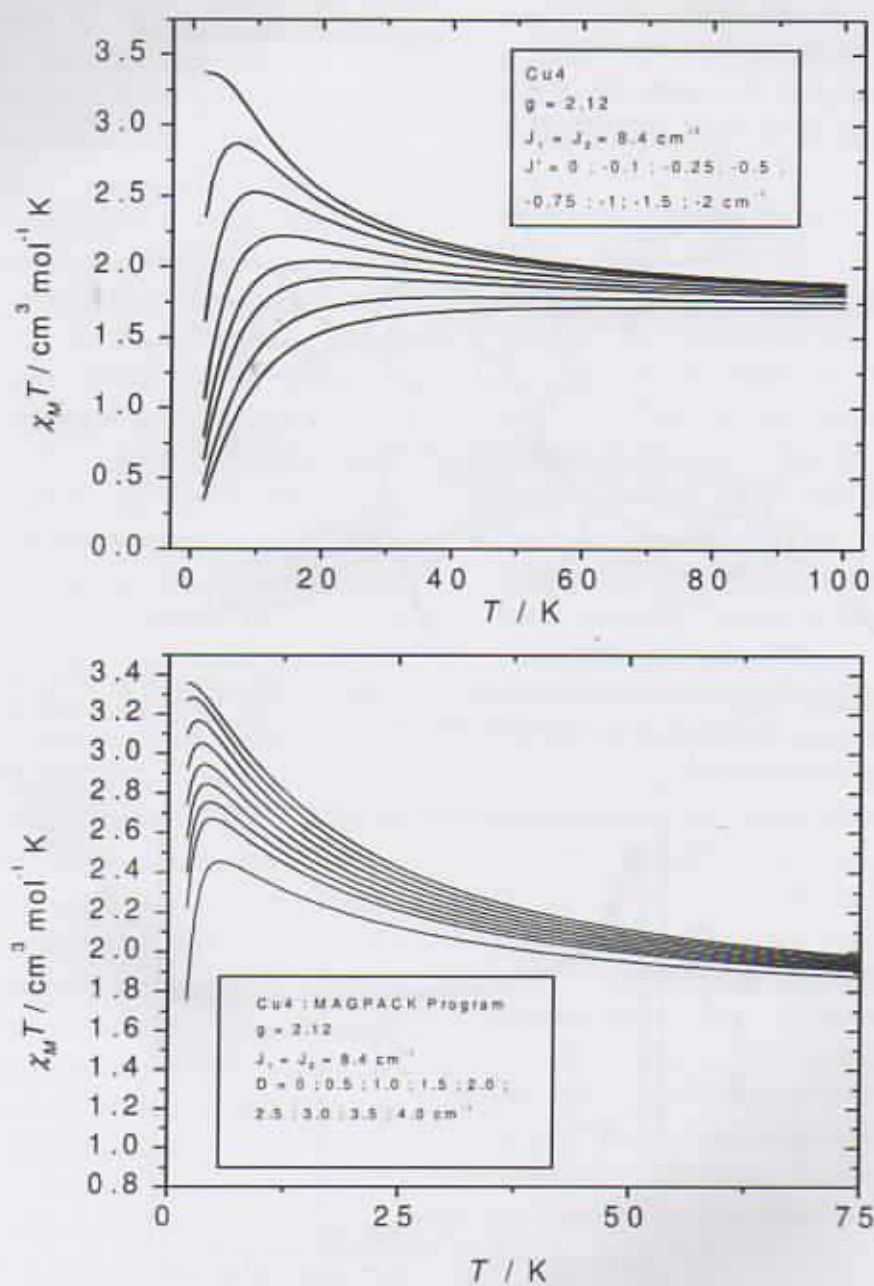


Fig. 3. $\chi_M T$ vs T with J' and D considering both J_1 and J_2 ferromagnetic.

References

1. S. Miller and M. Drillon, Eds. *Magnetism: Molecules to Materials II; Molecule-Based Magnets*. Wiley-VCH, Weinheim, 2001.
- S. Osa, T. Kido, N. Matsumoto, N. Re, A. Pochaba and J. Mrozinski; *J. Am. Chem. Soc.*, 2004, **126**, 420; R. Schenker, M. N. Leuenberger, G. Chaboussant, H. U. Gudel and D. Loss; *Chem. Phys. Lett.*, 2002, **358**, 313.
- R. Calvo, C. A. Steren, O. E. Piro, T. Rojo, F. A. Zuniga and E. E. Castellano; *Inorg. Chem.*, 1993, **32**, 6016 and ref. Therein;
- X. Zhang, C. Lu, Q. Zhang, S. Lu, W. Yang, J. Liu, H. Zhuang; *Eur. J. Inorg. Chem.*, 2003, 1181;
- CLUMAG Program: D. Gatteschi and L. Pardi; *Gazz. Chim. Ital.*, 1993, **123**, 231.
- P. S. Mukherjee, T. K. Maji, G. Mostafa, J. Ribas, M. S. El Fallah and N. R. Chaudhuri; *Inorg. Chem.*, 2001, **40**, 928.
- A. Rodríguez-Forteá, P. Alemany, S. Alvarez and E. Ruiz; *Chem. Eur. J.*, 2001, **7**, 627.
- S. K. Dey, B. Bag, K. M. Abdul-Malik, M. S. El Fallah, J. Ribas and S. Mitra; *Inorg. Chem.*, 2003, **42**, 4209 and ref. therein.
- A. W. Addison, T. N. Rao, J. Reedijk, J. van Rijn, C. G. Verschoor; *J. Chem. Soc. Dalton Trans.*, 1984, 1349.
- M. J. Frisch et al, *Gaussian 98*, revision A7; Gaussian Inc. Pittsburgh, PA, 1998.
- A. D. Becke; *J. Chem. Phys.*, 1993, **98**, 5648.
- R. G. Parr and W. Yang, *Density-Functional Theory of Atoms and Molecules*; Oxford University Press, New York, 1989.
- A. Schafer, H. Horn and R. Ahlrichs; *J. Chem. Phys.*, 1992, **97**, 2571.
- Built by adding diffuse functions on the Cu atoms (s, p and d, with exponents 0.00329, 0.0155, and 0.03887) and on the C, N and O atoms of the acetate and dicarboxylate anionic ligands (s, p with exponents: C = 0.01309, 0.01526; N = 0.01876, 0.02195; O = 0.02553, 0.02764).

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Upadhyay S N & Chattoraj D K (1972) *Indian J Biochem Biophys* 9, 17-20

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Dixon M & Webb E C (1964) *Enzymes*, 2nd edn, pp. 565-567, Longmans Green, London
Bracket J (1967) in *Comprehensive Biochemistry* (Florkin M & Stotz E M, eds), Vol. 28, pp. 23-54, Elsevier, Amsterdam

Laidler K J & Bunting P S (1973) *The Chemical Kinetics of Enzyme Action*, 2nd edn, Vol. 2, Chapt. 4, pp. 255-278, Clarendon Press, Oxford

Reports, non-serial symposia & proceedings

Harding B W, Whysner J, Cheng S C & Ramseay J (1970) *Proceedings of the Third International Congress, Hormonal Steroids*, Hamburg, September 1970, pp. 294-300

Technicon Autoanalyzer Methodology (1971) method file N-24, pp. 1-4

Iverson H O (1969) *Homeostatic Regulators* (Ciba Foundations Symposium), pp. 29-30, J & A Churchill Ltd, London

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Khan M A A (1988) *Sclerotium rolfsii*: Behaviour in culture and as pathogen, Ph. D. thesis, London University, London.

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