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Greetings!

We are glad that 3rd year 6th issue (in new phase it is 1st year 2nd volume) of our Journal has been published. It was not a trouble-free job for us as there were so many impasses infiltrating into all our steps. Majorly financial problems handicapped us. But some scholars and teachers bore with us and supported us. So we are now sanguine to transform dream into reality.

We have mentioned that after obtaining the ISSN for the JIRD in 2012 it was a challenging and remarkable task for the Editorial Board to acquire and upgrade its International standard from the opening spell. Ultimately we have accomplished it. We have already constructed a very strong three tier Editorial Body for the Journal with a Global Peer Review Board.

We consider that, there is no track of quarantine in higher level of research work. Every field of knowledge is inter-linked, and must unlock the vision of the scholar community and inculcate critical thinking among us. To build a rational and beautiful society we need a total re-orientation of knowledge. So the motto of our Journal is to encourage the integrated research for the development and progress of human civilization.

Our vision regarding integrated research is very clear. But there is a genuine problem. Since our Journal is a multi-lingual one catering to all the disciplines we will try to arrange translation of the papers in future for solving the medium problem.

I convey my sincere thanks to all who have been instrumental to help this issue reach the level of success and those who have contributed for it as well as assisted us for the last few days. My best wishes will always be there.

To conclude, I invite papers/review papers/research notes/articles which are original and unpublished from academicians, teachers, scholars, researchers, students for the next issue of IJIRD which will be published in June-July, 2015. The last date for sending papers is 31st March, 2015.

Sibsankar Pal
Editor-in-Chief

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OTHELLO THE MOOR OF VENICE AS A LITERARY REPRESENTATION OF COMMUNITY, CULTURE AND IDEOLOGY

Anamitra Chatterjee

Assistant Professor, Department of English
Maulana Azad College, Kolkata

Paper ID : LLE/1/IRD/2014/V-II

ABSTRACT

Current scholarship has offered sophisticated readings of the webbed relations between state power, the emergence of new classes and ideologies, the reshaping of patriarchal authority, the development of the idea of an English nation, sexual practices and discourses and the real and imaginary experiences of English people in America, Africa and Asia. These experiences built upon and transformed ideologies about 'others' which filtered down from earlier times, particularly the experience of the Crusades or that which emerged in interactions with other Europeans such as the Spanish, the Italians and the Dutch or most importantly, those that were developed in relation to those living on the margins of the English society – Jews, gypsies, the Irish, the Welsh and the Scots. Political criticism of Shakespeare as well as of early modern England has begun to show, with increasing detail and sophistication, that it is virtually impossible to seal off any meaningful analysis of English culture and literature from considerations of racial and cultural difference and from the dynamics of emergent colonialism.

Keywords: state power, Shakespeare, racial background, sexuality, self-affirmation, audience

Re-readings of Renaissance culture and power opened up, in at least two important ways, questions of colonialism and race in relation to Shakespeare. First, scholars began to examine emergent colonial discourses and relations during the early Modern period and their impact on different aspects of English history, culture and representations. Of course there had been pioneering scholarship in these areas earlier – books such as Samuel Chew's *The Crescent and the Rose* (1937) which examined views and representations of Islam in Elizabethan and Jacobean England; Eldred Jones's *Othello's Countrymen* (1956) and *The Elizabethan Image of Africa* (1971), both of which focused on images of black Africans in the period and its literature; and G.K. Hunter's *Dramatic Identities and Cultural Traditions* (1978), which examined racial discourses and the status of foreigners during the period and in Shakespeare's plays, must all be acknowledged as important progenitors for current scholarship on these matters.

Current scholarship has offered sophisticated readings of the webbed relations between state power, the emergence of new classes and ideologies, the reshaping of patriarchal authority, the development of the idea of an English nation, sexual practices and discourses and the real and imaginary experiences of English people in America, Africa and Asia. These experiences built upon and transformed ideologies about 'others' which filtered down from earlier times, particularly the experience of the Crusades or that which emerged in interactions with

other Europeans such as the Spanish, the Italians and the Dutch or most importantly, those that were developed in relation to those living on the margins of the English society – Jews, gypsies, the Irish, the Welsh and the Scots. Political criticism of Shakespeare as well as of early modern England has begun to show, with increasing detail and sophistication, that it is virtually impossible to seal off any meaningful analysis of English culture and literature from considerations of racial and cultural difference and from the dynamics of emergent colonialism.

G.K. Hunter in his essay 'Elizabethans and foreigners'¹ suggests that the Elizabethan awareness of foreigners was closely conditioned by a traditional religious outlook on the world; and that much 'new knowledge' lay fallow or was treated in merely superficial manner because of this. To Elizabethan Londoners the appearance and conduct of the moors was a spectacle and outrage, emphasizing the nature of the deep difference between themselves and their visitors, between their queen and the 'erring Barbarian'. When Shakespeare chose for this audience to present a Moor as his hero, he was perhaps not confused in his racial knowledge, but simply more aware than his contemporaries of the complex emerging pattern made by the concept of black and white.

The word 'Moor' was very vague ethnographically and very often seemed to have meant little more than a 'black-skinned outsider'. But it was not vague in its antithetical relationship to the European notion of the civilized white Christian. Throughout the Elizabethan

period, there seemed to be a considerable degree of confusion prevalent as to whether the Moor was a human being or a monster. In *Volpone* we are presented with a list of undesirables that Volpone had coupled with to produce his set of Fool, Dwarf and Hermaphrodite, whose supposititious parents are 'beggars, Gipseys and Jews, and black-moores.'²

The word had a wider, more ambiguous reference in its initial stages – the Spanish originally derived the word 'moro' from the Latin word 'maurus' which in turn came from the Greek word 'mavros' meaning 'black'.³ The term was first used to identify the natives of Mauretania – a region of North Africa corresponding to parts of present day Morocco and Algeria and later applied to the people of mixed Berber and Arab race, Mohammedan in religion, who conquered Spain in the eighth century. But as the Oxford English Dictionary points out – "In the Middle Ages, and as late as the seventeenth century, the Moors were commonly supposed to be mostly black or very swarthy (though the existence of 'white Moors' was recognized), and hence the word was often used for 'negro', cf Blackamoor." Thus the ambiguity was narrowed, if not totally erased and the figure of the Moor came to mean almost exclusively a blackamoor, or a person of black or very swarthy colour – which was how it was used by John Gower in 1390, Trevisa, in 1398, and Caxton in 1485.

In the street pageants and processions of the period, the Moors played a considerable part, but one that was unfortunately interchangeable with that of the Devils and Greenmen. Within the domain of the English folk-play also the figure of the 'Moor' plays an important role – the enemy of St. George is variously called 'The Turkish Knight, Black Morocco Dog', Morocco King, Black Prince of Darkness, Black and American Dog'.⁴

If we as readers therefore consider this to be an apt estimation of the received notions prevailing during the period about black man, we can see how Shakespeare makes use of this background in *Othello*. Iago presents the civilized, white, Christian viewpoint in just these terms. But Shakespeare seems to give an ironic turn to the stereotypical preconceived notions regarding the Moors when he makes the supposed outcast turn out to be the true Christian, while the nominal Christian, with the white skin appears as the devil's representative. Othello appears not only as a noble and courtly Christian but he also emerges as the leader of a white Venetian society dominated and populated primarily by Christians.

The assimilation of Moriscoes (converted Moors) within the Christian community was an affair strenuously policed by civic and ecclesiastical authorities. Moriscoes, for instance were even forbidden from singing and dancing in their traditional ways, for they were suspected of using words and gestures with double meanings which mocked

Christianity.⁵ This tension arising out of the dichotomy between a black exterior and a Christian interiority therefore needed to be constantly negotiated, explained and addressed.

Thus a literary tradition of the noble Moor indicated cultural stress rather than cross-cultural indulgence or harmony.⁶ In the English theatre, the figure of the noble Moor, such as Joffer in Heywood's *Fair Maid of the West* was usually the exception that proved the rule of Moorish incivility or devolved into a tragic figure like Othello who illustrated the impossibility of sustaining a perpetual contradiction.

For Shakespeare therefore the figure of the Moor in *Othello* becomes a mixture of black and tawny, perhaps both a negroid and an Arab; he is almost any 'colour' one pleases to consider him as, so long as it permits his easier isolation and destruction by his enemies and by himself. Othello's colour, which symbolises his external appearance is however, in some degree, not the literal factor, but becomes a signifier of the social reactions and assertions of the times.

In his own estimate, Iago is a man who had been doubly displaced from the 'place' that he from his viewpoint, rightly deserved and this gets highlighted in the opening scene of the play – "Three great ones of the city, / In personal suit to make me his lieutenant / Offcapped to him; and by the faith of man, / I know my price, I am worth no worse a place" (1.i.8-11). Iago's sense of the self, his acute consciousness of his own self worth, as revealed through the above lines is founded upon the treacherous relativities of comparison. For such a man to be deprived therefore of the 'place' and the position that he considers to be marker of his merit and as an object of his rightful deserving is perhaps equivalent to cheating and robbing a person of his own identity, since the very centre of his being is to be found in that obsessive concern for what is 'wholesome to my place'.

That Othello's racial background makes him an outsider in Venice goes without saying. He is portrayed as a Moor, as an experienced warrior and as an exclusive servant of the state of Venice. As such, the nature of the conflict between Iago and Othello might be brought into much clearer focus by being viewed through the dramatic action of the play symbolized by the Signoria of Venice and the island of Cyprus. Venice and its Senate embody order, reason, justice and concord – binding forces that hold the city together. Cyprus on the other hand, is associated with chaos and violent storms, with Turks and the Ottomans and the unharnessed forces of nature and as such comes to represent the 'Other'. If I were to reject the conventional – interpretations of Iago as a malignant or evil soul in action and view him instead as the expression of a settled point of view, his interactions with Othello

may then be read as a conflict between two different ethical and cultural systems. They are put into contrast by the playwright in much the same way as, but on a larger scale, the Signoria of Venice and the island of Cyprus are put into contrast and also conflict with each other.

It is a well discussed and established fact that racist readings of *Othello* as a play have always been a pervasive part of its dramatic structure and performance, primarily because Shakespeare deliberately chose to present his Christian Moor as the protagonist. In his study of the representational strategies that characterized the production of the image of the black man on the English stage during the sixteenth and seventeenth centuries, Elliott Tokson argues – “Studies have shown quite clearly that in western culture ‘black’ has been connected with thoughts of hell, sin, death and other manifestations of what is gloomy and forbidding...”.

As such, this typecasting of the black man as lustful and ‘devil’ish had been dominant in the dramatic characters of the period such as the treacherous villain Muly Hamet in George Peele’s *The Battle of Alcazar* (1588) and the vengeful, lecherous Eleazar in Thomas Heywood’s *Lust’s Dominion* (1600). It is specially pronounced in Shakespeare’s depiction of Aaron the Moor in *Titus Andronicus* (c.1592). Queen Tamora keeps Aaron as her adulterous partner and his sexual prowess is exceeded only by his ‘villainy’ when he resolves, in accordance with the stereotype of the black man as ‘devils’, that “Aaron will have his soul black like his face” (3.i.205) and as such has very little in common with the ‘noble Moor’ Othello. In view of the prejudices prevalent during the times and the literary tradition regarding the Moors as villains, it is remarkable that Shakespeare makes a departure from following the trend when he makes his tragic hero a black man and projects the white skinned Iago as his villain.

Thus, one might safely say that Shakespeare harps on these prejudices of the times only to subvert and explode them within the course of the play. Under this reading therefore, Othello’s error becomes a universal human weakness, rather than a flaw arising from his race; and the tragedy does not emphatically become a ‘study of a civilized barbarian reverting into type’, for Iago is the true ‘savage’ of the play. G.K. Hunter acknowledges the long established medieval tradition, literary and pictorial, that associated the black man with inferiority and damnation; but he also argues that a counter-current of religious discourse and art such as the emphasis on inner sanctity over outward appearance and the depiction of Balthazar, one of the Magi, bearing gifts for the infant Christ, as a black man, enabled Shakespeare to develop Othello as a ‘great Christian gentleman.’

It is thus as Virginia Mason Vaughan points out – “to be totally free of racism, one would have to invent a new

language with no loaded words, no colour discriminations, and no associations of blackness with evil, whiteness with good”. In other words, *Othello* cannot transcend the language and presuppositions of its culture. As such, if black-skinned men were regarded as the ‘Other’ in Renaissance Europe – a difference to be uneasily contained within or rejected by a white community – then women were also seen as a troublesome ‘Other’ within the patriarchal society. The Reformation in England is sometimes perceived as an era when the attitudes towards women’s roles were becoming more liberal. Puritans promoted the concept of an equal wedded partnership rather than unquestioned subordination of a wife to her husband and lauded marriage chastity above celibacy; yet as Valerie Wayne has suggested, this elevation of the married state might have served as a strategy to contain women’s unruly desires, rather than to promote a measure of real independence for them.

However, citing Winthrop Jordan and other scholars as support, Tokson argues that the characterization of blackness as negative was most consistent and dominant not only in the ‘literature’ of the period, but also in the written texts produced by numerous travellers, traders and ethnologists that characterized blacks as bestial, devoid of reason, sexually permissive and extremely jealous and yet at the same time ingenuous and of a free and open nature. It is within these general discourses of race and Otherness, with all their inherent contradictions that the character of Othello is to be understood. As a Moor, he is clearly presented as the ‘Other’, but not necessarily as an offensive ‘Other’; the qualifier ‘noble Moor’ does not extricate him from the realm of the exotic, but it undermines the perception of him as evil. What is to be noticed however, is that, the association of Othello with blackness and its numerous signifieds perhaps locates him within the domain of the undesirable. This blackness is articulated in a culture in which black is clearly the colour of degeneracy and damnation. As such, the racial undertones embedded within the dramatic structure of the play are revealed in its opening scene, in the verbal interactions between Iago, Roderigo and Brabantio, and in the Senate scene which follows it Iago glibly slanders Othello with derogatory epithets like ‘lusty Moor’, an ‘old black ram’, ‘Barbary horse’ and ‘devil’, while Brabantio, who earlier had ‘lov’d’ Othello as warrior, accuses him of practicing ‘damned’ witchcraft in order to win his daughter.

The scene where Brabantio confronts Othello for the first time after Desdemona has eloped with him is particularly noteworthy within the context of the play. According to the enraged Brabantio’s opinion, Othello appears as a ‘foul thief’ who has ‘stowed’ his daughter, somewhere out of the sight of the public and ‘enchanted’ her, for it was impossible for “a maid so tender, fair, and

happy, / So opposite to marriage that she shunned / The wealthy, curled darlings of" the nation to "Run from her guardage to the sooty bosom/ Of such a thing" as Othello, "to fear, not to delight" and thereby incur "a general mock" unless she "in chains of magic" were not bound (1.ii.67-72). The binary opposition that informs the larger structure of the play black as evil and white as good informs the context of Brabantio's speech.

Like Aaron in collusion with the demons of hell, and Caliban, the offspring of a witch, Othello, through compounding references to magic, charms, drugs and minerals, is projected not only as inferior to the 'wealthy, curled darlings' of Venice, but as frightening and 'other worldly' as well, as an 'abuser of the world, a practiser / Of arts inhibited and out of warrant' (1.ii.79-80). Therefore against the many arguments that Shakespeare emphasizes stereotypical ideas and explores prejudices only to explode them, there is somewhere perhaps a presentation of a pattern of inscribing blacks as devilish. Here the image of the 'tender, fair, and happy', Desdemona in 'chain', 'weakened' and 'abused' by 'such a thing' as the 'sooty bosomed Othello, effectively reinforces the associations of the black man as a rapist.

As such, the reference to 'race' within the context of the play dramatically foregrounds Othello's difference. In *Othello* what is perhaps revealed is a specific racialization of term 'Moor', in which the term signifies not only 'Otherness' but blackness as well, as revealed through the epithets applied by other characters while referring to Othello's 'thicklips' and 'sooty bosom' and other negative associations culturally signified by blackness.

Moreover, the aspects of excessive sexuality and bestiality, identified with the Moors and especially with the blacks are repeatedly highlighted. The characterization of Othello is problematized by the conflation of the twin concepts of blackness and Moorishness. Earlier, Othello had been referred to as the 'noble Moor' and although the difference was stressed in his characterization, the qualifier 'noble' had an ameliorating effect. Brabantio however, associates blackness with traits that would evoke negative responses; and as such the signifiers used to denote blackness come to be associated with a general lack of humanness. Also, the articulation of explicit and implicit bodies of binary opposition used to identify Othello – European vs. African, Christian vs. Moor, fair vs. dark, civilized vs. primitive – establishes the textual instance in which Moorishness and blackness are fused to complete a broader and more focused discourse of racial difference.

According to Jacquelyn Y. Mc. Lendon,⁷ the complex interplay of issues of identity involving the black man and the white woman is not fully addressed in *Othello* – Shakespeare does not foreground the notion that Othello's marriage to Desdemona is his way of gaining entry into

the elite white Venetian society, but within the context of the play, we perhaps get glimpses of an acute but unconscious sense of insecurity and inferiority from which Othello seems to suffer, which results in his proclamation – "I fetch my life and being / From men of royal siege" (1.ii.21-22). But the play does not provide any textual evidence that Othello feels any sense of spiritual or cultural bonding and affiliation with his African heritage.⁸ On the contrary, he consciously seeks to dissociate himself from the domain of the 'Other' and from the crippling sense of inferiority when he speaks "of the cannibals that each other eat/ The Anthropophagi, and men whose heads/ Do grow beneath their shoulders", (1.iii.142-144) and later when he rebukes Iago – "Are we turned Turks, and to ourselves do that/ Which heaven hath forbid the Ottomites? / For Christian shame, put by this barbarous brawl", (2.iii.153-155) as he tries to put a stop to the ruckus that had suddenly broken out. What is to be noted is the ease with which Othello adopts the discourse of the Western culture in describing and revealing the inferiority of the 'Other' in derogatory terms.

What is most striking in this development of the discourse of 'Otherness' is the strategy of self-representation that Othello employs. Othello's primary approach to self-construction in his earlier appearance had been through the means of storytelling or self narration. As such, this strategy may be said to have two major dimensions – a narrative construction of the self through story telling, reinforced by aestheticizing strategies and a focus on literariness that represents and elaborates his character as 'noble' and exotic; and an appropriation of the discourse of cultural 'otherness' that allows him to identify with the dominant group (Venetians) and suggests his difference from Moors and blacks. This is dramatically represented in the scene in which he defends himself against Brabantio's charges of practicing 'damn'd' witchcraft on Desdemona and speaks of his heydays and glorious adventures of the past before the Senate.

As such, Othello when he speaks of the 'Anthropophagi' and 'cannibals' simply ventriloquizes the descriptions of the non-western 'others' that characterized the discourse of the west. Tokson points out that the image of the wild man or man as a beast or monster can be traced back to the Middle Ages as a feature of Western discourse, and that such a trope eventually became associated with blackness. What is possibly presented in Othello's speech then, is an 'othering' of the self, both distancing from and negating of blackness. This act of self-defacement makes Othello therefore the 'Other' and more an outsider whose epistemological stance towards non-Westerners does not differ from that of the Venetians. By the end of act 1, the racial subtext has unfolded in all of its complexity. The signifier 'Moor' has been introduced

as designative of a rather racialized and indeterminate Otherness. The concept of 'black' has been encoded within a framework that might be said to be both appraisive and prescriptive. Othello as both 'Moor' and 'black' becomes representative of the contradictory cultural attitudes of his observers – he in 'noble', yet 'black'.

It is significant to note that Othello begins to suspect Desdemona even before he knows the handkerchief is lost; it is almost as if Othello is able to sense some spiritual loss within himself and from this point onwards Othello's language becomes angry and debased as he moves away from the courtly language in the earlier sections of the play and begins to employ 'low' physical images of rage and vows of retribution. Thus the handkerchief emerges as a symbolic signifier for Othello's own self, and moves to become a symbol of his love for Desdemona, a symbol of their mutual emotional bonding, on his own ancestral terms. By losing the handkerchief therefore, Othello seems to have lost the symbol of his own election or predestination to be a member of a noble rank and standing; and for him his two most vital concerns – his loss of his symbolic self in the material form of the handkerchief and his dread of losing Desdemona get fused together.

Karen Newman aptly sums up the symbolic significance of the handkerchief when she observes that this "snow balling signifier... first appears simply as a love-token given by Othello to Desdemona and therefore treasured by her"; but it would be accurate to say that it first disappears as a love-token and that its appearance or disappearance is not so simple. Newman herself remarks on its 'doubleness': "When the handkerchief is first given, it represents her virtue and their chaste love, but later it becomes a sign, indeed a proof of her unfaithfulness".⁹ Yet Emilia's 'he conjur'd she should ever keep it', places the representational emphasis less on her virtue and their chaste love, than on his desire to test her fidelity. The sense that Othello presented the handkerchief not only as a gift but also as a threat or warning is reinforced in 3.iv., after it has become a sign of her supposed unfaithfulness. Thus, if we only have Emilia's and Othello's comments to judge by, we must conclude that 'when the handkerchief is first given', the anticipation of betrayal is already the woven into the web of the gift, the terms of which express an anxiety about, a potential proof of Desdemona's unfaithfulness.

The handkerchief therefore, becomes the locus and medium of a complex motivational conflict between agents who displace or alienate their agency from themselves to it as a scapegoat, a fetish. The poison in Othello's gift is mystified as the magic in the web. The agency of subjects and discourses is desexualized both in and as the handkerchief. But the handkerchief itself is as Emilia says only 'a trifle', the word picked up by Thomas Rymer in

his notorious critique of 'the Tragedy of the Handkerchief', that is, 'a Tragedy of this Trifle'. As such, the fantasy that Othello unfolds through his narrative of the handkerchief is obviously parabolic and the parable is consistent with the divided attitudes towards sexuality and blackness that his language displays in 1.ii and 1.iii. The parable conveys, in Carol Neely's words, "something of Othello's ... imagined relation to ... the myth of African men's sexual excess", that is, he makes the handkerchief symbolize first his wife's sexual power over her husband, and then the chastity that the husband demands as an always inadequate placeholder for the virginity she had lost when she had subdued him to her love.¹⁰ The burden of the parable is that, if the exotic blackness of the romantic and heroic stranger gives way to the 'monstrous' blackness of the 'barbary horse', it is already her fault.

Othello is peculiarly vulnerable to such displacement. If Iago suffers from the devouring resentment of a man cheated of his place, Othello is threatened from the beginning with the even more radical insecurity of placelessness. He has, it is true a strongly developed sense of the dignity of his rank. Preparing to answer to the libels of Brabantio, he invokes the pride of his inheritance – "I fetch my life and being / From men of royal siege" (1.ii.21-22); and in requesting 'fit disposition' for Desdemona during his absence at the wars, he relies as much upon what is fitting to one of his status, as upon the proprieties demanded by 'her breeding'. But in Venice, Othello's place must always be, to some degree that of a stranger dependent on the favour of others for "The trust, the office I do hold of you (1.iii.117). It is given warrant only by an appeal to "My services, which I have done the Signory" (1.ii.18). This appeal opens Othello's first significant speech in the play, an aria of self-affirmation that is echoed at the end in a splendidly defiant reassertion of the theme: "I have done the state some service and they know't". Othello's strangely triumphant demonstration of the inherent contradictions in his designation as the 'Moor of Venice' makes him a kind of anamorphic 'beast with two backs', both Venetian and Turk; it invokes the claims of his military 'place' to declare his ultimate placelessness. What once promised to resolve these contradictions, what seemed to render his place as something more than a mere mercenary rank and located him properly within the order of the polis was the love of a Venetian woman – the very thing that he has now destroyed.

As such, Othello's Venetian self is to a large extent the creation of Desdemona's love – a love that was the more overwhelming because it was awakened by her romantic response to his history of 'place' less wandering. She is, in this sense, the very foundation of his conscious self, the 'place' or citadel of his vulnerable identity and it is as though only the self-esteem generated by the love of

his 'fair warrior' can validate the public esteem he is granted, can smother the self-doubt of this displaced stranger and enable him to fill his place in the Venetian state with the supreme confidence that he first displays. But it is also this that opens him so fatally to Iago's attack, for it means that his very being is invested beyond himself, where it can seem peculiarly exposed to the frailty or malice of others. John Bayley comments astutely in his essay 'Tragedy and Consciousness' when he says – "Clearly to love Othello, in whatever sense, is to feel with him and to feel his nobility, to see him in his mind", and "Desdemona has taught Othello to love himself, and herself in him – the tenderest of offices and also the most commonplace".

It is inevitable then, that any betrayal of his love for Desdemona should strike him as a double displacement, and expulsion from that 'place' where both his public and private identities had been located. This is evident in his agonised exclamation of – "Othello's occupation's gone". With a shock of terrible insight, the Moor recognizes the consequences of the equation of public and private roles upon which he had built his life. As such, Othello had never been more than what his love and 'occupation' had made him and from these he had cut himself adrift. He is from that moment, a man utterly out of his 'place'. Henceforth, it is characteristically in terms of a lost or violated place that he imagines Desdemona's betrayal. This is effectively revealed when he says – "But there where I have garnered up my heart, / where either I must live or bear no life, / The fountain from the which my current runs / Or else dries up – to be discarded thence, / Or keep it as a cistern for foul toads / To knot and gender in!" (4.ii.59-64). In the condensed language of this speech, the obsessively indicated 'there' is both the marriage bed (the locus of domesticity) as well as the seat of the beloved's heart. But as the imagery of the speech gathers emotional force, it becomes something else, the equivalent of Lear's 'forfended place', the 'dark and vicious place' of begetting – the female wellspring of life itself obscenely imagined as a reptilian mating.

As the play progresses, the audience however get to realize that Othello's real displacement is achieved in the great temptation scene, where it gradually evolves as the sealing of a diabolical bond between the demi-devil Iago and his victim, Othello. It emerges as the psychological equivalent of the scene in Marlow's *Dr. Faustus*, where the protagonist of the same name consigns his soul away to Mephistopheles.

The Othello of the last two acts is thus a man without a place. The height of his agonized self-realization and remorse is reached with the recognition of his utter dislocation and estrangement, the understanding that by the act of murder, he has encompassed the very

displacement he sought to overcome, by being expelled from the anchoring haven of Desdemona's love. Displaced, dispossessed, his 'occupation' gone, Othello offers himself almost gratefully to a punishment that makes him once again 'an extravagant and wheeling stranger / Of here and everywhere', as he hurls himself, heart and soul into the very centre of the chaos created by his own sense of jealousy, misplaced suspicion and insecurity about his own entity.

NOTES

1. G.K. Hunter : 'Elizabethans and foreigners' *Shakespeare Survey* 17, 1964.
2. *Volpone*, 1.5.44-45.
3. The word may in turn be connected to the Hindi word 'Amavas', meaning moonless night or dark. According to Martin Bernal, forty to fifty percent of Greek vocabulary comes from the Indo-European group of languages, and twenty to twenty-five percent from Egyptian (*Black Athena : The Afroasiatic Roots of Classical Civilization*, vol. 1; New Brunswick, 1987, p.xiv). Also refer to Barthelemy's discussion of the term in *Black Face, Maligned Race*, pp.7-17.
4. E.K. Chambers, *The English Folk Play* (Oxford, 1933), p.28.
5. Hess, *Forgotten Frontier*, p.151. In 1609, anxieties about converted Moors came to a head, and Moriscos were expelled from Spain.
6. As for the suggestion that the repeated English attempts to trade with Barbary resulted in a romancing of the Moor in England at the time when Shakespeare was writing *Othello*, we must remember that despite official attempts to suggest commonality of interests between Muslims and Protestants, there was a far more wide-spread association of Muslims with Roman Catholics : 'If Mahomet, that prophet false, / Eternitie doe gaine, / Then shall the pope, and you his saintes, / In heaven be sure to raigne', John Phillips, *A Friendly Larum, Select Poetry Chiefly Devotional of the Reign of Queen Elizabeth*, ed, Edward Farr (Cambridge, 1845), p.528.
7. Jacquelyn Y. McLendon : "A Round Unvarnished Tale" : (Mis) Reading *Othello* or African American Strategies of Dissent", 'Othello' : New Essays by Black Writers, ed, Mythili Kaul (Howard University Press), 1996.
8. Caryl Phillips observes : 'There is no evidence of Othello having any black friends, 'eating any African food, speaking any language other than theirs ... From what we are given it is clear that he denied, or at least did not cultivate his past'. Also refer to 'Othello's Alienation' in which Berry argues that, 'The most

- rootless of Shakespeare's tragic heroes [Othello] has no geographical or cultural anchor to his being' (323).
9. Karen Newman, *Fashioning Fertility and English Renaissance Drama* (Chicago and London : University of Chicago Press), 1991, p.91.
 10. Carol Thomas Neely, 'Circumscription and Unhousedness : Othello at the Crossroads', paper delivered at the 1992 meeting of the Shakespeare Association of America in Kansas City. Refer also to Neely's *Broken Nuptials in Shakespeare's Plays* (New Haven, CT, and London : Yale University Press), 1985, pp.128-129. For a similar and equally stimulating interpretation, refer to Janet Adelman, *Suffocating Mothers : Fantasies of Maternal origin in Shakespeare's Plays, 'Hamlet' to 'The Tempest'* (New York and London : Routledge), 1992, pp.68-69. Adelman lays more emphasis on the parable's strange conjunction of maternal power with virginity as representing 'the impossible condition of male desire, the condition always already lost' (p.69).
 11. John Bayley, *Shakespeare and Tragedy* (London : Routledge and Kegan Paul), 1981, p. 203.

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PALYNOLOGICAL CONTRIBUTIONS TO FORENSICS AND DRUG ENFORCEMENT WITH REFERENCE TO GREEN REVOLUTION

Dr. Ashoke Bhattacharya

Post Graduate Department of Botany
Darjeeling Government College
Darjeeling - 734 101, West Bengal, India
E.Mail: drashoke@gmail.com

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ABSTRACT

Forensic botany encompasses many sub-disciplines, including plant anatomy, plant ecology, plant systematics, plant molecular biology, palynology, and limnology. Although the field of forensic botany has been recognized since the mid-1900's, the use of trace plant material as physical evidence in criminal casework is still novel. A review of published forensic casework that used plant evidence is presented here. Cases include the analysis of wood evidence in the Charles Lindbergh baby kidnapping, the use of pollen in establishing the location of a sexual assault, and pollen analysis to determine the time of year for burial in a mass grave. Additional cases discuss the use of plant growth rates to determine the time of a body deposit in a field, the use of diatoms to link individuals to a crime scene, and pollen based DNA typing to match seedpods to a tree under which a body was discovered. New DNA methods in development for plant species identification and individualization for forensic applications are also discussed. These DNA methods may be useful for linking an individual to a crime scene or physical evidence to a geographic location.

Keywords : Palynology; DNA; pollen; criminology; gene probes; kidnapping; forensic

Introduction:

Forensic botany is defined as the use of plant evidence in court. Forensic botany is subdivided into several botanical subspecialties, including plant anatomy (the study of cellular features), plant systematics (taxonomy and species identification), palynology (the study of pollen), plant ecology (plant succession patterns), and limnology (the study of freshwater ecology) (1). In the past decade, molecular biology has been an important tool to further the research of these disciplines (2-4). Non-human DNA typing methods have been used on occasion for solving criminal and civil case-work (5-9). Although most forensic scientists are familiar with methods for human identity testing, the use of plant, animal, and insect evidence is not yet routine. This is due in part to a lack of awareness by evidence collection teams, who do not necessarily see the value in collecting botanical trace evidence. Prosecutors are also frequently unaware of the potential of botanical evidence to provide linkages between crime scenes and individuals or they

may simply not know who to contact for assistance. In addition, significant resources are required to construct digital databases from the large number of phytoresources that may be encountered in forensic casework. Forensic botany has a wide range of potential applications, including the identification of vegetable matter in stomach contents to verify, identification of specific locations of kidnapping victims (2,3), and tracking drug distribution networks (4). The goal of this article is to present a review of traditional forensic palynology methods (i.e., species identification by their morphological characteristics) and casework. In addition, this article will discuss some of the new molecular methods (DNA) that are being developed for forensic casework, investigative leads, and drug enforcement.

Plant Anatomy and Systematics:

Plant systematics is a broad discipline that includes the study of evolutionary relationships between plant species and taxonomy (the identification of plant species) (1,10,11). Species identification is a typical first step in

analyzing botanical evidence for casework (1,11,12). Plant anatomy uses features, such as leaf morphology and tree growth ring patterns, to aid in species identification and in performing physical matches of evidence, respectively. The kidnapping and death of Charles Lindbergh's young son in 1932 was the first modern era case to use such botanical evidence in court (1,13). A wooden ladder was used to gain access to the second-story nursery to kidnap Lindbergh's son (Fig. 1). Arthur Koehler, a wood identification expert for the Forest Products Laboratory of the United States Forest Service in Wisconsin, was able to provide critical evidence against Bruno Richard Hauptman, who was later convicted of the crime (13). Koehler had an excellent academic record and had provided evidence in several cases before the famous Lindbergh trial. His testimony is noteworthy, since the use of scientific experts in the mid-1930's was generally limited to fingerprints, handwriting, bullet comparisons, and analyses of stomach contents (1,13). Koehler first identified the four tree species used to construct the ladder as yellow pine, ponderosa pine, Douglas fir, and birch by microscopic analysis of wood grain patterns. Next, Koehler analyzed the tool marks left on the wood from both the commercial planning mill and the hand plane used by Hauptman during the construction of the ladder. Koehler used oblique light in a darkened room to observe the plane patterns left on the wood. Amazingly, he was able to trace the wood by the mill plane marks to a shipment of yellow pine delivered to the National Lumber and Millwork Company in Bronx, New York. The hand plane marks on the ladder exactly matched those made by a hand plane found in Hauptman's possession. Finally, Koehler compared the annual growth rings and knot patterns on rail 16 of the ladder to a section of wood in Hauptman's attic. The pattern of knots and growth rings on rail 16 exactly matched the exposed end of wood in the attic supporting the prosecution's position that a section had been removed to construct the ladder. This case exemplifies the use of plant anatomy and plant systematics in providing critical links to Hauptman's involvement in the Lindbergh kidnapping (13).

Palynology:

Forensic palynology refers to the use of pollen in criminal investigations (Fig. 1). The major plant groups identified as pollen sources include flowering plants, conifers, and ferns. Ferns technically produce spores instead of pollen but are included in pollen types (14). Pollen is microscopic and not visually obvious trace evidence during crime scene collection but is retained on clothing, embedded in carpets and pervasive in soil. Pollen grain morphology can be used to identify a plant genus and often the species.

(1). Crime scenes that are restricted to a few square meters, such as a rape scene or the entry point of a burglary, are good choices for pollen evidence (14-16). Localized areas have a specific pollen distribution pattern representing the combination of plant species found in the surrounding vegetation. Common pollen types from plants that use wind for distribution will be less useful than pollen from uncommon, poorly distributed species. Insect distributed pollen is typically deposited within a few feet of the source plant. Pollen analysis consists of species identification and an estimation of the percentage that each plant species represents in an evidentiary sample. A similar pollen composition from shoeprints and from the shoes that made the prints indicate a strong match correlation (14). Pollen evidence collected from a burglary entrance and a suspect's shoes, for example, could provide a linkage in a case. A case that exemplifies the use of pollen in criminal casework is described by Horrocks et al (16). In Auckland, New Zealand, a prostitute alleged that the defendant had raped her in an alleyway approximately seven meters from his car, after failing to pay her in advance for her services. The defendant claimed that he had never been more than one meter away from the car and had not entered the alleyway. Furthermore, he claimed that he had not had sex with the victim and the soil on his clothing was from the driveway area. An examination of the crime scene and the evidence showed no footprints and no seminal fluid stains. A soil sample was collected from the defendant's clothing, the disturbed area of ground in the alleyway, and from the driveway area near the defendant's car. All the soil samples were prepared for pollen analysis by deflocculating with potassium hydroxide, acetylation to remove cellulose and organic matter, and a silicate removal step with hydrofluoric acid (16). Samples were bleached to remove additional organic matter and analyzed under a microscope for pollen identification and counting. The types of pollens were similar between the two locations, but the amounts of each type were different in each sample. The alleyway sample contained 76% *Coprosma* (an evergreen shrub) pollen, but the driveway sample contained only 8%. The defendant's clothing contained approximately 80% *Coprosma* and only small amounts of other pollen species. These results support the victim's account of the sexual assault taking place in the alleyway. Pollen analysis has also been used to establish time of death (12). In Magdeburg, Germany, a mass grave containing 32 male skeletons was discovered in February of 1994. The identity of both the victims and the murderers was unknown. Two hypotheses were proposed: 1) the victims were killed in the spring of 1945 by the Gestapo at the end of World War II, or 2) the victims were Soviet soldiers

killed by the secret police after the German Democratic Republic revolt in June of 1953. The ability to differentiate between the spring and summer was critical to solving the case. Pollen analysis was performed on 21 skulls. Seven of the skull nasal cavities contained high amounts of pollen from plantain, lime tree, and rye (12). All of these plant species release pollen during the months of June and July. Pollen analysis supported the hypothesis that the remains were of Soviet soldiers killed by the Soviet secret police after the June 1953 revolt.

Plant Ecology:

Plant ecology involves studying the growth patterns of vegetation in areas that have been disturbed

(1). These patterns and the vegetative (non-flowering) portion of plants can be useful in estimating time of death (1,10,11). For example, when a body is discovered lying on top of a weed plant with a broken top, useful information can be obtained to define time windows for when the death occurred (10). A certain amount of shading will eventually kill a plant, so if the weed plant is lacking chlorophyll, a minimum amount of time must have already elapsed. If new shoots are present at the base of the plant, this may establish a second time window. Agricultural research on many plant species has defined the time for new shoot initiation after the top of a plant has been removed. The length of the new shoot can sometimes establish a third time window. Forensic anthropology sometimes uses plant anatomy to determine an approximate time of death (1,11). In one case, the brain cavity of a skull was filled with plant roots (11). The anatomy and developmental stage of the roots indicated that the plant was approximately one year old and the plant was putatively identified as *Ranunculus ficaria* L. (11). The predictable stages of plant development were useful in estimating the time that the skeletal remains had been in their present location. They were able to determine the skeleton had been there for at least one year; however, a maximum time could not be established. The plant could have developed secondarily sometime after the body had lain in its present location, so a maximum time estimate was not possible.

Limnology:

Limnology is the study of freshwater ecology and can be applied to a subset of forensic cases (8). In particular, aquatic plants (e.g., algae, diatoms) have been useful to link suspects to a crime scene or to establish that drowning occurred in freshwater (8,17). Diatom populations vary seasonally in lakes, rivers, and ponds (17). In early spring, diatom populations expand in freshwater. Following this expansion, the live diatoms decline but a large number of dead diatoms remain in summer water. In the fall, a

second diatom expansion occurs and then progressively declines through the winter months. When a person drowns in freshwater, diatoms are taken in along with water into the lungs. The diatoms are dispersed to the internal organs of the body. The diatom test is performed by extraction of bone marrow from an intact femur, heating the marrow in a nitric acid solution and centrifuging to pellet the solids (17). The solids are examined on slides by phase contrast microscopy for the presence of diatom species. Each species has a characteristic shape and refractive pattern from the silica in the cell wall, which can be used for identification. In a study of 771 cases, the diatom test was positive for 28% of presumed freshwater drowning cases but was rarely positive for domestic water drowning (17). The low rate of diatoms observed in domestic drowning could be traced back to cleaning agents containing crushed diatoms. In 1991, two young boys were brutally attacked by teenage assailants while fishing at a suburban pond in Connecticut (8). The boys were held at knifepoint, bound with duct tape, savagely beaten, and dragged into the pond to drown. One boy managed to get free, save himself, and rescue his friend. After many hours of criminal investigation, three suspects were apprehended. To link the suspects to the crime scene, investigators seized the sediment encrusted sneakers of both the victims and the assailants and analyzed them for algal and diatom species. A microscopic analysis of samples from each pair of sneakers plus reference samples from the pond showed the same species and distribution pattern of each species (8). These results supported the position that the samples all originated from a common fresh water location.

Plant Molecular Biology and Pollen based DNA:

DNA databases are used to identify, track, catalogue, apprehend, and prosecute the perpetrators of crimes. Today, national and international law enforcement agencies exchange DNA profiles found at crime scenes to identify serial perpetrators and to help solve crimes around the globe. As of January 2010, the United States has the largest forensic DNA database in the world with over 7.8 million offender DNA profiles and over 300,000 forensic profiles. The second largest DNA database is in the United Kingdom with over 5 million DNA profiles. The state of California has more than 1.2 million offender California DNA profiles making it the third-largest DNA database in the world. DNA Forensics is a centralized source of national and international news and resources about the latest developments concerning DNA databases. DNA Forensics focuses on states that have passed laws to take DNA of arrestees, (people arrested for a crime but not yet convicted) and the innovative but still controversial technique of familial searches, where

the DNA profile of an unidentified suspect is run deliberately through the DNA database in the hope that it will be partially matched with the DNA of the suspect's family member. Furthermore, DNA Forensics provides forensic news, conference reports and interviews with leading forensic professionals and law enforcement. The previously discussed cases have relied on traditional botanical methods for species identification (1,11-13,16,17). In the age of DNA analysis, forensic palynology is using molecular biology to aid in criminal and civil investigations. The first criminal case that used plant DNA typing to gain legal acceptance was a homicide that occurred in 1992 in Arizona's Maricopa County (9). A woman's body was found under a Palo Verde tree in the Arizona desert. Near the body was a beeper, eventually traced to a suspect, Mark Bogan. A few seed pods from a Palo Verde tree were found in the back of Bogan's truck. Officials wanted to know if DNA analysis could match those seed pods to the tree where the body was discovered. Dr T. Helentjaris from the University of Arizona used a technique of Randomly Amplified Polymorphic DNA (RAPD) analysis to generate a band pattern from the evidence in question (9). He also surveyed a small population of other Palo Verde trees to determine if the band patterns were unique to each individual. His convincing testimony on plant evidence helped convict Mark Bogan of murder. RAPD marker analysis has also been used in civil court cases to identify patent infringements. In Italy, RAPD analysis of a patented strawberry variety "Marmolada" helped settle a lawsuit involving the unauthorized commercialization of the plant (6). One useful application for the molecular analysis of botanical trace evidence is the identification of a geographic region where a kidnapped individual may be located. Based on flowering times and the plant species represented in the trace pollen evidence found with a ransom note, a geographic region may be identified and would provide the police with an investigative lead. Plant systematists have characterized many loci that are useful for the identification of plants, including several nuclear (18S, ITS1, ITS2) and chloroplast (rbcL, atpB, ndhF) genes (2,3). In September 1984, Dr. Alec Jeffreys, a geneticist from the University of Leicester in Great Britain was studying hereditary diseases in families. He was focusing on methods to resolve paternity and immigration disputes by demonstrating the genetic links between individuals. Jeffreys used RFLP to analyze DNA. Dr. Jeffreys discovered that repetitive patterns of DNA, known as VNTRs, were present in all human beings but that they varied in length for each individual. He soon realized that this variation could be used to establish the identity of a person and he named his technique genetic fingerprinting. Dr. Jeffreys

demonstrated that a genetic fingerprint is specific to each individual and the pattern does not belong to any other person on earth except for identical twins. In 1983, 15-year-old Lynda Mann was found raped and murdered. Three years later, Dawn Ashworth, also fifteen, was also raped and murdered. With the use of RFLP based DNA technology, Dr. Jeffreys was asked to compare semen samples from both murders against a blood sample from a seventeen year old suspect, Richard Buckland, who was in police custody and who had confessed to the second crime. This confession raised suspicion among some detectives, as Buckland had to be 14 years old when he committed the first crime. Dr. Jeffreys' DNA tests proved that the DNA fingerprint from the semen found on the two murdered victims was not the same as Buckland's. It also proved that the same killer was responsible for both crimes. With this information, law enforcement then took an unprecedented task to catch the killer. A total of 4,582 men, from three towns, were tested for the killer's blood type, (type A) and enzyme PGM +1 retrieved from his semen. Ten per cent of the men tested had the same blood type and enzyme as the killer and their blood was subsequently tested by Jeffreys' genetic fingerprinting technique. He gave a colleague, Ian Kelly, his passport in which he had replaced his picture with Kelly's photo.

Touch DNA vs. Forensic Palynology:

Since the introduction of DNA fingerprinting technology in 1984, the extraction of DNA from human biological fluids (e.g. blood, saliva, semen) has become a daily occurrence in forensic DNA labs worldwide. Over the years, the technology to extract DNA has become even more sophisticated. One such technology is called "Touch DNA" or "Contact Trace DNA," which refers to the DNA that is recovered from skin (epithelial) cells that is left behind when a person touches or comes into contact with items such as clothes, a weapon, or other objects. A person sheds about 400,000 skin cells per day, but it is the lower skin cells that will provide the best DNA profile. These cells are typically recovered when force is used such as on the victim's clothes or at a crime scene after a struggle has occurred. These epithelial cells can be lifted with a tape, swabbed with a Q-tip, or even scraped from the clothes of the victim, or objects.

Forensic Pollen Analysis:

Operating a specialist forensic palynology analysis service to clients across the UK, Forensic Resources provides expert witness and forensic pollen analysis services to support a wide range of criminal investigations including murder, assault, arson and burglary cases. With a growing demand for pollen analysis in criminal

investigations, our dedicated palynology service has the appropriate technology to provide accurate forensic pollen analysis and expert witness accounts to defense solicitors. Palynology is the science that studies contemporary and fossil particles such as pollen and spores, together with organic matter found in sedimentary rocks and sediments. A branch of the earth sciences, such as geology and biology, the team of palynologists study both pollen and powdered minerals as identification and location, in order to ascertain an account of a body in terms of geography and time span history, such as during which season the person died, dependent on the pollen found at the scene. Pollen is incredibly differential and thus positively indicates where a person or object has been. Its distinctive differences are hugely dependent on both the varying regions of the world and particular plant species. Pollen can also reveal the season in which a crime was committed as well as in the tracing of mass activity - such as genocide graves. Palynology also indicates if a body has been moved, and allows our experts to track back to where a crime may have taken place. Pollen is often microscopic and even after washing clothes, pollen can remain in pockets or cuffs which allows the evidence to be collected even up to long periods after the event.

Forensic Resources have identified the following sources to contain pollen evidence:

- A persons clothing, woven cloth, bags, baskets, and ropes
- Dirt, mud, or dust recovered from a person or object
- A person's hair and fur
- Contained within imported/exported goods, often used to verify country of origin, *e.g.* honey, fruit, tea, coffee, tobacco
- Packing materials particularly straw or cardboard
- Through analysis human remains; from the soft tissues of the stomach and intestines of corpses or the nasal passages of skeletons
- Air filters, to determine where private vehicles may have travelled
- Sexual assault on young woman, subsequently, police investigation followed, exact location of the assault told by the victim became an issue

Tim Masters and the Peggy Hettrick Murder Case

One case that has brought national and international attention was when Touch DNA helped determine the innocence and secure the release of accused killer Tim Masters from a prison in Colorado in 2008. On February 11, 1987, the semi naked body of 37 year old Peggy Hettrick was found in a field near Fort Collins. She was stabbed in the back with a knife and her body had been

sexually mutilated. Police followed the bloody trail from the nearby road to the field where she had been dragged and dumped. The medical examiner noticed that the wounds were "neatly" executed cuts and he remarked that in his 21 years of doing autopsies he had never encountered wounds like these. He even called the wounds "surgical." At the time, 15 year old Tim Masters lived with his father in a mobile home near where Hettrick's body was found. Masters admitted to the police that he had walked by the body on his way to school but did not notify authorities. No DNA from the victim was found on Masters and none of Master's DNA was found on the victim. Nonetheless, in 1998, eleven years after the murder and after he was honorably discharged from the Navy, Masters was arrested for the murder of Peggy Hettrick. During the trial, a forensic psychologist testified that Master's "disturbing artwork" had revealed that he had "displaced sexual matricide, stemming from Masters' feelings of abandonment by his dead mother." The psychologist concluded that Master's drawings "fit the profile of a killer because he's alone, he comes from an isolated or deprived background, and he harbored hidden hostility toward authorities as well as violent fantasies." This forensic psychologist never met or interviewed Masters. In 1999, Masters was convicted for the Hettrick's murder and sentenced to life in prison. In 2003, Masters pursued an appeal on the grounds of ineffective counsel and was appointed new defense counsel, Maria Liu. When Liu studied the huge case file, she found it incredible that Masters was convicted in large part because of his high school artwork. On January 22, 2008, Masters was free after spending more than nine years behind bars. On February 16, 2010, the Larimer County Commissioners approved payment of \$4.1 million to Tim Masters to settle claims brought forward in his lawsuit alleging wrongful imprisonment. Zoellner was never arrested for Hettrick's murder. Apparently, Colorado law enforcement believes that there was nothing strange about his skin cells being found on his ex-girlfriend's clothes. Since the Masters case, has become recognized as forensic mavericks and leaders in the new field of Touch DNA.

The JonBenét Ramsey Case

In 2008, Bode Technology Lab was able to perform Touch DNA on the clothing worn by six year old JonBenet Ramsey at the time of her murder. A full DNA profile was obtained of a still unidentified male, presumably the killer. In addition to providing a DNA profile, the discovery of a Touch DNA sample on a victim or object can provide law enforcement with important

evidence such as how the perpetrator removed clothes from the victim and how long an object was held at a crime scene.

1996 Rape Solved:

Using Touch DNA technology, police labs are re-evaluating cold cases. For example, in 2008, the Maryland State Police Lab had a private lab re-examine the clothes of a 12 year old who was raped in 1996. The lab retrieved a full DNA profile of the rapist's skin cells - a man who was already incarcerated for another rape he committed in 1996. With the Touch DNA evidence, the 51 year old rapist was ultimately convicted of this second rape. Touch DNA is proving to be an extremely valuable forensic tool in collecting all evidence left behind by a perpetrator. Today, both older cases and current cases are taking advantage of this innovative technology.

Drug Enforcement and Pollen based DNA:

Drug enforcement is taking advantage of new plant molecular biology techniques, too. Often in drug seizures, identification of the seized substance is a problem, especially if the plant material is fragmented and dried. A variety of methods are currently employed to identify *Cannabis sativa* L. It can be identified by classical botanical characterization, especially if the type of cystolith hairs present on the leaves are used. However, presence of cystolith hairs is not a conclusive identification, since more than 80 plant species have similar cystolith hair morphology (18). A chemical screening test called the Duquenois-Levine color test (19) is frequently used in combination with cystolith hair observation as a method to identify *Cannabis*. A positive Duquenois-Levine test for *Cannabis* exhibits a purple color in the chloroform layer of the extracted plant material (19). As with many chemical screening tests, a faint color can be subjectively interpreted. It can also be identified by chromatographic methods that test for the presence of THC and other cannabinoids (20,21). Unfortunately, not all *Cannabis* samples contain detectable levels of THC. An alternative strategy uses molecular genetics to identify *Cannabis*. *Cannabis* species identification has been achieved by cloning and sequencing the nuclear ribosomal DNA internal transcribed spacer regions (ITS 1 and ITS 2) (22). In addition to the identification of *Cannabis* samples, it is desirable but difficult to link individual growers and

distributors to specific illicit field and green house operations. Molecular genetics may offer a solution to this problem. AFLP analysis is based on the selective PCR amplification of restriction fragments from a total digest of plant DNA to generate a fluorescent band pattern (23). The AFLP technique has been used on some plants (24-26), insects (27), and bacteria (28) but has not been applied to forensically relevant plant species until recently (4). Validation of the AFLP technique on *Cannabis* samples and the construction of a *Cannabis* AFLP data-base for comparative purposes is in progress at the Connecticut State Forensic Science Laboratory.

Conclusion:

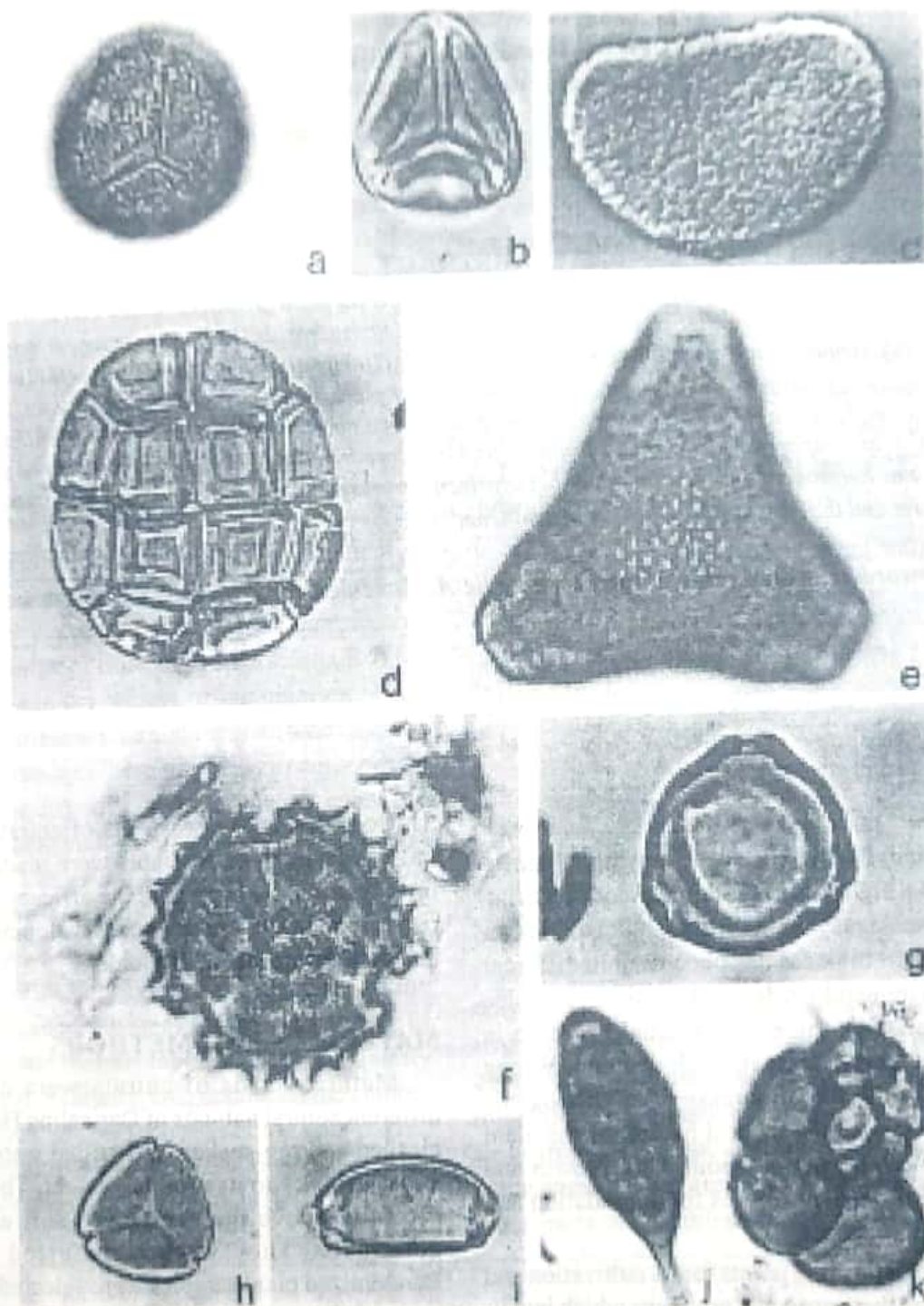
Forensic Palynology has been useful for solving criminal and civil cases but is still a very underused resource. Traditional Pollen analysis uses simple, inexpensive methods for the identification of a plant species. Identification of pollen or stomach contents can be useful in verifying a person's alibi, a victim's location or the time of death. A wide variety of plant species exist and many are restricted to specific geographic locations. These features make plant evidence useful to forensic scientists. In addition, forensic scientists are turning to academic research to identify molecular methods that can be applied to trace botanical evidence. The development of DNA typing methods for plant species may allow forensic scientists to take advantage of the enormous genetic diversity that exists in plant populations.

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Fig. 1: Variations in Pollen Morphology: Different types of pollen look different under a microscope in the context of Shape, Size, ornamentation, Sculpture patterns on surface apertures characteristics and wall structure/thickness.



COMPARATIVE STUDY OF YIELD PARAMETERS OF *SWERTIA CHIRAYITA* ROXB. EX. FLEMING UNDER THE INFLUENCE OF DIFFERENT PLANT GROWTH REGULATORS

Sabina Pradhan & P. C. Lama

Post Graduate Department of Botany
Darjeeling Government College, Darjeeling
West Bengal-734101

E-mail- projlama@gmail.com

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ABSTRACT

The experiments were designed to investigate the effect of different plant growth regulators on chirata plant. The plant growth regulators (PGRs) used were Gibberellic Acid (GA_3) and Maleic Hydrazide (MH). The treatment was given by spraying the seedlings with different concentrations of growth regulators - GA_3 (100 μ g/ml and 200 μ g/ml) and MH (100 μ g/ml and 200 μ g/ml) at seedling stage. The yield parameters like number of flowers per plant, number of branches per plant, length of the plant, wet weight and dry weight of the plant parts were determined. There is a notable increase in yield in the plants treated with the growth promoter GA_3 as compared with the plants treated with MH. Moreover 100 μ g/ml of GA_3 is found to be more effective than 200 μ g/ml of the same hormone. Total percentage of bitter principles present in dry roots of different treated plants was found more or less uniform and the efficacy of PGRs was insignificant.

Keywords: *Swertia chirayita*, Gibberellic Acid, Maleic Hydrazide, Yield parameters.

INTRODUCTION

Swertia chirayita Roxb. ex. Fleming (Family Gentianaceae) is a high value medicinal plant occurring at altitudes of Himalayas ranging from 1200m to 3500m. The dry whole plant biomass has been used in different ailments. It has a tremendous demand within and outside the country. Nowadays there is a gradual decrease in the yield of this plant despite its high demand. Wrong method of harvesting, rapid increase of anthropogenic activities in and around the natural habitat of the plant and less scientific information about plant growth and development are the real attributes for degradation and decline of plant production.

In spite of many positive points for its cultivation and commercialization there are some problems which impair high productivity of the plant. The low percentage of germination with no proper domestication and cultivation methods is causing rapid depletion in plant population in natural habitat. Biannual nature of plant with slow growth and development further deteriorate its production and dissemination.

Considering the prospects of chirata cultivation in Eastern Himalayas, attempts were made in the present investigation to understand the efficacy of plant growth regulators on the growth and development of the plant and their influence on its yield.

MATERIALS AND METHODS

Matured seeds of chirata were collected from different natural habitats of Darjeeling Hills. Seeds were cleaned and pre-soaked in distilled water for 24 hours and dried back to its original weight. They were spread carefully above the autoclaved soil and allowed to germinate. They were transferred to the field. Randomized plant samples were selected and tagged for each of the treatments and sprayed with the PGRs - GA_3 (100 μ g/ml and 200 μ g/ml) and MH (100 μ g/ml and 200 μ g/ml) - for three consecutive days. The treatment was given after the plant was grown for 40-45 days at seedling stage. Each experiment had five replicates. Uniformly grown plants were sprayed with distilled water and used as control.

The yield parameters like number of flowers per plant, total average length of the plant, wet weight and dry weight of whole plant, number of branches per plant, total weight of dry root of the plant were determined. Extraction and Estimation of Bitter principle from chirata plant were following the method. Dried plant materials were grind and made powder using No 60 sieve. Mix 20 g plant powder with boiling water containing 0.5 g of Calcium carbonate and extract with boiling water till the last portion of the extract is devoid of bitterness: concentrate in vacuum and dissolve the residue in hot alcohol. Filter while hot and wash the residue thrice on the filter with 10 ml portions of hot alcohol; remove the alcohol from the filtrate and take up the residue repeatedly with 25, 15, 15, 15, and 15 ml of hot water. Shake the aqueous extract repeatedly with 25,20,15,15, and 10 ml of ethyl alcohol, collect the ethyl acetate extracts, evaporate, dry and weight. Calculate the percentage of bitter principle.

RESULTS AND DISCUSSION

Influence of PGRs on growth and development of plant has to be measured in terms of their effect on yield. The yield in turn is dependent upon several contributing factors such as number of flowers per plant, length of the plant, wet weight and dry weight of the plant etc. Plant growth regulators influence the plant growth when applied in very minute quantity. There are many reports which indicate that application of growth regulators enhanced plant growth and crop yield (Hernandez, 1997; Ashraf *et al.*, 1987, 1989). Lee *et al.*, (1999) reported that GA₃ increased stem length and number of flower per plant.

Gibberellic Acid (GA), a naturally occurring growth hormone (Jaleel *et al.*, 2009) promotes early flowering in different crops, increase stem length and number of flowers per plant and thereby increase yield and quality (Kazaz *et al.*, 2010). Similarly, GA₃ increased the number of flowers per plant with branches in chirata plant. GA₃ of 100 *ig/ml* maximized the flower number but 200 *ig/ml* gave more biomass by increasing plant length, number of branches.

Table: 1. Effect of Gibberellins (GA₃, 100 and 200 *ig/ml*) and Maleic Hydrazide (MH, 100 and 200 *ig/ml*) on changes in flower number per plant, total length, Wet and Dry weight of mature of chirata plant.

Field grown chirata plants were given foliar application with PGRs for three consecutive days at seedling stage (40-45days). Data were recorded from 5 uniformly grown plants of each treatment.

Significant increase in plant height in *Abelmoschus esculentus* was noticed with GA₃ (25 and 50 *ig/ml*). GA₃ (25 and 50 *ig/ml*) has recorded significantly maximum LAI (Leaf Area Index) and SLW (Specific Leaf Weight) as compared to other treatments. The data on fresh yield indicated that the increase in fruit yield was significantly higher in GA₃ (25 and 50 *ig/ml*) as compared to other treatments and was found lowest in control (Surendra *et al.*, 2006). In chirata plant, it was noticed that dry weight of the whole plant biomass as well as root significantly increased by GA₃ treatment.

Maleic Hydrazide (MH) is an anti-auxin growth regulator and acts as a growth retardant, known to cause inhibition of seedling growth by inhibiting mitotic cell division in plants (Zukel 1950). Growth inhibitory effects of MH has been reported by Schoene and Hoffman (1949), Aurbey and Naylor (1950), Sircar and Ray (1962), Larry (1969) and Kumar and Pal (2004) in various plant species. These reports indicated that the growth inhibitory effect was dose dependent and more conspicuous at seedling stage affecting both root and shoot growth. Number of flowers and branches per chirata plant was significantly reduced by the MH treatments and it was noticed that yield data also decreased with retardant. It was observed that the enhancement of retardant concentrations lowered the yield data of plant. The principle bitter compound/s of chirata was found uniform in both PGRs treated plants. There was maximum percentage of bitter compounds contents in dry roots than other parts of the chirata.

TREATMENT (<i>µg/ml</i>)	NUMBER OF FLOWERS	LENGTH (cm)	WET WEIGHT (g)	DRY WEIGHT (g)
CONTROL	216	80.0	8.4	4.0
GA ₃ 100	346	90.2	12.2	4.5
GA ₃ 200	262	95.0	17.0	6.4
MH 100	192	85.4	11.0	3.2
MH 200	184	78.6	09.7	2.8

Table: 2. Effect of Gibberellins (GA₃, 100 and 200 $\mu\text{g/ml}$) and Maleic Hydrazide (MH, 100 and 200 $\mu\text{g/ml}$) on changes in number of branches per plant, total dry weight of root and percentage of bitter principle content in different parts of chirata plant.

Field grown chirata plants were given foliar application with PGRs for three consecutive days at seedling stage (40-45days). Data were recorded from 5 uniformly grown plants of each treatment.

TREATMENT ($\mu\text{g/ml}$)	NUMBER OF branches	Total dry weight of root (g)	% of bitter principle		
			Root	Stem	Leaf
CONTROL	24	1.82	1.84	1.60	1.02
GA ₃ 100	27	1.93	1.77	1.58	1.00
GA ₃ 200	28	2.10	1.72	1.55	1.01
MH 100	20	1.73	1.75	1.50	1.02
MH 200	17	0.95	1.70	1.52	1.01

The efficacy of PGRs was observed significant in growth and development of the chirata plant. The reproductive and vegetative stages of the plant was enhanced and reduced by GA₃ and MH but it was noticed that there were no significant difference in the percentage of bitter principles contents in the plant parts. This observation may suggests that PGRs may have less effects on secondary metabolism at later stage of the plant development.

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রবিকরোজ্জ্বল জলকথা

ড. শিবশংকর পাল

Assistant Professor & Head; Department of Bengali
Darjeeling Government College, WB, India.
Email: dr.sibsankar.pal1965@gmail.com, sibsankar1916@yahoo.com

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ABSTRACT

জল নিয়ে রবীন্দ্রনাথের সুস্পষ্ট বক্তব্য ও মতামত ছিল। রবিকরে নির্মিতও হয়েছে জলের নানা কোলাজ। নানা কথায় জলের বৃত্তান্ত, তার অপরিসীম গুরুত্ব রবীন্দ্রনাথের চিন্তাক্ষেত্রকে শস্যসফল করে তুলেছে। বিষয়টি নিয়ে কবি ও দার্শনিক মানুষটি সমাজের ফলিত পরিসরটিতে যথেষ্ট উদ্বিগ্ন ছিলেন। পাশাপাশি যথেষ্ট দায়িত্বেরও পরিচয় দিয়েছেন। ভূগর্ভস্থ জলের বৈজ্ঞানিক বিশ্লেষণ ও বিশুদ্ধতা প্রসঙ্গেও রবীন্দ্রনাথের সচেতনতা বিস্ময়কর। বিশ শতকের প্রথম দশকে গঙ্গা সম্পর্কে রবীন্দ্রনাথের পরিবেশবাদী পর্যবেক্ষণটি এই প্রসঙ্গে অত্যন্ত উল্লেখযোগ্য। চোখে কালো শিরার অসুখের শুষ্কতা করতে চেয়েছিলেন তিনি। এ বিষয়ে তাঁর ভিষকের ভূমিকা ঐতিহাসিক; এবং স্মরণ ও অনুসরণযোগ্য। বুঝতে অসুবিধা হয় না, প্রকৃতি ও প্রাকৃতিক সম্পদ সম্পর্কে রবীন্দ্রনাথের অতি স্পষ্ট বিশ্বাস ও মানবীয় একটি ধ্যানধারণা ছিল। বিশেষত জল ও তার ধাত্রী নদী ও সমুদ্রের কোনো ভূগোল বা রাষ্ট্র হয় না—এ কথাটি তিনি মনেপ্রাণে বিশ্বাস করতেন। সেই ভাবধারা অনুযায়ী নির্বন্দু হয়েই তিনি বলতে চেয়েছেন—সসাগরা ধরিত্রীর অন্তরে বাহিরে যে বিপুল জলসম্পদ রয়েছে তার মালিক কোনো ব্যক্তি নন, দেশ নয়, রাষ্ট্র নয়; কিম্বা নয় রাষ্ট্রপুঞ্জও। এ সম্পদ বিশ্বের সকল লোকের। জল নিয়ে কোনো রাষ্ট্রীয় কূটকচালি করতে হলে এ বিষয়ে রবীন্দ্রনাথের মনোভাবটি স্পষ্ট করে বুঝে নেওয়া দরকার। এ বিষয়ে তাঁর দৃষ্টিপ্রদীপই আমাদের আলোকিত করতে পারবে।

Keywords : জল, নদী, সমুদ্র, শস্যক্ষেত্র, ধাত্রী, তৃষ্ণা নিবারণ, স্বাস্থ্যরক্ষা, উত্তরকূট, বাঁধ, মুক্তধারা, প্রজাসকল।

“পাষণ-বাঁধন টুটি, ভিজায়ে কঠিন ধরা,
বনরে শ্যামল করি, ফুলেরে ফুটায়ে ত্বরা,
সারা প্রাণ ঢালি দিয়া,
জুড়িয়ে জগৎ-হিয়া—

আমার প্রাণের মাঝে কে আসিবি আয় তোরা!”

[নির্ঝরের স্বপ্নভঙ্গ, প্রভাতসঙ্গীত]

“পৃথিবীকে যাহারা ‘জলরেখাবলয়িত’ মাটির গোলা বলিয়া স্থির করিয়াছে তাহারা যেন মনে করিয়াছে যে, জলকে জল বলিলেই সমস্ত জল বোঝা গেল এবং মাটিকে মাটি বলিলেই সে মাটি হইয়া যায়।”

[আত্মপরিচয়—১]

“The water in a vessel is sparkling; the water in the sea is dark. The small truth has words which are clear; the great truth has great silence.”

[fromwww.brainyquote.com]

জল জীবনের আখ্যান রচনা করে। আমাদের নীলগ্রহটির বুক জুড়ে জীবনের এই শিল্পনির্মাণ নানাভাবে ও নিরন্তর ঘটে থাকে। পৃথিবী নামক

গ্রহটি সত্যিই অত্যাশ্চর্য। এই কারণে যে, সৌরলোকের আর কোনো বস্তুধামে জল নামক বস্তুটি নেই। অস্তত এখনও পর্যন্ত যতটা আমরা জানতে পেরেছি। জল এতই মূল্যবান যে এর জন্য ব্রহ্মাণ্ড জুড়ে তোলপাড় শুরু হয়েছে। এ বিষয়ে বৈজ্ঞানিকদের মাথাব্যথার অন্ত নেই। এই তরল ও সরল বস্তুটিই মর্ত্যকে অমর্ত্যালোকের মর্যাদা দিয়েছে। রূপে-রসে-গন্ধে-বর্ণে-স্বাদে-সুন্দরে কল্পিত স্বর্গের চেয়েও সে এই ধরাধামকে অনিন্দ্যসুন্দর করে তুলেছে। আবার আমাদের বঙ্গ নামক ক্ষুদ্র মর্ত্যের রবিকরেও নির্মিত হয়েছে সেই জলেরই নানা কোলাজ। সে কোলাজে বহু বিভঙ্গে জলের রূপটান বিধৃত। রবিকরোজ্জ্বল সেই জলকথা নানা সাহিত্য প্রকরণের ডালিতে ভরে উঠেছে। কখনও কাব্যের বিভঙ্গে নদীর নৃত্যে প্রাণপ্রবাহের যাপনকথা রচিত হয়েছে। কখনও সূচিস্তিত গদ্যে জীবনের আদি রসদের গুরুত্ব ধরা পড়েছে। কখনও বা পন্নীর জলাশয়গুলির উদ্বিগ্নজনক পরিস্থিতির ব্যাখ্যানে আশঙ্কাজর্জর কবিচিন্তের অভিভাবকত্ব আমাদের উত্তর আধুনিক জীবনশৈলীর পথনির্দেশ হয়ে স্রষ্টার চক্ষুদান করতে চেয়েছে। আবার জলের মতো প্রাকৃত সম্পদের ভাগবাটোয়ারায় হিংস্র রাষ্ট্রের নখদস্ত উন্মাত্তিত হয়েছে নাটকের রূপাঙ্গিকে। জলের অপচয় ও

অপব্যবহারের কথায় কবির অশ্রদ্ধা কখনও গোপন থাকেনি। বরং নানা প্রসঙ্গে জলের বৃত্তান্ত, তার অপরিসীম গুরুত্ব রবীন্দ্রনাথের চিন্তাক্ষেত্রকে শস্যসফল করে তুলেছে। কবি ও দার্শনিক মানুষটি সমাজের ফলিত পরিসরটিতে জল বিষয়ে যথেষ্ট উদ্বেগ ও দায়িত্ব নিয়ে বিচরণ করেছেন। চোখে কালো শিরার অসুখের শুশ্রূষা করতে চেয়েছেন। এ বিষয়ে তাঁর ভিষকের ভূমিকা ঐতিহাসিক; এবং এই উত্তর আধুনিক অন্তর্ঘাতী জমানায় তিনি আজও সমানভাবে স্মরণ ও অনুসরণযোগ্য। ভূতলের সবচেয়ে বড়ো জলস্থল হলো সমুদ্র। অনাদি অনন্ত সমুদ্র বিষয়ে 'সোনার তরী' কাব্যে তিনি যত তত্বকথাই লিখুন না কেন, সমুদ্রকে কখনও তাঁর খুব বেশি আপন বা আত্মীয় বলে মনে হয়নি। তাঁর নদীয়াপিত স্বর্ণপ্রসূ দিনগুলি এ কথার স্মারক। 'ছিন্নপত্র' তার পাথুরে প্রমাণ। যদিও ঐ একই সময় তিনি 'সমুদ্রের প্রতি' কবিতায় সমুদ্রকে আদি জননী ও বসুন্ধরাকে তার কোলের কন্যা বলে চিহ্নিত করেছেন। এই ভাবনাটি আত্মীয়তার চেয়ে ঢের বেশি মগজপ্রধান এবং তত্ত্ব আরোপে জটিল। 'যুরোপ-প্রবাসীর পত্র'-এ সমুদ্রকে 'দণ্ডবৎ' জানিয়ে তাই তিনি লিখেছেন, "সমুদ্রের উপর আমার কতকটা অশ্রদ্ধা হয়েছে।" সমুদ্রের সঙ্গে রবীন্দ্রনাথের সম্পর্কের আত্মতার দিকটি ভৌগোলিক কারণেই গড়ে উঠতে পারেনি। কারণ সমুদ্রের সঙ্গে বঙ্গ জনের প্রতিদিনকার রসায়নটি ঠিক 'দিবে আর নিবে মিলাবে মিলিবে'—এই সমীকরণের ফল নয়; কারণ মেঘের আঁতুরঘর হলেও সে পানযোগ্য নয়; তা যতই সে আ-সমুদ্র হিমাচল ছুঁয়ে থাকুক না কেন। বরং নদীর সঙ্গে মানুষের নিত্যদিনের প্রাণের যোগটিই রবীন্দ্রনাথকে তাতিয়েছে বেশি। তাই রবিচিন্তে সমুদ্র যতখানি তাত্ত্বিক তথা দার্শনিক প্রেরণা, ততখানি অন্তর্সত্তার প্রাণরস সৃষ্টির প্রাণনা হয়ে ওঠেনি। নদীর ক্ষেত্রে ঠিক এর উল্টোটাই ঘটেছে। কবির সৃষ্টিসত্তার উৎসমুখগুলি 'নির্ব্বরের স্বপ্নভঙ্গ' হয়ে উঠেছে নদীর ঘরোয়া রূপের প্রত্যক্ষ সংস্পর্শে এসে। তাই জলের উৎস হিসেবে নদীই কবিকে বেশি টেনেছে। তাঁর কবিতার রসকেন্দ্রে ও জীবনভাবনার ভরকেন্দ্রে নদীর সপ্রাণ উপস্থিতি প্রমাণ করে রবীন্দ্রনাথ এই প্রাকৃতিক সম্পদটি সম্পর্কে অত্যন্ত স্পর্শকাতর ছিলেন। নদীর জীবনযাপনে কোনো ব্যাঘাত ঘটুক কোনোদিন তিনি চাননি। নদীর আপন বেগে পাগল পারা স্বভাবটিকে তিনি সব সময় প্রশ্রয় দিয়েছেন। বিশ শতকের প্রথম দশকে গঙ্গা সম্পর্কে রবীন্দ্রনাথের পরিবেশবাদী পর্যবেক্ষণটি এই প্রসঙ্গে অত্যন্ত উল্লেখযোগ্য। 'গোরা' উপন্যাসে গোয়ার শারীরিক ও মানসিক ক্রান্তির উপশমে গঙ্গার ভূমিকাটি স্মরণ করে নেওয়া যাক— "তখন কলিকাতার গঙ্গা ও গঙ্গার ধার বণিক-সভ্যতার লাভলোলুপ কুশ্রীতায় জলে স্থলে আক্রান্ত হইয়া তীরে রেলের লাইন ও নীরে ব্রিজের বেড়ি পরে নাই। তখনকার শীতসন্ধ্যায় নগরের নিঃশ্বাসকালিমা আকাশকে এমন নিবিড় করিয়া আচ্ছন্ন করিত না। নদী তখন বহুদূর হিমালয়ের নির্জন গিরিশৃঙ্গ হইতে কলিকাতার ধূলিলিপ্ত বাস্তুতার মাঝখানে শান্তির বার্থা বহন করিয়া অনিত।" এই বক্তব্য পড়ে প্রাথমিকভাবে মনে হতে পারে রবীন্দ্রনাথ বৃষ্টি উন্নয়ন বিরোধী। উন্নয়ন নামক যাদুকরী মায়ামোহের আবরণ ভেদ করে প্রকৃত উন্নয়ন কাকে বলে তা কি তিনি জানতেন না? অন্তত এই পর্যবেক্ষণে রবীন্দ্রনাথ উন্নয়ন ও নদীর প্রাকৃত স্বভাবকে গুলিয়ে ফেলেননি। তাই গোয়ার রেজারেকশন ঘটছে পোষ মানানো ঘাট বাঁধানো নদীর কাছে নয়, প্রাকৃত তথা বন্য গঙ্গার শুশ্রূষার প্রলেপে— "নদী তাহাকে

লোকালয়ের অশান্ত কর্মক্ষেত্র হইতে কোন অনির্দেশ্য সুদূরের দিকে আত্ম দোষায়া দিল; সেখানে নির্জন জলের ধারে গাছগুলি শাখা মিলাইয়া কী ফুল ফুটাইয়াছে। কী ছায়া ফেলিয়াছে।" [গোরা] "তীরে রেলের লাইন ও নীরে ব্রিজের বেড়ি" কথাটির মধ্যে কবির বিরক্তি ও ক্ষোভ জমে ছিল না। নদীর প্রাকৃত অবস্থান ও স্বভাবকে 'বেড়ি' না পরিষ্কার ভাবলে ভুল হবে। নদীর প্রাকৃত অবস্থান ও স্বভাবকে 'বেড়ি' না পরিষ্কার প্রগতি ও উন্নয়নের রথ চলতে পারত। 'ডেভেলপমেন্টে'র তথাকথিত সংজ্ঞায় যে কবির আত্মা ছিল না সেটি উপরোক্ত শব্দনিচয়ে ব্যক্ত হয়েছে। সে কথা বলার অপেক্ষা রাখেনা।

আমাদের এই ধরাধামের উপরিতলে ঘরোয়া ও মিঠে জলের সবচেয়ে বড়ো উৎস হলো নদী। নদীর প্রাকৃত স্বভাবে কিছু বন্য থাকলেও অন্তরে সে জননীর মতোই স্নেহময়ী প্রাণের ধাত্রী। তার প্রাকৃত স্বভাবটি তরুণ রবির করে অসামান্য প্রাণময় হয়ে উঠেছে নদী কবিতায়—

সদা	হেসে করে লুটোপুটি,
চলে	কোনখানে ছুটোছুটি।
ওরা	সকলের মন তুবি
আছে	আপনার মনে খুশি।
*	* *
নদী	যত আগে আগে চলে
ততই	সাথি জোটে দলে দলে।
*	* *
শেষে	পাহাড় ছাড়িয়ে এসে
নদী	পড়ে বাহিরের দেশে।
*	* *
দেখে	এই মতো কত দেশ,
কে বা	গনিয়া করিবে শেষ।
*	* *
হেথায়	ফুরাইল সব দেশ,
নদীর	ভ্রমণ হইল শেষ।....

কিছু ছুঁতো ধরা পণ্ডিত রয়েছেন যাঁরা মনে করেন, এই কবিতা আসলে নদী বিষয়ক একটি রচনা মাত্র। আর একটু সম্মান দিতে কেউ কেউ হয়তো বলবেন, কবির প্রকৃতিপ্রেমের অটুট পরাকাষ্ঠা ছাড়া কবিতাটিতে আর কিছু নেই। একটু নিবিষ্ট ধ্যানে পড়লে আমরা বুঝতে পারতাম, রবীন্দ্রনাথ এই কবিতায় যে নদীপীতির পরিচয় দিয়েছেন তা আসলে পরিবেশবাদী ভাবনার আন্তরিক জলসেকই শুধু নয়, প্রকৃতি সহযোগে বাঁচার দিশা নির্দেশও বটে।

অনেকেই মনে করেন, বাংলাদেশের অনেক নদনদী আপন নিয়মে মরে গিয়েছে। এই ধারণা সর্ব্বৈব ঔদকবিজ্ঞান বিরোধী। নদী যেহেতু গতিম প্রাণের ধারা, তাই বাইরে থেকে আঘাত না করলে তার মরার কথা নয়। নদীর উৎসস্থানে বন্ধপ্রদেশে বা মিলনমোহনায় বাঁধ-বাঁধাল দিয়ে কি অবহেলা অপব্যবহারে বা কুকৌশলে তাকে গলিত জঞ্জালের নির্দ

নালাম পরিণত করে আমরাই তাকে প্রতিনিহত নিহত করছি। জারকবর্ষের সবচেয়ে বড়ো নিকাশি নালা তো গঙ্গাই। মথুরা বৃন্দাবন বা আগ্রার প্রেমনিরিত্তি জবাই করে যখনকে আমরা নিকেশ করে দিয়েছি। এ বঙ্গের খোয়াই, অঞ্জনা, জলসী, সরস্বতী—এরকম কত যে নদী আজ আক্ষরিক অর্থেই মৃত। খঞ্জনি বাজিয়ে ঘান গাওয়ার সেই অঞ্জনা নদীতীরটি আর নেই। নদীকে নদীর মতো চলতে মিলে মর্ত্যের মানচিত্র তো অন্যরকম হতো; এবং তাতে অনেকানেক উপকারও হতো মানবসভ্যতার। নদীমাতৃক বাংলা আজ ক্রমশ নদীবিরল ছুঁতে পরিণত হচ্ছে। বহুকাল আগেই এই বেদনা রবীন্দ্রনাথকে অনেকক্ষেত্রেই বিরক্ত করেছিল। অন্যনিকে রবীন্দ্রনাথ বুকেছিলেন, বহুকাল পূর্বে খনিত পুকুর দিঘি সরোবর ইত্যাদি কৃত্রিম জলাধারগুলির নিত্য সংস্কারের উপশম দরকার। সেই গুঞ্জহার অভাবে বাংলার এককালের লাইফলাইন বা আরোগ্যানিকেতন পুকুর-দিঘি-সারগুলি মরে হেজে গিয়ে প্রাণঘাতী রোগবালাইয়ের আঁতুর ঘর হয়ে উঠেছে। একদা যে রাজন্যবর্গের প্রসাদে এই জলাশয়গুলি গড়ে উঠেছিল, তার বর্তমান দুর্দশা দেখে তিনি নিশ্চেষ্ট থাকতে পারেননি। তাঁরই প্রাণনায় এবং মূলত প্রভাতকুমার মুখোপাধ্যায় ও অন্যান্য আশ্রমকর্মীদের উদ্যোগে বীরভূম জেলার বিখ্যাত ভুবনডাঙার পঞ্চিল ও মুর্খু জলাধারটির সংস্কার করে প্রাণসংরক্ষণ করা হয়। এই কর্মযজ্ঞ উপলক্ষে ১৩৬৩ বঙ্গাব্দের ৭ ভাদ্র সমাজকর্মী রবীন্দ্রনাথ একটি অসাধারণ মূল্যবান ভাষণ দিয়েছিলেন। এই ভাষণে তিনি বলেছিলেন, ‘...যে করে আরোগ্যবিধান সেই আজ রোগের আকর। দুর্ভাগ্য আক্রমণ করেছে আমাদের প্রাণের মূলে, আমাদের জলাশয়ে, আমাদের শস্যক্ষেত্রে। সমস্ত দেশ হয়ে উঠেছে তৃষ্ণার্ত, মলিন, রুগ্ন, উপবাসী। ঋষি বলেছেন—হে জল, যেহেতু তুমি আনন্দদাতা, তুমি আমাদের অমলাভের যোগ্য করো। সর্ববিধ দোষ ও মালিন্য-দূরকারী এই জল মাতার ন্যায় আমাদের পবিত্র করুক।’

মিঠে জলের সবচেয়ে গুরুত্বপূর্ণ ভাণ্ডারটি হলো বসুন্ধরার অন্তঃস্থল। বিশ্বের অধিকাংশ ঘর-সংসারই চলে ভূগর্ভস্থ জলে। এই জলভাণ্ডারও যে সীমিত ও বহুক্ষেত্রে নিরাপদ নয় সে বিষয়টি রবীন্দ্রনাথকে বেশ ভাবিত করেছিল। ভূগর্ভের জলের বৈজ্ঞানিক বিশ্লেষণ ও বিস্কৃততা প্রসঙ্গে রবীন্দ্রনাথের সচেতনতা অত্যন্ত বিস্ময়কর। ভূতলের জলও যে নানা কারণে বিপজ্জনক হতে পারে তা তিনি বিশেষজ্ঞের মতো বুকেছিলেন; এবং সমাজকর্মীর মতো মানুষকে সচেতন করতে সচেষ্ট হয়েছিলেন। একটি নিবন্ধে লিখেছেন, “এই ভূগর্ভস্থ সর্বব্যাপী জলপ্রবাহ মানুষের পক্ষে নিতান্ত সামান্য নহে। কৃপ সরোবর উৎস প্রভৃতি আশ্রয় করিয়া এই জলই পৃথিবীর অধিকাংশ মানবের তৃষ্ণা নিবারণ করে—এবং স্বাস্থ্যরক্ষার সহিতও ইহার ঘনিষ্ঠ যোগ আছে।... ঋতুবিশেষে এই ভূগর্ভস্থ জলের তলোচ্ছতা উঠিয়া-নামিয়া থাকে। এবং এই উঠ-নাবার সহিত রোগ বিশেষের হ্রাস-বৃদ্ধির যোগ আছে।” ভূগর্ভের জলতল নেমে যাওয়ার জন্য আজ যে আর্সেনিক দূষণে লক্ষ লক্ষ মানুষ আক্রান্ত হয়ে হয় পঙ্গু হয়ে যাচ্ছেন, নয়তো বা এই বিষজল পান করে ধীর গতিতে মৃত্যু মেনে নিতে বাধ্য হচ্ছেন, সেই ভবিষ্যৎবাণীই কি এই বক্তব্যে প্রতীত হয়নি?

[ভূগর্ভস্থ জল ও বায়ুপ্রবাহ, সাধনা, আশ্বিন-কার্তিক, ১৩০১ বঙ্গাব্দ।]

আমাদের অদূরদর্শী অব্যবহৃত আশ্রয়স্থারক বে-হিসেসী জীবনযাপনের জন্য পৃথিবীতে ব্যবহারযোগ্য ও পানীয় জলের পরিমল ক্রমশ কমে আসছে। আমাদের অস্তিম কি শেষ পর্যন্ত তাহলে জলের কারণেই জলরসায়নের বীভৎসাকে হ্রাসক করবে? ‘আমার পৃথিবী তুমি/বহু বরষের’ বলে বসুন্ধরা কবিতায় রবীন্দ্রনাথ অনেক আগেই আমাদের সচেতন করে প্রকৃতির সঙ্গে সঠিকভাবে উত্তরাপনিক মানবের যাপনশৈলীর জাবনা চেয়েছিলেন। বসুন্ধরা কবিতায় সে বিশ্বাসযোগ্যের সঙ্গে আমরা পরিচিত হই তা তো আসলে সেই শেকড় ফেরারই ইঙ্গিত। এমন কি তিনি রোগশয্যা থেকে মানবজাতির কাছে, নদী সম্পর্কে যে বার্তাটি পাঠিয়েছিলেন সেখানেও ধ্বনিত হয়েছে গভীরতর এক ভবিষ্যৎ আশঙ্কার কথা—

নদীর একটা কোণে শুষ্ক মরা ডাল
থোতের ব্যাখাত যদি করে,
সৃষ্টিশক্তি ভাসমান আবর্জনা নিয়ে
সেখানে প্রকাশ করে আপনার রচনাচাতুরী—
ছোটো দ্বীপ গড়ে তোলে, টেনে আনে শৈবালের দল,
তীরের যা পরিত্যক্ত নেয় সে কুড়িয়ে,
দ্বীপসৃষ্টি-উপাদানে যাহা-তাহা জোটায় সম্বল।

...
একদিন বন্যা নামে, শৈবালের দ্বীপ যায় ভেসে;
[১৪ সংখ্যক কবিতা, রোগশয্যায়]

নদী নিয়ে এতখানি যোগ্য অভিমান ও সচেতনতা বাঙালি আর কোনো কবির রচনায় এমন করে আমরা পাই না। মানবসভ্যতাকে বুক দিয়ে আগলানো বোধহয় একেই বলে।

জল ও তার ধাত্রী নদীর কোনো ভূগোল বা রাষ্ট্র হয় না। সীমান্তের কাঁটাতার সংলগ্ন গাছে ফল ধরলে এপারের লোক খাবে না ওপারের—গাছ তা বোঝে না। কিন্তু তাই বলে ফলবতী গাছ কি বেজ্ঞাবদ্ধ্য স্বীকার করে? সাগর নদী সরোবর—এরা সীমান্ত মানে না। কাঁটাতারের চোখরাঙানি দিয়ে জলভূমিকে শাসন করা যেতে পারে। তবে সে শাসন বহুক্ষেত্রেই আত্মঘাতী হয়ে ওঠে। তিস্তার জলবশ্টন নিয়ে জলঘোলা করার রাজনীতি আমাদের গভীর খাদের মুখে ঠেলে দিয়েছে। প্রযুক্তি ও যন্ত্রসভ্যতায় অতি সমৃদ্ধ এই একুশ শতকের দ্বিতীয় দশকের প্রথম অর্ধেও কি আমরা নদীজলের ভাগবাটোয়ারার জন্য দুচারটে যুদ্ধ বা মানসযুদ্ধের প্রস্তুতি নেব? ঘরে এবং বাইরে আমরা কি বন্ধ করে দেব মুখ দেখাদেখি? আড়ালে চুকলি কাটব পরস্পরের বিরুদ্ধে? এর কি কোনো সুষ্ঠু স্থায়ী দূরদর্শী সুদূরপ্রসারী মীমাংসা নেই? কোনো ঠাণ্ডা হাতের কোমল উপশম কি আমাদের প্রাণিত করবে না এই মন কষাকষি বন্ধ করতে? তাহলে কি আমাদের সভ্য বলা চলে?

ঠিক এইখানে এসে এই গভীর সংকটে নিমজ্জিত দুটি পড়শি দেশ ও একটি প্রদেশের শীর্ষ ব্যক্তিগণ ঘারস্থ হতে পারেন সেই শ্বেতগুপ্ত শাসকশে শোভিত চিরন্তন মানুষটির। তাঁরই ভাবনার সূত্রে হয়ত মিলতে পারে সমাধানের পরশপাথর। তিনিই তো আমাদের প্রথম গুনিয়েছিলেন বিশ্বভ্রাতৃত্বের সেই মহামন্ত্রের ধ্রুবপদ, ‘আমার পৃথিবী তুমি / বহু বরষের’। বিশ্বলোকের সঙ্গে একাত্ম হয়ে তিনিই আমাদের সচেতন করে দিয়েছেন

বিশ্বসম্পদের ভাগবাটোয়ারায় যেন না থাকে কোনো হননের গুট ও গোপন আয়োজন। সম্রাটের জন্য ধরিত্রীর স্তন্যদানে কোনো আঞ্চলিকতার ভূগোল ঠাই পায়নি তাঁর ভাবনার কাব্যপ্রতিমায়—

... .. নদী খোতোনীয়ে
আপনারে গলাইয়া দুই তীরে তীরে
নব নব লোকালয়ে করে যাই দান
নিপাথর জল, গেয়ে যাই কলগান
দিবশে নিশীথে; পৃথিবীর মাঝখানে
উদয়সমূহ হতে অন্তসিদ্ধ পানে
প্রথারিয়া আপনারে তুঙ্গ গিরিরাজি
আপনার সুদুর্গম রহস্যে বিরাজি;
কঠিন পাষণক্রোড়ে তীর হিমবায়ে
মানুষ করিয়া তুলি লুকায়ে লুকায়ে
নব নব জাতি।

বুঝতে অসুবিধা হয় না, প্রকৃতি ও প্রাকৃতিক সম্পদ সম্পর্কে রবীন্দ্রনাথের অতি স্পষ্ট বিশ্বাসিক ও মানবীয় একটি ধ্যানধারণা ছিল। রবীন্দ্রনাথ নির্ভদ্র হয়েই যেন বলতে চেয়েছেন—সসাগরা ধরিত্রীর অন্তরে বাহিরে যে বিপুল সম্পদ রয়েছে তার মালিক কোনো ব্যক্তি নন, দেশ নয়, রাষ্ট্র নয়; কিম্বা নয় রাষ্ট্রপুঞ্জও। এ সম্পদ বিশ্বের সকল লোকের। এ সম্পদের অধিকার সর্বজনীন। কাঁটাতার যেন এখানে মাথা না গলায়।

সকল লোক কথাটার কোনো মানে হয় না। কেননা সব লোকই কোনো না কোনো রাষ্ট্রের অধীন, তা সে বাসিন্দা হোন বা না হোন। এই কচলির অর্থ আমরা পরে বুঝে নেব। তার আগে বরং বুঝে নেওয়া যাক রবীন্দ্রনাথ ঠিক কাদের ‘লোক’ বলতে চেয়েছেন। ছিন্নপত্র পড়লেই জানা যাবে ‘লোক’ হলেন মৃত্তিকালগ্ন সেই লোকসমাজ তথা প্রজা সাধারণ, যাঁরা ‘মোটর গাড়ির চাকায় ওড়ায় ধুলো/যারা সরে যায় তারা শুধু—লোকগুলো;/কঠিন, কাতর, উদ্ধত, অসহায়,/যারা পায়, যারা সবই থেকে নাহি পায়,’ [সংগতি, অমিয় চক্রবর্তী]এবং যাঁরা নির্ধন নিপীড়িত অবহেলিত যুগে যুগে, দেশে দেশে, কিম্বা মনুষ্যত্বে মহীয়ান। সব রাষ্ট্র এঁদেরই শোষণ করে; শাসনযন্ত্র অব্যাহত রাখার জন্য এঁদেরকেই বাহানা বানায়। পৃথিবীর সকল শাসক সম্প্রদায়ের কাছে যাঁদের একটাই পরিচয়—‘পাবলিক’ কিম্বা ‘ভোটার’। এই দরিদ্র মর্ত্যমানুষগুলির জন্য কবির আন্তরিক বেদনাই ধরা পড়েছে কালীগ্রাম থেকে লেখা ছিন্নপত্রের ১৮ নম্বর চিঠিতে। এই চিঠিতে প্রথমেই তিনি ‘আমি এই পৃথিবীকে ভারি ভালোবাসি’ বলে পরে অতি হৃদয় মনোহারী স্বাভিমাত্রী ভাষায় লিখেছেন—“আমাদের এই মাটির মা, আমাদের এই আপনাদের পৃথিবী, এর সোনার কাম্য ক্ষেত্রে এর স্নেহশালিনী নদীগুলির ধারে এর সুখদুঃখময় ভালোবাসার লোকালয়ের মধ্যে এই সমস্ত দরিদ্র মর্ত্যহৃদয়ের অশ্রু ধনগুলিকে কোলে করে এনে দিয়েছে।”

দেশের হতদরিদ্র প্রজাদের প্রতি আক্ষরিক অর্থেই রবীন্দ্রনাথের এই আত্মতা ও বিশ্বাসিক ভাবনাকে যাঁরা কুপিত বায়ুর ফলোক্ষ মস্তিষ্কের ক্ষণজাত প্রতিক্রিয়া বলে মনে করেন তাঁরা ‘মুক্তধারা’ নাট্যটি পড়ুন; বুঝতে পারবেন কারা প্রকৃত কুপিত বায়ুর শিকার। মুক্তধারা নাট্যটি পড়লেই ‘সকল’ কথাটিরও গুঢ় তাৎপর্য অর্থাৎ রাষ্ট্রাভীত মানুষের প্রতীতি

পেয়ে যাবেন। অনুরোধ করব নদীর জল ভাগবাটোয়ারা করবার পক্ষে সংশ্লিষ্ট রাজনীতিক তথা উচ্চ ক্ষমতাসীন ব্যক্তিবর্গ অনুগ্রহ করে কবি রবীন্দ্রের অন্তত নদী ও বসুন্ধরা কবিতা দুটি এবং মুক্তধারা নাট্যটি মুক্ত মনে পড়েন। অনেকখানি সহজ হয়ে যাবে নদীর জলবন্টন নিয়ে জটিলতা। সেইসঙ্গে বিশ্বের সংবাদপত্র ও সাধারণ পাঠককেও অনুরোধ এই রচনাগ্রন্থ পড়ুন, দেখবেন ত্র্যাহস্পর্শ যোগে মঙ্গলও সাধিত হয়।

মুক্তধারা নাটকে উত্তরকূট (রাষ্ট্রের নামটি মাথায় রাখুন) একটি পল্লী রাষ্ট্র। শিবতরাই (এই নামটিও খেয়াল রাখুন) তারই দক্ষিণে স্ট্রাকচারাল আইরনির সাহায্যে আমাদের বুঝতে অসুবিধা হয় না এদুটি আসলে পৃথক রাষ্ট্রের উপস্থাপনা। মুক্তধারা একটি কল্প উত্তরকূটের পর্বতে তার জন্ম। উত্তরকূট বাহিত হয়ে অবশেষে সে প্রবাহিত হয়েছে শিবতরাই জুড়ে। শিবতরাইয়ের প্রজাদের বাগে আনতে এতে ভাতে মারতে না পেরে (পড়ুন দলদাস বানাতে না পেরে) উত্তরকূট রাষ্ট্রশক্তি তৃষ্ণা ও সেচের জল বন্ধ করে এদের শায়েস্তা করবে বরং মুক্তধারা ঝরণার স্রোতোধারা বেঁধে দেয়। মুক্তধারার উন্মুক্ত ধারায় শৃঙ্খল পরাতে সমর্থ হয়ে উত্তরকূটের যন্ত্ররাজ বিভূতি (পড়ুন সরকারি চিফ ইঞ্জিনিয়ার, প্ল্যানিং অ্যান্ড ইরিগেশন) বলদর্পী হয়ে অভিজিভের প্রেরিত দূতকে বলছে, “তাদের প্রাণ দেওয়া ব্যর্থ হয়নি। আমার বাধ সম্পূর্ণ হয়েছে।” প্রত্যুত্তরে দূত বলছে, “শিবতরাইয়ের প্রজারা এখনও এ কথা জানে না। তারা বিশ্বাস করতেই পারে না যে, দেবতা তাদের যে জল (পড়ুন প্রকৃতিপ্রদত্ত) দিয়েছেন, কোনো মানুষ তা বন্ধ করতে পারে। অর্থাৎ রবীন্দ্রনাথের মতে নদীর জলে রাষ্ট্রাভীত সকল মানুষের অধিকার বিভূতির দৃষ্টিভঙ্গির মূলে রয়েছে চূড়ান্ত সংকীর্ণ স্বার্থপরতার বিরূপ প্ররোচনা—“দেবতা তাদের কেবল জলই দিয়েছেন, আমাকে দিয়েছেন জলকে বাঁধবার শক্তি।” দস্তী বিভূতি আরও জানিয়েছে—“জলের ঝো আমার বাঁধ ভাঙে না, কান্নার জোরে আমার যন্ত্র টলে না।” এভাবে রাষ্ট্রের উদ্ধত অশালীন দস্ত ও শাসনশোষণের অমিত পরাক্রমের না চেহারাটি রবীন্দ্রনাথ তুলে ধরেছেন বিভূতির বলনে ও বাবথারে। তাঁর উত্তরকূটের কাছে উপেক্ষিত থাকে নদীর জলে বিশ্বমানবের সমান অধিকারের মূল প্রসঙ্গটি। ‘সকল’ কথাটির গভীর তাৎপর্য এখানেই।

আমরা যারা ‘প্রজাসকলের’ মধ্যে পড়ি, তারা শুধু চাই, কেবল তির্যক নয়, যে কোনো দেশের যে কোনো নদীর জলবন্টন নিয়ে উত্তরকূট শিবতরাইয়ের মতো জাতীয় বা আন্তর্জাতিক কাজিয়া সংশ্লিষ্ট কোনো পক্ষেই যেন যুদ্ধ না বাধে, যে মানসযুদ্ধই হোক কিম্বা সশস্ত্র। কোনে প্রকার যুদ্ধ কোনো কারণেই কাম্য নয়। তাই কোনো বাহানাতেই বে কেন্দ্রে-প্রান্ত ও প্রতিবেশী রাষ্ট্রের মধ্যে চোরা অবিশ্বাস ও অন্তর্ঘাতের আবহ সৃষ্টি না হয়। আর তিস্তার জলবন্টনের ক্ষেত্রে কোনো পক্ষের হুঁ কুঁচকোলে ভারত ও বাংলাদেশের আম বাঙালির পক্ষে তা হবে বরং ‘হৃদয়বিদারক’। কেননা, দু দেশের বাঙালিই তো ঘরপোড়া গরু। ব্রিটিশ জমানা থেকেই আমরা আহত নিহত ও দম্ব হয়েছি। আবার আমরা যে ইতিহাসের কলঙ্কিত পৃষ্ঠা না হয়ে উঠি। আমাদের আন্তরিক বিশ্বাস, ত্রিপক্ষে শীর্ষ নেতৃত্ব এহন স্পর্শকাতর বিষয়টির সমাধান করতে বসে যাবো বিচক্ষণতার পরিচয় দেবেন। অনতিঅতীতের ইতিহাস এবং রবীন্দ্রনাথের

অতি প্রাসঙ্গিকতা বিবেচনায় রেখে মুক্তমনে মানবিক ও স্বচ্ছ দৃষ্টির পরিচয় দিয়ে ভবিষ্যতের আলোচনাগুলিকে ফলপ্রসূ করবার জন্য তাঁরা সত্যিকারের আন্তরিক ও ঘরোয়া হয়ে উঠবেন। এ বিষয়ে রবীন্দ্রনাথই আমাদের প্রধান আলোকবর্তিকা।

অন্যদিকে আমরা যারা 'পাবলিক' তাঁদেরও বুঝতে হবে, পশ্চিমবঙ্গের উত্তর ভূ-ভাগের (পাঠক দয়া করে উত্তরবঙ্গ পড়বেন না) 'প্রজাসকল' যেমন অকৃপণ প্রাকৃতিক দক্ষিণ্য পাওয়ার অধিকারী, তেমনই তিস্তার স্রোতানীরে পুষ্ট বাংলাদেশের 'প্রজাসকল'ও যেন উপেক্ষিত বা বঞ্চিত না হন। কেননা, রবীন্দ্রোচ্চারিত ধারণায় কোনো রাষ্ট্রিয় ভূগোল ঠাই পায়নি। তাঁর সেই মহৎ বাণীটিও উভয়পক্ষকে মনে রাখতে হবে যে, 'পরের দুঃখ দূর না হলে পরে/আনন্দ তার আপনারই ভার/সইবে কেমন করে'। আমরা বেশ বুঝতে পারছি, পাশের 'দ্যাশের' পড়িশি বাঙালি পশ্চিমের বিশ্বভ্রাতৃত্ববোধের পরাকাষ্ঠা দেখবার জন্য উৎসুক ও উন্মুখ হয়ে রয়েছেন। এই সংকটকালে নীলগ্রহের মানুষ হিসেবে আমাদের অনেক দায়িত্বশীল ও উদার হতে হবে। আমাদেরকেই দেখতে হবে রাজনৈতিক কাজিয়ায় যেন নদীর ধড়মুণ্ড ছিন্নভিন্ন না হয়। আমরা বিশ্বাস করব, কোনো নদীর জলবন্টনের ক্ষেত্রটি যেন কোনোভাবেই উত্তরকূট-শিবতরাইয়ের ঝগড়া হয়ে না ওঠে। আমরা এই আশায় বসে

থাকব যে, এ বিষয়ে সংশ্লিষ্ট দেশ বা রাজ্যের দণ্ডমুণ্ডের কর্তারা যেন মানবীয় উদার ও দু দেশের মধ্যে প্রজাস্বার্থরক্ষাকারী সিদ্ধান্তসমূহ গ্রহণ করেন। এবং এ বিষয়ে পদক্ষেপ করবার আগে তাঁরা যেন হয়ে ওঠেন বিশ্বনাগরিক রবীন্দ্রনাথের নিবিড় পাঠক। 'লোক' হিসেবে এটুকু দায়িত্বজ্ঞানের পরিচয় আমাদের দিতেই হবে।

কল্পনার সাম্রাজ্যে ধূসর ও স্পর্শকাতর জগতে বাস করেও রবীন্দ্রনাথ জীবনের ফলিত ক্ষেত্রের কোনো বাস্তবতাকেই অস্বীকার করেননি। ছোটো করে দেখেননি কোনো সমস্যাকেই। পাশ্চাত্যে অষ্টাদশ শতকে যে পরিবেশভাবনার মৃদু সূত্রপাত, উনিশ শতকে সেই সমস্যা ও তার প্রতিকারের প্রচেষ্টাও প্রথর হতে শুরু করেছিল। সবে আলোকিত হতে থাকা ভারতও চূপ করে ছিল না। এ বিষয়েও রবীন্দ্রনাথ আমাদের পথিকৃৎ। প্রকৃতির সবচেয়ে মূল্যবান সম্পদ জল। সেই জল বিষয়ে রবীন্দ্রনাথের বিস্তার ভাবনা ও দুর্ভাবনা ছিল। তারই অভিজ্ঞান তাঁর নানা রচনায় মুখ্য হয়ে উঠেছে। তাঁর সেই দিকনির্দেশকারী ভাবনাসমূহ আজও প্রাসঙ্গিক। এবং আমাদের পথ দেখাতে সক্ষম।

নিবন্ধের সকল উদ্ধৃতি ও বিবৃত তথ্য রবীন্দ্ররচনাবলি,
বিশ্বভারতী, সুলভ সংস্করণ থেকে গৃহীত।

INDIA AS A TAX HAVEN COUNTRY, ACHIEVEMENTS AND CHALLENGES: A COMPARATIVE ANALYSIS.

Dr. Barin Kumar Pramanik

Asst. Professor of Economics and H.O.D
Deptt. of Economics, Darjeeling Govt. College
Darjeeling-734101, Email: barinkp1969@gmail.com

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ABSTRACT

The paper investigates whether India can be uplifted to a tax haven country in future or not. Tax haven country in the sense is the place where certain tax are levied at a low rate or not at all while offering due process, good governance and a low corruption rate. Individuals and/or corporate entities can find it attractive to move themselves to areas with reduced or no taxation levels. This type of tax havens are according to my paper is termed as tax haven type-II countries.

Keywords: Keywords: tax haven, tax, revenue, gdp, growth.

Introduction:

During the last six decades we have achieved self-sufficiency in food, created a strong and diversified industrial base and developed a high degree of resilience that could effectively withstand the onslaught of the East Asian crisis in 1997 & 1998, the Kargil War in 1999, the oil shocks in 1999 & 2000 and the global financial meltdown in 2007. None of these could push India into an economic crisis of the kind we faced in 1991.

Tax systems over the world have undergone significant changes during the last thirty years as many countries across the ideological spectrum and with varying levels of development have undertaken reforms. The wave of tax reforms that began in the mid-1980s and accelerated in the 1990s was motivated by a number of factors. In many developing countries, minimizing fiscal imbalance was the driving force. Tax policy was employed as a principal instrument to correct severe budgetary pressures. In other words, the transition from a planned economy to a market economy necessitated wide-ranging tax reforms. Besides efficiency considerations, these tax reforms had to address

the issues of replacing public enterprise profits with taxes as a principal source of revenue and of aligning tax policy to change in the development strategy. Another motivation was the internationalization of economic activities arising from increasing globalization. On the one hand globalization entailed significant reduction in tariffs, and replacements had to be found for this important and relatively easily administered revenue source. On the other hand, globalization emphasized the need to minimize both efficiency and compliance costs of the tax system. The supply-side tax reforms of the Thatcher-Reagan era also had their impact on the tax reforms in developing countries. The evolution of the Indian tax system was driven by similar concerns and yet, in some ways, it is different and even unique unlike most developing countries, which were guided in their tax reforms by multilateral agencies.

Tax haven countries:

A tax haven is a country or territory where certain taxes are levied at a low rate or not at all while offering

process, good governance and a low corruption rate. Individuals and/or corporate entities can find it attractive to move themselves to areas with reduced or nil taxation levels. This creates a situation of tax competition among governments. Different jurisdictions tend to be havens for different types of taxes, and for different categories of people and/or companies. States that are sovereign or self-governing under international law have theoretically unlimited powers to enact tax laws affecting their territories, unless limited by previous international treaties. There are several definitions of tax havens. *The Economist* has tentatively adopted the description by Geoffrey Colin Powell (former economic adviser to Jersey): "What ... identifies an area as a tax haven is the existence of a composite tax structure established deliberately to take advantage of, and exploit, a worldwide demand for opportunities to engage in tax avoidance." *The Economist* points out that this definition would still exclude a number of jurisdictions traditionally thought of as tax havens. Similarly, others have suggested that any country which modifies its tax laws to attract foreign capital could be considered a tax haven. According to other definitions, the central feature of a haven is that its laws and other measures can be used to evade or avoid the tax laws or regulations of other jurisdictions. In its December 2008 report on the use of tax havens by American corporations, the U.S. Government Accountability Office was unable to find a satisfactory definition of a tax haven but regarded the following characteristics as indicative of a tax haven:

- i. nil or nominal taxes;
- ii. lack of effective exchange of tax information with foreign tax authorities;
- iii. lack of transparency in the operation of legislative, legal or administrative provisions;
- iv. no requirement for a substantive local presence; and
- v. self-promotion as an offshore financial center.

Tax haven countries may be divided into two categories one is the tax haven-I and the other is the tax haven-II. The tax haven-I are the countries those who are the shelter for the tax averting countries and the tax haven-II are the countries that are having low taxes and do attract FDI for their country. In India the practice of tax haven-I is regarded as illegal activities where as the practice of tax haven-II is appreciated. Here we have intended to investigate whether India can be uplifted to tax haven-II or not.

Origin of the research problem:

The tax haven is as old as taxation itself. In Ancient Greece some of the Greek Islands were used as depositories by the sea traders. These islands were used

to place their foreign goods to avoid 2% tax imposed by the city-state of Athens on imported goods.

The offshore world is all around us. More than half of world trade passes, at least on papers, through tax havens. More than half of all banking assets and a third of foreign direct investment by MNC's are routed offshore. An impression has been created in sections of the world's media since a series of stirring denunciations of tax havens by world leaders in 2008 and 2009, that the offshore system has been dismantled, or at least tamed. In fact quite the opposite has happened. The offshore system is very rude health – and growing fast (Nicholas Shaxon).

Various countries claim to be the oldest tax haven in the world. For example, the Channel Island claims their tax independence as far back as Norman Conquest, while the Isle of Man claims to trace its fiscal independence to even earlier times. Nonetheless, the modern concept of tax haven is generally accepted to have emerged at an uncertain point in the immediate aftermath of World War I. Bermuda sometimes optimistically claim to have been the first tax haven based upon the creation of the first offshore companies legislation in 1935 by the newly created law firm of Convers Dill and Pearman. However, the Bermudian claim is debatable when compared against the enactment of a Trust Law by Liechtenstein in 1926 to attract offshore capital.

Most economic commentators suggest that the first 'true' tax haven was Switzerland, followed closely by Liechtenstein. Swiss Bank had long been a capital haven for people fleeing social upheaval in Russia, Germany, South America and elsewhere. However, in the early part of the 20th century, many European Governments raised taxes sharply to help pay for reconstruction efforts following the devastation of World War I. By and large, Switzerland, having remained neutral during the Great War avoided these additional infrastructure cost and was consequently able to maintain a low level of taxes. As a result, there was a considerable influx of capital into the country for tax related reason. It is difficult; nonetheless, pinpoint a single event or precise date which clearly identifies the emergence of the modern tax haven.

Interdisciplinary relevance:

The topic has interdisciplinary relevance as it has to deal with the following specialized disciplines such as:

Public Finance, Theory of Taxation, Allocation of Credit and Cross-Crediting, International Finance, Financial Leakage, Poverty, International Trade, Globalization, Foreign Investments (FDI & FII), Transfer Pricing, Black Marketing, Money Laundering..... and so on.

Review of Research and Development in the Subject:

Some economists hold that the inflation tax affects the lower and middle classes more than the rich, as they hold a larger fraction of their income in cash; they are much less likely to receive the newly created monies before the market has adjusted with inflated prices, and more often have fixed incomes, wages or pensions. Some argue that inflation is a regressive consumption tax. Also see Andrés Erosa and Gustavo Ventura, "On inflation as a regressive consumption tax". Some claim there are systemic effects of an expansionary monetary policy, which are also definitively taxing, imposing a financial charge on some as a result of the policy. Because the effects of monetary expansion or counterfeiting are never uniform over an entire economy, the policy influences capital transfers in the market, creating economic bubbles where the new monies are first introduced. Economic bubbles increase market instability, and therefore increase investment risk, creating the conditions common to a recession. This particular tax can be understood to be levied on future generations that would have benefited from economic growth, and it has a 100% transfer cost (so long as people are not acting against their interests, increased uncertainty benefits no-one). One example of a strong supporter of this tax was the former Federal Reserve chair Beardsley Ruml.

The most important challenge in restructuring the tax system in the country is to evolve a co-ordinated consumption tax system. Although tax assignment between different levels of government follows the principle of separation, as these separate taxes levied by the centre (excise duties), states (sales taxes, state excise duties, taxes on motor vehicles, goods and passengers), and local governments (octroi) fall on the same tax base, we end up in a chaotic situation with tax on tax and mark up on the tax. Besides cascading and relative price distortions, this results in a totally non-transparent tax system. Development of dual VAT – a manufacturing stage VAT by the centre and a consumption type destination based retail stage VAT by the states is a solution, which needs to be progressively applied. Proper levy of goods and services tax would, therefore, require an amendment of the Constitution. The central government can use this as a leverage to persuade the states to reduce and eventually eliminate the taxation on inter-state sales so that a levy of destination based VAT becomes a reality". [M. Govinda Rao (Directors, Institutes for Social and Economic Change, Bangalore, India), *Asia-Pacific Development Journal Vol.7, No.2, December 2000 - Tax Reform In India: Achievements and Challenges*]

"Ajay Shah said it was useful to analyze where the tax system was going wrong. Several measures currently in place had adverse efficiency effects, Shah said, including the 2 percent cess, or surcharge, on all taxes that are earmarked for education. Similarly, the subsidy to promote the universal service objective in telecommunications was funded by taxes on telephone usage and interconnections between fixed and cell phones. These specialized taxes were in place, Shah said, even though we know that it is more efficient to fund education and universal service obligations out of general tax revenue. Shah added that because of its bad design and implementation, the value added tax also failed to yield the desired efficiency results. The transactions tax, which started with a security transactions tax, is yet another example of inefficient taxation. The recent plans by the Maharashtra government to introduce very high stamp duties on Mumbai-based financial transactions were likely to be even more damaging, he said. Finally, Shome commented on the controversy between Acharya and Govinda Rao on the timing of the tax reform. He said the controversy had reminded him of a parallel controversy on when and which country first implemented the VAT. The French started it in the early 1960s on certain items. Then, a couple of years later, Brazil introduced a very comprehensive VAT at the level of the states, addressing even the issue of how to tax the interstate trade. Shome noted that in his view, although France was the first to adopt the VAT technically speaking, Brazil was the one to first adopt it meaningfully. [M. GOVINDA RAO (National Institute of Public Finance and Policy) & R. K AVITA RAO (National Institute of Public Finance and Policy), *India Policy Forum, 2005-06: Trends and Issues in Tax Policy and Reform in India*]

International status:

The Federal Govt. loses both individual and corporate income tax revenue from the shifting of profit and income into low-tax countries, often referred as tax havens. The revenue losses from this tax avoidance and evasion are difficult to estimate, but some have suggested that the annual cost of offshore tax abuses may be around \$100 billion per year. International tax avoidance can arise from large Multinational Corporation who shifts profits into low-tax foreign subsidiaries or wealthy individual investors who set up secret bank accounts in tax haven countries.

Recent action by the Organization for Economic Cooperation and Development (OECD) and the G-20 industrialized nations has targeted tax haven countries following primarily on evasion issues. The recently adopted HIRE Act (P.L. III-147) included a number of anti-evasion

provisions, and P.L. 111-226 included foreign tax credit provisions. Some of these proposals, and

some not adopted, are in the American Jobs and Closing Loopholes Act (H.R. 4213); the Stop Tax Haven Abuse Act (S. 506, H.R. 1265); draft proposals by the Senate Finance Committee; two other related bills, S. 386 and S. 569; the Bipartisan Tax Fairness and Simplification Act (S. 3018); and proposals by President Obama.

Multinational firms can artificially shift profits from high-tax to low-tax jurisdictions using a variety of techniques, such as shifting debt to high-tax jurisdictions. Since tax on the income of foreign subsidiaries (except for certain passive income) is deferred until repatriated, this income can avoid current U.S. taxes and perhaps do so indefinitely. The taxation of passive income (called Subpart F income) has been reduced, perhaps significantly, through the use of "hybrid entities" that are treated differently in different jurisdictions. The use of hybrid entities was greatly expanded by a new regulation (termed "check-the-box") introduced in the late 1990s that had unintended consequences for foreign firms. In addition, earnings from income that is taxed can often be shielded by foreign tax credits on other income. On average very little tax is paid on the foreign source income of U.S. firms. Ample evidence of a significant amount of profit shifting exists, but the revenue cost estimates vary from about \$10 billion to \$60 billion per year.

Individuals can evade taxes on passive income, such as interest, dividends, and capital gains, by not reporting income earned abroad. In addition, since interest paid to foreign recipients is not taxed, individuals can also evade taxes on U.S. source income by setting up shell corporations and trusts in foreign haven countries to channel funds. There is no general third party reporting of income as is the case for ordinary passive income earned domestically; the IRS relies on qualified intermediaries (QIs) who certify nationality without revealing the beneficial owners. Estimates of the cost of individual evasion have ranged from \$40 billion to \$70 billion.

Most provisions to address profit shifting by multinational firms would involve changing the tax law: repealing or limiting deferral, limiting the ability of the foreign tax credit to offset income, addressing check-the-box, or even formula apportionment. President Obama's proposals include a proposal to disallow overall deductions and foreign tax credits for deferred income and

restrictions on the use of hybrid entities. Provisions to address individual evasion include increased information reporting and provisions to increase enforcement, such as shifting the

burden of proof to the taxpayer, increased penalties, and increased resources. Individual tax evasion is the main target of the HIRE Act, the proposed Stop Tax Haven Abuse Act, and the Senate Finance Committee proposals; some revisions are also included in President Obama's plan.

National Status:

Significance of the study:

The study is going to add a modified definition and concept to the current literature. The significance of the study in several fields of applied economics, where related the economy as a whole, has greatly increased in modern times. The increasingly complex nature of finance and government has focused attention on the use of study in solving operational problems. Research, as an aid to economic policy, has gained added importance, both for government and student.

The study of Tax Free India is considered crucial and their results assist, in more than one way, in taking non tax receipts of the Government for development and also helps to citizen of country to improve the country's development.

This study will be helped to philosophers and thinkers for the development the new styles and creative work about the Tax System of a Country.

It will be a breakthrough to note that the study of Tax Free India will be the fountain of knowledge for the sake of knowledge and an important source of providing guidelines for solving different business, governmental and social problems. It is a sort of formal training which enables one to understand the new developments in the field of Tax in a better way.

Objectives of the study:

1. To analyse trends and prospects of India as Tax Haven Country.
2. To examine the impact of Taxes on the growth and development of India.
3. To examine the reasons why other countries are growing faster and more attractive to Taxpayers than India. Contrast in the performance of Tax Haven Country vs. India.
4. To analyse inflow of Government's Direct Tax Receipts in comparison with Government's Indirect Tax Receipts.
5. To frame a policy for the Plan, Procedure, System & Action to see India as a Tax Haven Country.

Methodology:

The Population:

There are total one hundred twenty nine countries in the World Trade Organization, which are improving their Tax System.

Collection of Data:

The research design for our study is exploratory in nature. We have depended heavily on secondary data. The required data were collected from Books, Thesaurus, Activator, Dictionary, Research Journals/Periodicals, Annual Report, Popular Media, Internet, Doctoral Thesis and Old Synopsis.

Selection of Samples:

Purposively two developing and two developed countries are selected for a comparative analysis. The countries are the members of the World Trade Organisation, which have accelerating their investment through Foreign Direct Investment, mainly India and UAE situated in Arab.

Period of Study:

We have relied on Economic Survey, from financial year 1990-91 to 2010-11. The study is conducted for the period from April 1990 to March 2011.

Techniques of Analysis:

The data collected have been analysed through the application of advanced scientific statistical & Econometrical tools such as Mean, Median, Mode, Standard Deviation, Correlation, Probability, Chi-square, t-test, Percentage analysis, Regression, etc. We will also try to formulate a model which will be relevant for becoming tax haven country.

Hypothesis of the Study:

Having identified the objectives of this study, the following hypotheses have been formulated and tested during the period of study that is from the period of liberalisation to till date.

1. Whether there is any significant difference between improvement of Government's non tax receipts and of Government's tax receipts of India.
2. Is there any significant relationship between improvement of Government's tax receipts and inequality of the Society?
3. Is there any significant relationship between Government's tax revenue improvement and growth (GDP, GNP)?
4. Is there any significant difference between tax heaven countries and other countries with special reference to India?

Advantages of tax havens:

The advantages of tax havens are viewed in four principal contexts:

⊙ **Personal residency:** Since the early 20th century wealthy individuals from high-tax jurisdictions have sought to relocate themselves in low-tax jurisdictions. In most countries in the world, residence is the primary basis of taxation. In some cases the low-tax jurisdictions levy no or only very low, income tax. But almost no tax haven assesses any kind of capital gains tax, or inheritance tax. Individuals who are unable to return to a high-tax country in which they used to reside for more than a few days a year are sometimes referred to as tax exiles.

⊙ **Asset holding:** Asset holding involves utilizing a trust or a company, or a trust owning a company. The company or trust will be formed in one tax haven, and will usually be administered and resident in another. The function is to hold assets, which may consist of a portfolio of investments under management, trading companies or groups, physical assets such as real estate or valuable chattels. The essence of such arrangements is that by changing the ownership of the assets into an entity which is not resident in the high-tax jurisdiction, they cease to be taxable in that jurisdiction. Often the mechanism is employed to avoid a specific tax. For example, a wealthy testator could transfer his house into an offshore company he can then settle the shares of the company on trust (with himself being a trustee with another trustee, whilst holding the beneficial life estate) for himself for life, and then to his daughter. On his death, the shares will automatically vest in the daughter, who thereby acquires the house without the house having to go through probate and being assessed with inheritance tax. (Most countries assess inheritance tax (and all other taxes) on real estate within their jurisdiction, regardless of the nationality of the owner, so this would not work with a house in most countries. It is more likely to be done with intangible assets.)

⊙ **Trading and other business activity:** Many businesses which do not require a specific geographical location or extensive labor are set up in tax havens, to minimize tax exposure. Perhaps the best illustration of this is the number of reinsurance companies which have migrated to Bermuda over the years. Other examples include internet based services and group finance companies. In the 1970s and 1980s corporate groups were known to form offshore entities for the purposes of "re invoicing". These re invoicing companies simply made a margin without performing any economic function, but as the margin arose in a tax free jurisdiction, it allowed the group to "skim" profits from the high-tax jurisdiction. Most sophisticated tax codes now prevent transfer pricing scams of this nature.

⊙ **Financial intermediaries:** Much of the economic activity in tax havens today consists of professional financial services such as mutual funds, banking, life insurance and pensions. Generally the funds are deposited with the intermediary in the low-tax jurisdiction, and the intermediary then on-lends or invests the money (often back into a high-tax jurisdiction). Although such systems do not normally avoid tax in the principal customer's jurisdiction, it enables financial service providers to provide multi-jurisdictional products without adding an additional layer of taxation. This has proved particularly successful in the area of offshore funds. This type of methodology has been used by Google and came to light in the year 2010 when it was reported that Google uses techniques called the "Double Irish" and "Dutch Sandwich" to reduce its corporate income tax to 2.4%, by funneling its corporate income through Ireland and from there to a shell in the Netherlands where it can be transferred to Bermuda, which has no corporate income tax. The search engine is using Ireland as a conduit for revenues that end up being cost to another country where its intellectual property (the brand and technology such as Google's algorithms) is registered. In Google's case this country is Bermuda. In the year 2009, the internet giant made a gross profit of €5.5bn, but reported an operating profit of €45m after "administrative expenses" of €5.467bn were stripped out. Administrative expenses largely refer to royalties (or a license fee) Google pays it Bermuda HQ for the right to operate. Google has uncovered a highly efficient tax structure across six territories that meant Google paid just 2.4% tax on operations outside the US.

Table-1

The G8 countries

Net pay after tax and social security per country (from lowest to highest)

	Salary after tax (based on gross pay of \$25,000)		Salary after tax (based on gross pay of \$200,000)	
	Amount	%	Amount	%
Germany	\$18,149	72.6%	\$108,189	54.1%
France	\$18,750	75.0%	\$111,953	56.0%
Italy	\$18,800	75.2%	\$117,519	58.8%
UK	\$20,799	83.2%	\$121,819	60.9%
Canada	\$21,204	84.8%	\$129,340	64.7%
Russia	\$21,750	87.0%	\$139,709	69.9%
USA	\$22,660	90.6%	\$144,083	72.0%
Japan	\$22,704	90.8%	\$174,000	87.0%

Source: Organization for Economic Co-operation and Development (OECD)

"What is surprising to us is the wide difference between countries in terms of tax burden placed on high earners. With the exception of Israel, the countries which tax high earners the most are EU members. The countries with the lightest tax burden on high earners – with the

exception of Japan and the United States – are emerging economies."

"Many governments are facing tough choices as they grapple with record deficits. Achieving a sustainable fiscal position will be difficult without raising taxes, which is a major political issue for many countries as they seek to strike a balance between fiscal responsibility and economic growth."

"Russia is unique among major economies in that employees pay a flat rate of income tax of 13%. In Russia much of the tax burden falls on employers instead, who have to pay social insurance for every employee up to a maximum of 34%. This means that for high earners in particular Russia is a very attractive country in which to be based. For those earning \$200,000 per annum, the difference between the amount of tax paid in Russia and most other G8 economies is very significant."

Paul Mencke, partner of Govers Accountants/Consultants in the Netherlands, member of UHY comments: "High earners in the Netherlands take home just 55% of their pay compared to 87% in Russia. That is a huge difference that could have serious consequences for our economic competitiveness. The high tax burden on high earners in the Netherlands is partly compensated by being able to offset interest on house mortgages against tax, for example, as well as incentives for foreign professionals. It is obvious that our tax system can be improved and simplified however."

"The reason why the 'take home pay' in Germany is lower than in other countries is due to the high social security contributions rather than a high tax rate. For a low income worker (US\$25,000 per annum) the tax burden including solidarity surcharge is merely US\$1,632. In Germany, a comprehensive social coverage is given by law. Everybody is obliged to pay the contributions. On the other hand, low income workers in Germany benefit from a (nearly) complete health insurance coverage."

Excluding Dubai, for low earners the difference in the amount of tax collected between the highest taxing country (Germany) and the lowest taxing (Ireland) is US\$5,788, which means that a person earning US\$25,000 per annum in Germany would pay over six times more in tax and social security than the equivalent person in Ireland.

Table-2

Net pay after tax and social security per country in US dollars (from lowest to highest)

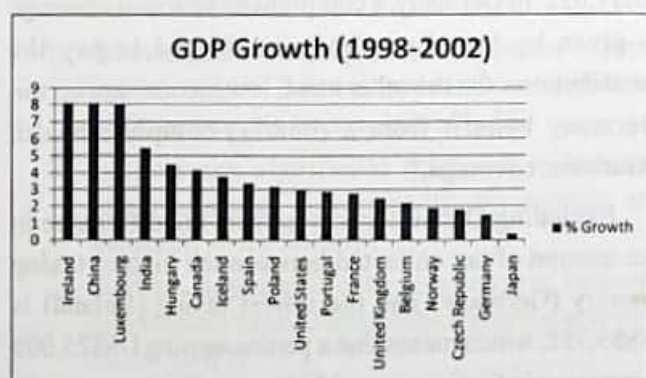
Net pay after tax	Salary after tax (based on gross pay of \$25,000)			Salary after tax (based on gross pay of \$200,000)		
	Country	Salary	%	Country	Salary	%
	Germany	\$18,149	72.6%	Italy	\$108,189	54.1%
	India	\$18,663	74.7%	Netherlands	\$109,417	54.7%
	France	\$18,750	75.0%	Ireland	\$111,905	56.0%
	Italy	\$18,800	75.2%	Germany	\$111,953	56.0%
	Estonia	\$19,518	78.1%	Israel	\$112,363	56.2%
	Mexico	\$20,534	82.1%	France	\$117,519	58.8%
	UK	\$20,799	83.2%	UK	\$121,819	60.9%
	Egypt	\$20,847	83.4%	Spain	\$127,332	63.7%
	Brazil	\$21,023	84.1%	Canada	\$129,340	64.7%
	Netherlands	\$21,087	84.3%	Malaysia	\$137,128	68.6%
	Malaysia	\$21,140	84.6%	USA	\$139,709	69.9%
	Israel	\$21,177	84.7%	India	\$141,163	70.6%
	Canada	\$21,204	84.8%	Japan	\$144,083	72.0%
	Spain	\$21,328	85.3%	Mexico	\$146,377	73.2%
	Russia	\$21,750	87.0%	Brazil	\$148,088	74.0%
	USA	\$22,660	90.6%	Estonia	\$152,515	76.3%
	Japan	\$22,704	90.8%	Egypt	\$160,847	80.4%
	Ireland	\$23,937	95.7%	Russia	\$174,000	87.0%
	Dubai	\$25,000	100.0%	Dubai	\$200,000	100%

Source: Organization for Economic Co-operation and Development (OECD)

The situation of diverse growth rates in the world:

Economic growth is conventionally measured with the percentage of increase in gross domestic product (GDP). According to statistics from OECD, the GDP annual growth rates between countries from 1998 to 2002 differ greatly. The top GDP growth rate of Ireland and China is 8.1%, while the bottom GDP growth rate of Japan is only 0.2%. However, it does not mean that the greater rate is much better than the lower one because different countries have specific economic background and development speed.

Figure-1



Source: Organization for Economic Co-operation and Development (OECD)

Considering the general trend in 21st century, the worldwide economic growth has slowed down than before, only 2% on average. Most surprisingly it appears significant difference among countries. In 2003, the annual economic growth rate of USA is about 2.5%, compared to 0.5% of Japan and 7.5% of China.

The analysis of possible reason:

The quality of governance is a very important factor in driving economic growth. According to World Bank Institute, governance is the process and institutions through which decisions are made and authority in a country is exercised. The governance is responsible for providing necessary infrastructure and social environment for economic development of the whole society. The first appearance of "good governance" came in 1989 from World Bank report on Africa (Leftwich, 2000). As Kauffmann and Kraay (2002) point out, there are six aggregate indicators to evaluate the quality of governance: accountability, Political stability and lack of violence, government effectiveness, regulatory framework, rule of law and control of corruption. Nowadays, in many developing and developed countries, the main purpose of governance has always been set to stimulate the economic

development. Accountability means officials should be responsible for their actions and social policies (Leftwich, 2000). Stable political environment and lack of violence are also necessary for continuous economic development. As for government effectiveness, it is closely related to the quality of public regulation, quality of bureaucracy, performance of civil (Jalilian et al, 2003). It was found by Olson et al (1998) that the quality of regulation influences economic performance and productivity development is strongly correlated with the quality of governance as well. Then good governance requires clear separation of legislative, executive and judicial powers and efficient performance of each sector. Meanwhile good governance still insists on transparency, control of corruption and consultative process between government and private interests (Leftwich, 2000).

Table-3

DIRECT AND INDIRECT TAX REVENUE OF INDIA

From table-3 it is evident that the total tax revenue of India has grown from Rs. 139226 crore in the year 1997-98 to Rs. 588909 crore in the year 2007-08. In the year 1997-98 the contribution of the direct tax revenue was 34.68% of the total tax revenue. Of this direct tax 12.28% came from personal income tax, 14.38% came from corporate tax and the rest 8.02% came from other taxes. The contribution of the indirect tax revenue was 65.32% of the total tax revenue. Of the indirect tax 34.45% came from excise duty, 28.87% from custom duty and the rest 2% from other sources. So in the previous years a large percentage of the tax revenue of India Govt. was from indirect taxes. This indicates that the tax policy was not efficient and that was regressive in nature. Gradually over the period it has been found that the share of the indirect tax revenue has decreases and that of the direct tax revenue has increases. In the year 2007-08 the percentage of direct tax revenue became 53.02% and that of the indirect tax revenue became 46.98%.

(Rs. in crores)

Years	Direct taxes				Indirect taxes				Total tax revenue
	Personal income tax	Corporate tax	Other taxes	Total	Excise duty	Custom duty	Other taxes	Total	
1997-98	17101 (12.28)	20016 (14.38)	11163 (8.02)	48280 (34.68)	47962 (34.45)	40193 (28.87)	2791 (2.00)	90946 (65.32)	139226 (100.00)
1998-99	20240 (14.07)	24529 (17.06)	1831 (1.27)	46600 (32.41)	53246 (37.03)	40668 (28.28)	3288 (2.29)	97202 (67.59)	143802 (100.00)
1999-00	25655 (14.94)	30692 (17.87)	1612 (0.94)	57959 (33.75)	61902 (36.04)	48420 (28.19)	3470 (2.02)	113792 (66.25)	171751 (100.00)
1999-00	31764 (16.84)	35696 (18.93)	845 (0.45)	68305 (36.22)	68526 (36.33)	47542 (25.21)	4231 (2.24)	120299 (63.78)	188604 (100.00)
2001-02	32004 (17.11)	36609 (19.57)	585 (0.31)	69198 (36.99)	72306 (38.65)	40096 (21.43)	5461 (2.92)	117863 (63.01)	187061 (100.00)
2002-03	36866 (17.05)	46172 (21.35)	50 (0.02)	83088 (38.42)	82310 (38.06)	44852 (20.74)	6016 (2.78)	133178 (61.58)	216266 (100.00)
2003-04	41387 (16.40)	63562 (25.18)	140 (0.06)	105089 (41.64)	90774 (35.97)	48629 (19.27)	7891 (3.13)	147294 (58.36)	252383 (100.00)
2004-05	49268 (16.21)	82680 (27.21)	823 (0.27)	132771 (43.69)	99401 (32.71)	57566 (18.94)	14134 (4.65)	171101 (56.31)	303872 (100.00)
2005-06	55985 (15.38)	101277 (27.82)	7954 (2.19)	165216 (45.39)	110665 (30.40)	65050 (17.87)	23053 (6.33)	198768 (54.61)	363984 (100.00)
2006-07	75079 (15.94)	144318 (30.64)	10784 (2.29)	230181 (48.86)	117088 (24.86)	86304 (18.32)	37484 (7.96)	240876 (51.14)	471057 (100.00)
2007-08	102655 (17.43)	192911 (32.76)	16647 (2.83)	312213 (53.02)	122711 (20.84)	102852 (17.46)	51133 (8.68)	276696 (46.98)	588909 (100.00)

Source: Compiled from Reports of Comptroller and Auditor General of India of relevant years.

Note: Figures in parentheses represent percentage share in total tax revenue.

Table-4
GROWTH IN INCOME TAX REVENUE OF INDIA

(Rs. in crores)

Year	Personal income tax		Corporate tax		Total income tax		Total tax revenue	
	Amount	GR	Amount	GR	Amount	GR	Amount	GR
1997-98	17101	-	20016	-	37117	-	139226	-
1998-99	20240	18.36	24529	22.55	44769	20.62	143802	3.29
1999-00	25655	26.75	30692	25.13	56347	25.86	171751	19.44
2000-01	31764	23.81	35696	16.30	67460	19.72	188604	9.81
2001-02	32004	0.76	36609	2.56	68613	1.71	187061	-0.82
2002-03	36866	15.19	46172	26.12	83038	21.02	216266	15.61
2003-04	41387	12.26	63562	37.66	104949	26.39	252383	16.70
2004-05	49268	19.04	82680	30.08	131948	25.73	303872	20.40
2005-06	55985	13.63	101277	22.49	157262	19.18	363984	19.78
2006-07	75079	34.11	144318	42.50	219397	39.51	471057	29.42
2007-08	102655	36.73	192911	33.67	295566	34.72	588909	25.02
EGR	24.64		17.44		21.67		15.09	

Source: Compiled from Reports of Comptroller and Auditor General of India of relevant years.

Table-4 depicts the growth of income tax revenue as well as the total tax revenue of India from the period 1997-98 to 2007-08. In the year 1998-99 the growth rate of total tax revenue was 3.29%. It raised to 19.44% in the year 1999-2000 again it felled to 9.81% in the year 2000-01 again in the following years it rose and in the year 2007-

08 it became 25.02%. It has also been found that the growth of the income tax has rose from 20.62 % in the year 1998-99 to 34.72% in the year 2007-08. Also that of the personal income tax revenue and the corporate tax revenue rose respectively from 18.36% to 36.73% and 22.55 % to 33.67%.

Table-5
INCOME TAX TO GDP RATIO OF INDIA

(Rs. in crores)

Years	Personal income tax	Corporate tax	Total income tax	GDP	Percentage of personal income tax to GDP	Percentage of corporate tax to GDP	Percentage of total income tax to GDP
1997-98	17101	20016	37117	1426670	1.20	1.40	2.60
1998-99	20240	24529	44769	1612383	1.26	1.52	2.78
1999-00	25655	30692	56347	1936831	1.32	1.58	2.91
2000-01	31764	35696	67460	2089499	1.52	1.71	3.23
2001-02	32004	36609	68613	2282143	1.40	1.60	3.01
2002-03	36866	46172	83038	2469564	1.49	1.87	3.36
2003-04	41387	63562	104949	2772194	1.49	2.29	3.79
2004-05	49268	82680	131948	3126596	1.58	2.64	4.22
2005-06	55985	101277	157262	3580344	1.56	2.83	4.39
2006-07	75079	144318	219397	4145810	1.81	3.48	5.29
2007-08	102655	192911	295566	4713148	2.18	4.09	6.27

Source: Compiled from Reports of Comptroller and Auditor General of India of relevant years.

Table-5 represents income tax to GDP ratio of India from the year 1997-98 to 2007-08. The ratio income tax to GDP has shown increasing trend it was raised from 2.60 in the year 1997-98 to 6.27 in the year 2007-08 which indicates that the income tax revenue has risen more proportionately than the growth of GDP.

Concluding Remarks:

From the above study we have come to the following conclusion that the tax haven countries may be divided into two categories Type-I and Type-II. Type-I tax havens are the countries those who encourage money laundering, protect and provide security to the black money of other countries. Indirectly these tax havens help tax evasion. Many countries are there those who are keeping their black money here in these type-I tax havens at low tax or no tax. Many industrialists are also there those who are producing elsewhere and procuring profits from tax haven type-I for tax saving purposes. These funds are again invested in other countries as FDI and again arriving at tax concession. In this way the industrialists are getting double benefits out of type-I tax havens. These tax havens sometimes indirectly enhance terrorism in different countries. Black money is in most of the cases used in terrorist activities.

Type-II tax havens are the countries those who invite FDI at low tax. That means a country or territory where certain tax are levied at a low rate or not at all while offering due process, good governance and a low corruption rate. Individuals and/or corporate entities can find it attractive to move themselves to areas with reduced or nil taxation levels. This creates a situation of tax competition among governments. Different jurisdictions tend to be havens for different types of taxes, and for different categories of people and/or companies. States that are sovereign or self-governing under international law have theoretically unlimited powers to enact tax laws affecting their territories, unless limited by previous international treaties.

Though according to most political philosophies, taxes are justified as they fund activities that are necessary and beneficial to society. Additionally, progressive taxation can be used to reduce economic inequality in a society. According to this view, taxation in modern nation-states benefits the majority of the population and social development. A common presentation of this view is "Taxes are the price of civilization".

It can also be argued that in a democracy, because the government is the party performing the act of imposing taxes, society as a whole decides how the tax system should be organized. The American Revolution's "No

taxation without representation" slogan implied this view. For traditional conservatives, the payment of taxation is justified as part of the general obligations of citizens to obey the law and support established institutions. The conservative position is encapsulated in perhaps the most famous adage of public finance, "An old tax is a good tax". Conservatives advocate the "fundamental conservative premise that no one should be excused from paying for government, lest they come to believe that government is costless to them with the certain consequence that they will demand more government 'services'". Social democrats generally favor higher levels of taxation to fund public provision of a wide range of services such as universal health care and education, as well as the provision of a range of welfare benefits.

If the increased tax revenue is spent elsewhere rather than spending in the development process then the whole exercise of implementation of efficient tax policy becomes futile exercise. The money collected from tax revenue is sometimes robbed by the Politicians or Bureaucrats and are kept in the international banks of the other countries (such as Swiss Bank). The public money which is the money of the poor people as well is misused by the leaders and the responsible officers of the country then it becomes very unfortunate for the lot of the country's development. If this is the scenario then it is better to tax less and put extra effort to stop corruption and at the same time bring the black money back to country that are kept in the custody of the other countries. The black money that is kept in the Swiss Banks or the banks of the other countries is very often used for terrorist activities.

Policy prescriptions to uplift India as Tax Haven Type-II country:

1. To modify the tax laws to attract foreign capital in the form of FDI.
2. To keep the tax rate at a minimum level such that the corporate entities find it attractive to move themselves to the areas.
3. To make the tax progressive in nature that is high earners will pay high tax and low earners will pay low tax.
4. To take strict measures to restrict tax avoidance and money laundering.
5. To provide good governance.
6. To minimize the corruption rate and black marketing.

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THE IMPACT OF COPYRIGHT ON OWNERSHIP OF THE ACADEMIC FACULTY AND LIBRARY CREATION

Abu Sayed

Librarian, Darjeeling Government College
Darjeeling-734101
Email Id: asayed2811@gmail.com

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ABSTRACT

The ownership of the copyright in a work is not the same as ownership in the material object in which the copyright work is embodied. When a person buys a book he becomes the owner of the book but not the owner of the copyright in the book. Similarly, a person who buys a painting may be the owner of the canvas in which the painting is drawn but copyright in the work may vest in the artist who has drawn the painting. In higher learning academic institutions many works are created by the faculty members and the librarians and other library staff to perform their duties in the changing environment of teaching, learning and applications of ICT. This article focuses on the impact of copyright on ownership of the university/college faculties' creations

Keywords: copyright; copyright ownership; works; library collections; digitize; faculty member; owner

1. INTRODUCTION

Academic libraries play a key role in educational institutions in many spheres, including copyright. Library collections house both copyrighted and public domain materials and their missions are to make these works available to students and faculty in support of teaching, learning, research. Some of these copyrighted works are owned by faculty members, universities and publishers, but academic libraries also create copyrightable works. Librarians and library staff members develop copyrighted works and libraries often are the moving force behind the work done by colleges and universities to reexamine their copyright ownership policies in light of changing technologies, pedagogies and delivery methods for courses. Because of these changes, there is a trend on the part of higher learning institutions to increase the control and management of copyrighted works created in the campus. At the same time, old models of scholarly communications are becoming increasingly problematic as both the cost to acquire copyrighted works and the quantity of works published increases.

All of these changes, as well as increased concern about copyright ownership, provide an interesting background against which to examine the impact of copyright ownership and management on academic libraries.

In this regard we should consider what comes under protection of literary works as per the Berne Convention for the Protection of *Literary and Artistic Works*, usually known as the Berne Convention, is an international agreement governing copyright, which was first accepted in Berne, Switzerland, in 1886.

The expression "*Literary and Artistic Works*" shall include every production in the literary, scientific and artistic domain, whatever may be the mode or form of its expression, such as books, pamphlets and other writings; lectures, addresses, sermons and other works of the same nature; dramatic or dramatic-musical works; choreographic works and entertainments in dumb show; musical compositions with or without words; cinematographic works to which are assimilated works expressed by a process analogous to cinematography

works of drawing, painting, architecture, sculpture, engraving and lithography; photographic works to which are assimilated works expressed by a process analogous to photography; works of applied art; illustrations, maps, plans, sketches and three-dimensional works relative to geography, topography, architecture or science.

2. IMPORTANCE OF FACULTY MEMBERS' OWNERSHIP OF THEIR COPYRIGHTS

The importance of copyright ownership to college and university faculty and to the institutions in which they work is clear. Traditionally, individual faculty members own the copyrights in the works they produce even though many argue that higher education institutions could have claimed authorship and thus ownership under the work for hire doctrine. Moreover, most faculty-generated scholarly works produce no income. Universities and colleges are interested in either owning the rights in their work product such as syllabi, laboratory manuals, tests, databases and online courses, or in having the rights to continue to use the work even after a faculty member leaves that particular institution. They may also want to commercialize or participate in the commercialization of these course materials.

In order to have a work published, a faculty author often must transfer the entire copyright to a publisher. Colleges and universities are encouraging faculty members to retain certain rights in their scholarly works even if copyright ownership is impossible under publisher requirements. These include the right to reproduce the work for the faculty author's own classes, to place the material on reserve in the library, either print or electronic reserves, and to retain the electronic rights to their articles. If it is not possible to retain the electronic rights, sometimes publishers will permit the faculty author to place the article on a website up to six to twelve months after publication in print or electronically. This permission might be limited to password protected websites only, or it could be free of such restrictions.

3. STUDENT OWNERSHIP OF COPYRIGHTS

Students own the copyright in the works that they author for courses and programs. Graduate students who produce dissertations and theses certainly own the copyright in these works. But university libraries have a unique copyright issue with these documents, but not a question of ownership. In order to complete graduate work in most institutions of higher learning, the graduate student is required to provide two copies of his/ her dissertation or thesis to the university library. The library then adds that work to its collections and the work may be used like other

library material by patrons/users or may be used for interlibrary loan. Most institutions require graduate students to file some type of intent to complete graduate studies. Part of this is an agreement that can be drafted to provide the above mentioned copies of the completed dissertation or thesis to the university library. While the library certainly does not hold the copyright in these works, the signed forms permit it to use these graduate papers in certain ways.

4. LIBRARY INTERESTED IN COPYRIGHT OWNERSHIP

Much of the interests of academic libraries concerning copyright ownership actually center on concerns about the rapidly increasing costs of journal subscriptions, especially in science and technology. These increases cause serious budgetary controls for libraries but also negatively impact on disciplines in the humanities, social sciences and other subject areas that rely on monographic materials, since the purchase of monographs is often sacrificed in order to maintain journal subscriptions. Once upon a time, scholarly societies published scholarly journals in many disciplines with high quality but lower cost journals. As publishing costs rose, however, many of these societies turned over publication of their journals to commercial publishers, which resulted in higher priced journal subscriptions. As journal prices increase, the balance between journals and monographs that many university/college library collections try to maintain is lost. For this purpose libraries proposed several solutions:

- 1) To find other publication outlets for faculty members beyond those offered by commercial publishers;
- 2) To work with commercial publishers to reduce the cost of subscriptions and
- 3) To develop some other models of copyright ownership.

Here libraries assumed that if faculties own their copyrights, this would result in lower journal costs and perhaps even free copies would be received for the library collection and for distribution to classes.

Librarian and library associations have led much effort to reexamine copyright ownership policies on university campuses with an eye toward both preserving additional rights for individual faculty members, and to further the ability to share these works across campus and all of academic institutions. This is done either through interlibrary loan or by other methods. This is based on an assumption that faculty authors are more likely to grant broad permission to use their works within the institution free of charge and may be willing to grant the same broad permission across all of academia. Even if faculties do not own their copyrights but instead publish their works in

lower price journals, consequently, libraries and their users will be benefited since libraries will be better able to afford the cost of the journal subscription.

5. LIBRARY OWNERSHIP OF COPYRIGHTS

Generally university/college libraries do not hold the copyright on most of the works in their collections, but libraries do own copyrights in three primary types of works such as:

(i) Works produced by library staff members as a part of their jobs ;

(ii) archival materials in which the copyright was transferred to library along with the artifact and

(iii) Digital library projects. This article particularly focuses on these three issues which will affect copyright ownership and it's impact on academic libraries.

6. COPYRIGHT OWNERSHIP OF LIBRARY-GENERATED WORKS

Libraries actually generate a number of works that may qualify for copyright protection. Some of these materials may be attributed to individual staff members working in their capacities as librarians; a good example of such is a **library webmaster** who is responsible for producing and updating the library's webpage. There are also library-produced works of doubtful copyright ability which are jointly created by a large number of library staff members working in concert. An example of this type of work is the **online library catalogue**. There are also works that the library commissions such as **paintings, photographs, maps and even studies and reports on which it may hold the copyright.**

6.1. Librarians' works

Works created by library staff members for the benefit of the library are varied and important to the institution. The most valuable jointly created work of a library is its **ONLINE CATALOGUE**. Because of the factual nature of the data contained in a library catalogue and standardization in the way data elements are presented and the information is arranged, it is **unlikely that a library catalogue is copyrightable**. The library catalog consists of fact-based bibliographic records for all works in the library's collection, arranged by an accession number. Entries may be retrieved from the catalogue by author, title, series, International Standard Book Number, subject headings and classification number. Today, users often prefer to perform keyword searching in library catalogues, but these terms are often either word found in the title of the work or subject headings which likely qualify as facts about the book. Under the "sweat of the brow" doctrine,

It was long assumed that library catalogues were copyrightable, and, in fact, some library catalogues were produced as book catalogues and were sold to other libraries as bibliographic references. After *Fest Publications v. Rural Telephone Co.*, the "sweat of the brow" doctrine was eliminated and no longer could a work that consists of a collection of facts be copyrighted just on the basis of the hard work it took to produce the work. So, despite its importance to libraries and library users, an online catalogue is not likely copyrightable.

Libraries also produce web pages, research guides, library handbooks, some software, teaching materials for bibliographic instruction, and multimedia presentations for virtual tours of the library, newsletters, and audiovisual works on how to use the online catalogue, annual reports, strategic planning documents, library displays and bulletin boards. Most of these works are created by librarians and library staff members within the scope of their employment, and they are **works for hire**. The *Copyright Act* defines a work for hire as a work produced by employees within the scope of their employment or a work that is ordered or commissioned for use as a collective work. These collective work include contributions to the following:

- (1) A motion picture,
- (2) A translation supplementary work,
- (3) A compilation,
- (4) Instructional text,
- (5) A test or answer material for a test and
- (6) An atlas.

In the library, however, the situation is usually clear when the individual producing the work for use by the library is a regular library employee and works either full or part-time for the institution. Library employees tend to be on the regular payroll of the college or university, have taxes and social security taxes withheld from their wages are offered insurance coverage, provided with a place to perform their duties, given tools to complete the work and their work is directed by the library employer who assigns tasks to the employee.

Contract employees who are hired to work on a particular project, (such as reclassification / retro-conversion/ digitalization etc.) who are actually employees of a library employment service and are paid directly by that service are likely to be an exception. The copyrightable works they produce are most likely in the nature of commissioned works, but not of the type covered under the definition of work for hire. Likewise, it probably does not occur to these individuals to assume that they own any rights in works that were

produced for at the direction of the library. In order to avoid problems, however, academic libraries would be better served to clarify this issue in contracts with the library employment agency and the individual employee up front.

One exception to the general rule that the library owns the copyright in works created for it by its employees, involves the **faculty status** of librarians. In many academic institutions, librarians are members of the faculty. In others, librarians are classified as employees with professional status but are not faculty. For those who are faculty members, the issue of copyright ownership is complicated. Certainly, the works they produce for the library such as research guides, library web pages and reports are done within the scope of their employment and the library owns the copyright. But with respect to copyright ownership, scholarly articles written by faculty librarians should be treated the same as articles by other faculty members. In most institutions this will mean that the librarian owns the copyright in scholarly articles he produces. There is little reason that an academic library would want to claim ownership of articles that are written by librarians, even those that utilize the librarian's professional expertise, research skills and experience gained on the job. Indeed, in many academic libraries, librarians are expected to contribute to the body of scholarly work in librarianship and to publish. When digitize librarians publish scholarly articles, since the name of the library appears prominently in the biographical information about the author the library actually garners good publicity. Furthermore, libraries seldom need to own the copyright in order to use the article or to provide access to members of the campus community or the profession. Most librarians are extremely flattered when anyone wants to use one of their (librarians) articles, including their employer, and most of them grant permission broadly for multiple copies. Just as with most scholarly articles by other faculty members, there is little cash value in the production of the article, so there is no financial incentive for the library to claim copyright ownership. Instead, the benefits a librarian receives from publishing scholarly articles are primarily reputational but may lead to tenure and promotion, just as for teaching faculty. Moreover, similar to other scholarly authors, librarians often have to transfer the copyright in their article to the journal publisher as a condition of publication. This certainly is the case with most journals in library science. Thus, it makes little sense to argue about ownership of the copyright in most of the scholarly articles produced by academic librarians.

Librarians also create totally unrelated works outside the scope of employment, and the library certainly has no ownership claim on the copyright in these works.

Librarians write novels, plays, poetry, short stories; create paintings and compose music. There is little doubt that the librarian owns the copyright in these works which are not created within the scope of employment.

It is also possible for a library to provide a great deal of support to a librarian who produces a copyrighted work such as research by other librarians, manuscript preparation and monetary support for conducting surveys. In this instance, the library and the librarian should agree up front who will own the copyright, and whether both the library and the librarian author have reuse rights. In the event that the work is commercialized and actually produces income, the library might insist that it be reimbursed for expenses it incurred in the production of the work from the income the work generates. But this should be handled by a contract up front.

6.1.1. Works by Library Staff

Works by non-librarian staff members developed for the library are almost certainly works for hire. However, staff members may also produce works on their own time and would own the copyright in those works. There is an element of unfairness since works by faculty librarians are treated differently from those of other librarians and support staff members, but it parallels the same division between staff and faculty works throughout of the university.

6.1.2. Student Employees, Volunteers, Interns & Graduate Assistants

Works created by student workers employed by a library, whether they were student library assistants, desk attendants, shelvers or paid graduate assistants, are likely works for hire. Although such individual student assistants may primarily be students who author their own papers or theses, the work performed for the library is as an hourly or salaried employee. Libraries rely heavily on student assistants for collection maintenance, re-shelving of materials, staffing the circulation desk and other routine tasks. These tasks generally do not produce copyrightable works. However, graduate assistants and other student workers may develop bibliographies, WebPages, newsletters and library displays as a part of their job duties. These works are copyrightable if they are original and fixed. Works created in this capacity are works for hire, and the library itself is the author according to Copyright Law.

Even students who serve as unpaid interns and volunteers are probably considered to be employees in this context. Although wages are not paid, the library certainly directs their work, assigns additional projects and

provides both workspace and tools. For internships, students may actually receive academic credit for their work in the library and often a student produces a copyrightable work for the library as a part of that internship. By agreement, the library has access to and may use the work for library purposes while the student may use the work to fulfill course requirements. There are no reported disputes involving the ownership of the copyright in these works, but if such a work were commercially viable, one could envy a situation when a student intern created software or a webpage and either the student or the library wants to commercialize it. There is no clear answer as to which party owns the copyright in this situation; hopefully, the parties will willingly agree up front as to ownership or absent an agreement, share ownership and avoid a dispute.

6.2. Archival Works Commissioned by the Library

When a library contracts with an outside agency to produce a work for the library, it is natural to assume that the library, which is paying for the creation of the work, will own the copyright. In the past, however, making such assumptions with works such as photographs, software and graphic designs has harmed libraries. The library immediately used the photographs for its purposes such as in a brochure or other publication or had them framed to display in the library. One can envision problems arising in three instances. First, the library later digitizes the photographs and puts them on a library webpage over the objections of the photographer. The second problem occurs several years later when the photographer has become famous and publishes a major retrospective of his work, without the permission of the library to include these works in the publication. A third scenario might arise when the once struggling photographer has now received major recognition as an architectural photographer for brilliant lighting and framing of buildings. Someone on the library staff remembers that the library has some photographs of its building taken by this photographer, and the library reproduces the images on tote bags and coffee mugs to sell for a fundraising project.

Clearly, the contract with a producer, such as a computer programmer or graphic designer, should specify ownership rights. Most often the library will mandate that it owns the copyright in the work, the fee it is paying for production of the work, and other specifics concerning future uses of the work by the producer. The library should register the copyright in its name once the work is completed.

The other side of the coin is that libraries are often contractors for other organizations and may produce

copyrightable works for others under the contract. The same advice concerning definition of copyright ownership rights in addition to payment issues, and completion date applies when the library is performing the work as the contractor as opposed to being the contracting agency.

6.3. Digital Library Projects

Libraries all over the world are involved in "digital library projects" in which the library digitizes material from its collection and makes them available to the public. Sometimes these are referred to as digital archives. Libraries are engaged in creating digital libraries consisting of a variety of materials, for example, on a special subject matter or theme, the works of a particular author which may include letters, journals and manuscripts, or works in a special format. The reason such digital collections are created is to produce an electronic library that will be valuable to researchers everywhere, and thus libraries seek to make unique materials from their collections available online. Often, this material is in the public domain, but not always. Naturally, there are copyright concerns when a library digitizes works that are still under copyright. So assume that the works the library digitizes are in the public domain or that the library has obtained permission from the copyright holder. Does the work the library performs to create the digital version of the work or the digital library itself qualify for copyright protection? At least one case has held that creating the digital version of a work does not create a new copyright in the work. Publishers used to rationalize that it was difficult and labor intensive to digitize a work and therefore the digital version should be separately copyrightable. This theory was always somewhat suspect since copyright is found in the underlying work, not in the format in which it is stored or presented.

Digital library projects are very labor intensive, but the "sweat of the brow" doctrine no longer provides copyright protection for such projects. Therefore, no matter how much work is required to digitize it and determine that it is within the public domain, no copyright is available on the basis of hard work. Two other possibilities for copyright protection exist. First, the entire project, as a compilation of digitized public domain works may qualify for copyright protection if it meets the criteria articulated in *Feist v. Rural Telephone*. Under *Feist*, a factual compilation may qualify for copyright if there is sufficient originality, such as, creativity, which is found in the selection of the factual data, organization of the database, indexing and value adding. For example, if the library selectively chose certain items to include in the digital library instead of all the data, it might satisfy the selection criteria. However, this is not as likely, since

normally a library will include all of the items that it owns on a given subject or by a certain author in the digital library. Thus, the digital library may use a total universe of data just as the white pages of the phone book in *Feist* was a total universe of data.

The second possibility for copyright ownership on the part of a library is the original work that the library may do to accompany some of these digitized items, such as biographical information, publishing history of the original work, the impact the work has had on culture, literature, or art, over the years. This original material appears along with the digitized work. Thus, the original work may be sufficient to receive copyright protection for the compilation.

Another type of digital library is more properly called a departmental or institutional compilation. With the permission of faculty authors, some academic libraries have digitized other faculty-generated materials such as case studies, problem sets etc. Some libraries are creating digital archives of faculty papers, including unpublished works. Although the copyright in these individual works probably belongs to the faculty author, the library that creates and manages such a repository might claim copyright in the compilation itself if it satisfies the *Feist* criteria.

7. CONCLUSION

And copyright ownership. There are certainly many other situations that involve an active role on the part of the library in producing works, such as videotaping the lectures of faculty members at the command of the teacher. While the faculty member owns the copyright in the lecture if it is fixed on the tape with her permission, what similar tapes that make up a collection in the library? Is there a copyright in the collection as a whole? Should libraries develop guidelines dealing with the copyright issues and management of such a collection?

The reexamination of copyright ownership on campuses has highlighted increased need for libraries to scholarly articles are primarily reputational but may lead to tenure and promotion, just as for teaching faculty. Moreover, similar to other scholarly authors, librarians often have to transfer the copyright in their article to the journal publisher as a condition of publication. This certainly is the case with most journals in library science. Thus, it makes little sense to argue about ownership of the copyright in most of the scholarly articles produced by academic librarians.

Librarians also create totally unrelated works within the scope of employment, and the library certainly has no ownership claim on the copyright in these works.

update their policies relating to copyright ownership of works it creates, those developed by librarians and staff members within the scope of their employment, and copyright issues as they apply to archival works. Librarians will have to continue to address the ownership issue. There is little reason that an academic library would want to claim ownership of articles that are written by librarians, even those that utilize the librarian's professional expertise.

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POETICS OF IDENTITY: ACCENTUATING POLITICAL IMAGINATION IN INDIAN NEPALI POETRY

Mr. Kabir Basnet

Assistant Professor

Post Graduate Department of Nepali

Darjeeling Government College Darjeeling: 734101.

Email: kabirbasnetdj@gmail.com

&

Dr. Padam Nepal

Reader

Department of Political Science, St Joseph's College

North Point, Darjeeling: 734104.

Email: padamnepal@gmail.com

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ABSTRACT

Presupposing a possible triadic relationship between narrative, memory and identity with an understanding that narrative constitutes collective memory, and it, in turn facilitates the constructions of collective identity, the present paper seeks to explore how the discourse of collective memory, as it is enacted through literature, shapes the formation/construction of a identity by a group, with particular focus on Gorkhas in Darjeeling, which has been reeling through a series of identity base protest movements. Grounded on the theory of literary field as a discursive space and based on Discourse Analysis as its methodological premise, the present paper would, with an understanding that the default value of humans' contacts with different literatures and cultures have often been ethnocentric in that anything that deviated from accustomed domestic pattern is identified as the 'Other' as an oddity, an anomaly, with specific peculiarities apt to allow space for its stereotypical constructions, and hence, exploitation, begins with an imagological analysis of the stereotypical constructions of the Gorkha in India, and evaluates the mnemonic ability of the poetic genre of Indian Nepali literature to create, foster and (re)articulate a dilemma of Gorkha Community about its collective identity and how it can raise questions about the common past upon which this identity is contingent.

Keywords: *Collective Identity, Discursive Space, Gorkha, Imagological Analysis*

INTRODUCTION

Poetry in modern Indian Nepali literature¹ since its birth has taken a radical stance in its function as a medium to react to the brazen socio political actualities experienced by the poets and their community. Poetic images are being deployed to preach against the cases of otherisation, stereotypical constructions, portrayals and representations, socio-economic and political exploitation, and to construct and (re)articulate identity and nationhood. Hence, Indian Nepali poetry is not only a form of artistic expression concerned with lyricism and beauty but is also an instrument that conveys political issues and influences opinion within its society². It, as a particular medium of communication that influences opinions and comments on the current situation in order to modify or restore it, is a 'discourse' with its particular criteria of 'discursive formation'. The 'discursive formation', or the set of rules that specify the poetic discourse, works in such a way that contributes

enormously to the critique of Gorkha stereotypical image creation, responses to the inadequacies if not failures of mainstream history to incorporate Gorkha historical contributions and allow them some historical space for appropriation, and finally, to the formulation of a Indian Nepali national identity. The Indian Nepali poetry defines the social relationships between the Indian 'mainstream' and the Indian Nepali community on the one hand, and, with its mnemonic ability, transfers the past history and memory to the present, thereby facilitating a process of construction and articulation of identity. Thus, presupposing a possible triadic relationship between narrative in all forms including poetic narration, memory and identity with an understanding that narrative constitutes collective memory, and it, in turn facilitates the constructions of collective identity, the present paper seeks to explore how the discourse of collective memory, as it is enacted through literature, shapes the formation/construction of an identity by a group. It begins with an imagological analysis of the stereotypical constructions of the Gorkhas in India, and evaluates the mnemonic ability of the poetic genre of Indian Nepali literature to create, foster and (re)articulate a dilemma of Gorkha Community about its collective identity.

II

INDIAN NEPALI POETRY AND POLITICAL IMAGINATION

Central to the present study is the notion that the arts can be powerful agents for developing social imagination (Greene, 1995). Greene defines imagination as the capacity to invent visions of what should be and what might be in our deficient society (ibid). Active, meaningful encounters with art works may counter the habitual, the familiar and move us to envision a more humane society and world. Thus, imagination creates openings for the empathetic. Empathy, according to Greene (2001), signifies the capacity to see through another's eyes, to grasp the world as it looks and sounds and feels from the vantage point of another. Imagination enables us to glimpse the grim, unspeakable realities of a marginalized community. And, the fusion of art and politics which gives rise to the political imagination. How one sees the world through the prism of art as well as the belief that art is a force by which one can alter reality, must be linked to what the artist holds dear. The importance of poetry as a political instrument, especially as wielded by subjugated peoples, is simply immense. Poetry of the political imagination is a matter of both vision and language. Any progressive social change must be imagined first, and that vision must find its most eloquent possible expression to move from vision to reality. Any oppressive social condition, before it can change, must be named and condemned in words that persuade by stirring the emotions, awakening the senses. Thus the need for the political imagination in the literary works specially poetry. The weapon of poetry may be a poet's greatest device in his/her search for freedom and for a just society. Indian Nepali poetry is poetry of political imagination, replete with expressions of the lived experience of injustice and cravings for recognition of a Gorkha Identity in India. However, the complex and multifaceted phenomenon of identity has been a challenging topic of numerous literary, linguistic and interdisciplinary explorations. Identity, whether personal,

group, ethnic, religious, national, professional, or any other, is something that is no longer given or constant, but needs to be defined, established, maintained, constructed or reconstructed, and can be lost, searched for, questioned, reinvented or reaffirmed in the turmoil of confusing and conflicting influences and forces. The poetry of political imagination discursively performs this function in its search for a just and humane world. Poetic genre of literature is a powerful means of preserving memories of the past and contributing doubly to political imagination with its mnemonic ability. A.J. Mayer (1993) has shown, memory, and especially collective memory, needs material supports to endure, such as monuments, movies, music, but also books and other literary works that allude to or recount historical events. Literature in general and poetry in particular is thus one of the numerous possible supports for memory and helps to expand it in time and space. Because of its written form, a literary piece can last longer. Poetic Literature thus seems to be an almost eternal site of memory that preserves the memory of the past, passed down from generation to generation to readers who have not themselves experienced the events. Literature, regardless of the genre or the period when a particular piece was written, is essentially concerned with identity in a particular social and historical context. However, poetry can perform identity because of its capacity to persuade by stirring the emotions and awakening the senses. In the sections that follow, we shall explore the political imagination in the Indian Nepali poetry and how it has stirred the emotions of the wailing Gorkhas.

A. Imagology³ of Stereotypical Representations and Infliction of Pain: Stereotypical representation or portrayal is the process of expressing or denoting a particular idea or impression of a situation, a person, or an object by means of words (discourse), figures, signs (symbols) with the intention of influencing opinion, otherisation, marginalisation, and exploitation; and in doing so, displacing the situation, person or an identity from its 'situatedness', and hence, of identity. Central to both Marxist and hermeneutical theories of interpretation is the view that the interpretation of a situation is invariably conditioned by the prior history of the impact of that situation (Hoy, 2000). When one analyses a stereotypical construction and representation/portrayal, for example, characters in fictional works, academic texts, oral literature, and advertisements, one must analyze it in terms of who is being depicted, the explicit or implicit intention behind the construction and portrayal, the socio-political reality within which the portrayal has been embedded, and the tone of the signifying and or consigning practice. This representation or portrayal is a signifying and consigning practice and is used to mean description or representation of the socio-political life and experience of a people through socially and culturally based signifying devices. It, like other signifying practices, is constitutive and reflective of our place in the political, social, economic, religious and racial/ethnic configurations of our being. Such representations are places where ideologies are figured, refigured, and debated, and as sites for the apparent mediation of power/knowledge differences. This brings to the fore the question of domination, alterity and otherness, which reveals the strategies used to subject the dominated/subaltern/powerless through degrading stereotypes and usurpation. However, the intervention

and resistance are processes that disclose the way the subject groups fight back against the hegemonic power by means of what is theoretically termed as mimicry, parody, sly civility, *weapons of the weak*, albeit without direct confrontation. In the following sections, we deal with the poetic expressions of how Gorkhas are portrayed for 'otherisation' and 'domination' through a study of the Indian Nepali poetry. However, it is beyond the scope of this analytical study to look at all poems of Indian Nepali poetry in detail, as time and space permit only the examination of a few representative ones. The Gorkhas in India are subject to multiplicity of stereotypical portrayals, most of which are negative in orientation, jeopardizing their social image and humiliating in their essence. Indian Nepali poetry has quite often 'reproduced' the stereotypical constructions of the Gorkhas in India by the dominant cultures and communities. Such stereotypical images are usually degrading, associating the 'image' to a certain 'lower' economic and occupational category, wherein the rational faculty and cognitive capacity are conspicuous by their absence. Images of *Badahur*, *Darwan*, *Chaukidar*, etc. having the characteristic of an *Aristotelean Slave*, having no rational-cognitive faculty whatsoever and thus incapable of decision-making and unfit for self determination are associated with the Gorkhas. Interrogating the structures of 'feelings' as responses to such portrayals constitutes a dominant theme in a large corpus of Indian Nepali poetry; and Sanjay Bantawa's poetry is no exception. Sanjay Bantawa's poetry views place, space and portrayals as a process of experience and estrangement. The sense of place in Bantawa's work is frequently created by transformative exchanges, and is transitional and questioning rather than stabilizing and affirming. As is evident from the excerpt below, Bantawa's poetic language is engaged in showing how fragments and remains from history become a crossroads in every encounter with experience.

ओ बहादुर ! तिमीलाई थाहा छ के
 नाउँ यो देशको !
 ओ बहादुर तिमीलाई कस्तो लाग्छ आफ्नै देशभित्र
 बताउनु नाउँ तिमी यो देशको !!
 (Bantawa, 2007: p. 21)

As evident, Bantawa's poetry reveals that the projection of undesirable ethnic traits onto an *ethnic other* like the *Bahadur* (बहादुर), incapable of 'knowing' the name of one's country of residence (तिमीलाई थाहा छ के नाउँ यो देशको) indicates the acceptance of the racist stereotypes of the dominant culture. The second part of the stanza (ओ बहादुर तिमीलाई कस्तो लाग्छ आफ्नै देशभित्र बताउनु नाउँ तिमी यो देशको !!) is a self reflection and introspection by the *Bahadur* himself and experience of the feelings of pain thus inflicted. These messages make it clear that people with minority status like the Gorkha's in India have a different ethnic make-up and one that is less than desirable within mainstream society. Similar reference to the stereotypical constructions of the traits of a Gorkha as perceived by the dominant communities finds expression in the poems of Jas Yonzon 'Pyasi' thus:

अनि कति सस्तो-

ज्यालामा पनि किन्न सक्ने
र नूनसँग साट्न सकिने
श्याबास र धन्यवाद भनेर पनि
आफ्नो बनाउन सकिने,
कस्तो अचम्मको मान्छे
कान्छा र बहादुर ।

उसलाई आफ्नो हक र मर्यादा चाहिएको छैन
किनभने आजसम्म उसले
त्यसको लागि युद्ध लडेको छैन ।

(Yonzon, p.)

Here the characterisation of the Gorkhas as being "*cheap* (कति सस्तो), *exchangeable-commodity likes beings* (ज्यालामा पनि किन्न सक्ने/र नूनसँग साट्न सकिने)—*Bahadurs and Kanchhas, easily winnable through appreciation* (श्याबास र धन्यवाद भनेर पनि आफ्नो बनाउन सकिने), *unconcerned of his dignity, rights and respect* (उसलाई आफ्नो हक र मर्यादा चाहिएको छैन)" portrayed by the Indian mainstream diminishes and degenerates a Gorkha to an exchangeable commodity not so much different from what has been referred to in this paper elsewhere as *Aristotelean Slave*, sans rational faculty and decision-making ability, a characterization that is shunned by the Gorkhas. Poet here appeals his readers to *struggle and fight for the 'rights', something that has not taken place hitherto* (किनभने आजसम्म उसले त्यसको लागि युद्ध लडेको छैन), to come out of such characterizations.

Emerging poets like Kamal Regmi are equally touched by the image creations and portrayals and the resultant infliction of pain in the Indian Gorkhas. Regmi laments the blatant labeling of Gorkhas in India as a '*foreigner*', a migrant thus:

पूर्व गए पूर्वे ढजुर विदेशीको दाग लाग्छ
उत्तर दक्षिण जता गए पाहुनाको भाग लाग्छ
(Regmi, 2007: p. 70)

The poet expresses the view that the political position and experiences of the Gorkhas in India is characterised by instability and insecurity; and that the analysis of the Gorkha history in India reveals that the Indian State has called upon the Gorkhas in times of wars and insecurities, however, when it comes to the question of mainstreaming them, the responses of the state has never been in the affirmative. The poem

attempts to communicate to the readers the fact that the mainstream society therefore has these 'images' of the 'otherised' Gorkhas as 'a foreigner', 'a mercenary', 'an outsider' (पूर्व गए पूर्व ठजुर विदेशीको दाम लाग्छ) so ingrained in their psyche that they continue such image creations and portrayals in various forms consciously or unconsciously, inflicting more and more of pain in the so otherised. The ethnic portrayal, particularly the negative portrayal is a signal of an unhealthy social reality. The political and economic marginalization of an ethnic group and the deliberate denigration of the group's cultural and social identities is an aspect of a pathological social and political system that evokes ethnic/nationalist conflicts in pluri-ethnic or pluri-national countries like India. The Gorkhaland Movement in Darjeeling Hills, India claims itself to be a movement 'for identity' as a response to such marginalization, denigration and portrayals as foreigners⁴. Such constructions and portrayal of the images of the Gorkhas obviously facilitated their exploitation by the groups having a proximity to power centers. Indian Nepali poetry is replete with the plight and wails of the Gorkhas as a result of being exploited as the insignificant other. For instance, Agamsing Giri writes,

“लुछिएछु-लुटिएछु
निमोठिएछु निचोरिएछु
बोली मेरो खोसिदै गएछ यहाँ।
मेरो वास छिनिएछ
मेरो गाँस खोसिएछ।”
(Giri, 1978: p. 106)

Poet expresses (on behalf of its community) that he has been looted and plundered (लुछिएछु-लुटिएछु), bruised and squeezed (निमोठिएछु निचोरिएछु), made speechless (बोली मेरो खोसिदै गएछ), denied of shelter (मेरो वास छिनिएछ), and livelihood snatched (मेरो गाँस खोसिएछ). Similar accounts of pain and suffering find their place in the poetry of Baraily, Saajan Moktan, Milan Bantawa, Sanjay Bantawa, and others.

Thus, the lived experience of otherisation, exploitation suffering and infliction of pain is further accentuated by the 'deliberate' ignorance, and attempts of dominant History to 'unlearn' and 'not recognize' the contributions of the Gorkhas in India⁵. It is a commonplace that the narratives which constitute 'History' are interpretations of events from the vantage point of those who have the power and influence to write History. Hence, obvious as it is, Gorkha contributions found no space whatsoever in Indian History, and hence the poetry challenges the dominant hegemonic history in its search for a historical 'space' for the Indian Gorkhas, a situation that could benefit from a locatable creative tension between the theories of political hegemony proposed by Gramsci and Foucault's analysis of discursive power. The creative tension between these two

positions in fact constitutes the foundation of the present argument. It demonstrates that the very slipperiness of discourse is itself a means by which hegemonic histories can be undermined, the tenuousness of their narrative construction exposed as just one more form of power-seeking. Within that slipperiness there exists, therefore, a 'space' for the emergence of alternative "histories," those occluded by the grand narrative of the hegemonic discourse of a particular nation or group. Thus unvoiced 'le petit recits'⁶ or 'small histories' like the one of the Gorkhas in India can gain a foothold and insinuate themselves in the discursive cracks and fissures of History. The 'histories' of the 'other' circulate mostly *after* the traumatic process of excavation, retrieval and what Toni Morrison (1987 & 1992) terms 'rememory'⁷. One of the most important undertakings of this study has been to explore and reveal how the poets trace their lost histories, wherein the poetry has acted as an active agency of both 'memory' and 'rememory' discursively digging the past, thereby producing what Derrida (1981) calls 'pharmakon' - the therapeutic consequences of both retelling and rewriting of history, and facilitating the (re)construction and (re)articulation of identity premised on the discursively constructed history. The following few stanzas of poems by different poets through the course of Indian Nepali poetic history would illustrate the argument.

“हो, म यहाँ नचिनिने भएको छु
 अतीत गौरव दन्त्य कथा मात्र भएको
 मेरो यो चिसो वर्तमानमा
 विश्वासै गर्न नसकिने विश्वासघातहरु छन्”

(Yonzon, 2002: p.121)

Yonzon is of the opinion that the past glory and the national contributions of the Gorkhas has been something like a folk and fairy tale (अतीत गौरव दन्त्य कथा मात्र); neglected by history, rendering Gorkha identity-less (हो, म यहाँ नचिनिने भएको छु).

There are a few other poems that interrogate the Indian nation as to the shortfall of the Gorkhas in their contributions towards the motherland that is responsible for the non-incorporation of their contributions in the Indian History. For instance, Haribhakta Katuwal writes,

यो देशको माटोले भन्छ
 यो देशको ढुंगाते भन्छ
 हाम्रो पनि यतौ रगत यहीं बगेको छ
 हाम्रो पनि तातो पसिना यहीं ससेको छ
 देशको लागि मरेको घाम र जून अझै साक्षी छ
 हामीले के पो गरेौं के गर्न अझ बाँकी छ !

(Katuwal, 1962)

Yuddhabir Rana wails and laments on the failings on the Indian History to recognise the contributions of the Gorkhas not only in the struggle for Independence but also in the making and development of Northeast India. However, his poem as it appears below, interrogates the mis/nonrecognition of the contributions of the Gorkhas in the context of Assam, which is the focal point of Northeast India.

The Gorkhas of Darjeeling and elsewhere in India constantly evoke historic memories of Gorkha nationalists like Durga Malla, Dal Bahadur Giri, Savitri Debi, etc to establish the fact of their patriotic inheritance and unswerving loyalty to India, which, according to them has remained unrequited throughout⁸. Patriotism is deeply ingrained in the minds and hearts of the Gorkhas. Yet, as revealed from the discussions on the 'history' above, the Indian history has not recognised the contributions of the Gorkhas.

A huge number of poems in Indian Nepali poetry are patriotic poems. However, quite often, this sense of patriotic feeling of the community have failed to draw a favourable response from the state. The unrequited patriotism of the Gorkhas and the consequent feeling of non-recognition are expressed in the poems thus:

आफ्नो अनुहारमा देशको मानचित्र टाँसेर
म देशको परिचय हिँडिरहे हिँडिरहे
तर मेरो परिचय भने देशको मानचित्रमा
किन टाँसिएन है ?

(Subba in Pradhan & Sharma, 2012: p. 18)

In the poem, Man Prasad Subba, the poet says that he "walked and walked miles in the name of the country/nation, wearing the map of the country on the face (आफ्नो अनुहारमा देशको मानचित्र टाँसेर म देशको परिचय हिँडिरहे हिँडिरहे), and interrogates as to why 'his' identity and 'recognition' could not be painted in the map of the country" (तर मेरो परिचय भने देशको मानचित्रमा किन टाँसिएन है?).

कति अन्याय, हेलचेक्रयाइँमाझ बँचाइराखेको
मेरो भारतेलीता
यो वक्तव्य मेरो
तिमीकन पुर्याऊँ म-
भारतको सार्वभौमिकताभिन्न
मैले पनि सक्रिय हुने अधिकारको
मेरो देश, तिमीप्रति मेरो प्रेमको अधिकारको।
(Kada, 1973)

More than mere victims, however, poets of the political imagination are activists, political participants. In fact, perhaps the most remarkable characteristic found in the poetry of the political imagination, like the one by Kada as excerpted above, is the quality of hopefulness, testimony to the extraordinary resilience of the human quality. The prophetic voice resonates throughout the poetry; the poets sing of the possibility, the certainty of eventual justice, as Kada asks his audience of which his country is one, whether he should receive the message that he too could be an active citizen of the country with legitimate rights and duties within the sovereignty of India. Kada is hopeful that the message to his motherland will be reciprocated with recognition as an active citizen. Similar expressions on Gorkhas' unrequited patriotism is expressed by Gyanendra Khatiwada in his poem entitled 'Ma Begharbar Chhu' thus,

मैले मेरो नाकको शान काटेर
यस देशको इज्जत र मान बढाइदिएको छु
यसैले म नाकचेप्टे छु ।
मैले मेरो सिङ्गो शरीर नै
यस देशको सिमाना सिमानामा छेकबार बनाइदिएको छु
यसैले म बेघरबार छु
(Khatiwada, 1995, p. 59)

The poet expresses his deformed body with deformed parts as results of his sacrifice for the motherland (मैले मेरो नाकको शान काटेर यस देशको इज्जत र मान बढाइदिएको छु). He laments that he has made the country honourable by making himself deformed and physically unrecognizable, for which he is blunt nosed (यसैले म नाकचेप्टे छु) that he has dedicated his whole body for the earmarking the country (मैले मेरो सिङ्गो शरीर नै यस देशको सिमाना सिमानामा छेकबार बनाइदिएको छु), for which the reward has been his state of homelessness (यसैले म बेघरबार छु).

Remika Thapa is deeply disturbed about her 'stained' characterization that prevents her from standing on the Reality show stage-I Love My India.

म कहिले सुकिलो हुनु !
कहिले सजिलै भन्नु पाउनु मैले
रियालिटी शोको रङ्गारङ्ग मञ्चमा उभेर-
"आइ लभ माइ इन्डिया !"
(Thapa, 2008: p. 33)

B. Collective Memory and the Construction and Articulation of Identity: As revealed from the above discussion, Gorkhas in India have been suffering 'identity crises. However, identity construction depends largely on the sites of memory- a place, space or an incident. Places, constructed spatially, have multiple meanings for their inhabitants. It is normally said that you have to be fixed in space and in time if you want to belong somewhere. Yet, Space is not simply a geometric 'thing out there', but a site of memory facilitating the reclamation of identity. In this sense, therefore, 'land' with which one identifies emerges as a symbol of

identity. Bantawa's poem excerpted below longs for a land wherein the Gorkhas would be able to live in dignity.

शानसित जिउन पाउने कहिले हाम्रो माटो हुन्छ ?

शिखरसम्म पुग्न पाउने कहिले राम्रो बाटो हुन्छ ?

(Bantawa, 2012: p.16)

However, the sites of memory are the points where space and time meet memory⁹. Space fuses place, property and heritage, and creates identity. Memory is spatial, and is created from *places* and *images*. A place (*locus*) is easily memorized –a construction, a characteristic *location*. Images are '*forms, marks or simulacra of what we wish to remember*'. The identity between people, heritage, and territory is also brought about by the use of varied metaphors, the effective expressions of narratives of nations. In the following excerpt of a poem by Kitabsing Rai, while interrogating the methods and motives of remembering the past and in revising how histories are recovered, reveals as to how the Indian Nepalis have endeavoured to reclaim memories, referring to the 'land' (the डुवर्सभूमि), rivers' (टिस्टा र सुनकोश), 'air', and 'mountains' (भोटाङ्गका भिरालो पहाड) as witness to the Gorkhas being the inhabitants of the specified territory, and thereby attempt to rewrite history, recreate, reframe and perform a collective identity for their nation.

यो डुवर्सभूमि साक्षी छ,

टिस्टा र सुनकोश साक्षी छन्,

यहाँको बतास साक्षी छ

भोटाङ्गका भिरालो पहाड साक्षी छन्

चियाबारीका हरिया पाखा निर्माण गर्ने हाम्रै हुन्।

(Rai, 1983: p.214)

Protests, resistances and movements for reclamation of identity arise not only in response to conditions of inequality or injustice but, more importantly, because of changing definitions of these conditions. Those involved must recognize and define their plight as an injustice, and one that is intolerable to live with, rather than just passing it off as the result of luck or a cruel twist of fate (Smelser, 1963; Turner, 1969). In addition, participants in such a movement must come to believe that an alleviation of these intolerable conditions is possible and that their efforts will be important in obtaining the desired changes in political and social conditions (Wilson, 1973). The poems, like the ones by Agamsing Giri bewail the present state of oppression and suppression and embody a strong voice of resistance in favour of liberation.

जागिरे बनिदिन्छु म पनि

तर्साइदिन्छु-मलाई निचोर्ने, निमोर्ने

बाँच्चै नदिनेहरूलाई।

(Giri, 1978: p.107)

Not surprisingly, resistance is a major theme of the political imagination in Giri. The poet is careful to insist upon the kind of intimate details that give politics a human face. The poet is committed advocate, speaking for the voices struck silent, living or dead, being haunted by being perennially thrown in the dungeon of voicelessness. Yet, the ability of the deprived, marginalized and weak is restricted to scaring (तर्साइदिन्छु) those who subject them to such perilous conditions as Giri bewails. This too, however, needs caution in the sense that it speaks of a very thin line of demarcation between patriotism and rebellion against the unrequited patriotism and denial of history.

However, for a collective action to protest against deprivation and for reclamation of identity, what is necessary is the solidarity building among the members of the community. Nepal (2011 & 2012) argues that music (and for that matter, poetry-as a musical literary piece) can project a powerful emotional message that may be more effective in promoting solidarity than more other 'rational' modes of communication; and above all poetry, with its musical quality and appeal, in this emotional communication, can charge the interests of the group, elevating them to the intensity of moral rights. It is apparently for this reason that protest publics have historically utilized song as an important element in its host of repertoires of actions. Secondly, an important function of music in social movements is in the development of social solidarity among members and potential members (Gamson, 1975; Cashmore, 1979). Protest poetry attempts to *appeal to* and *reinforce* common values and social identities among its readers. The fact that musical forms in general and poetry is not often taken seriously as a political activity often gives protest publics more license to reach a broad range of audiences. This is revealed in several songs of the movement. For instance, Milan Bantawa writes,

यदि

गाँउ साँच्चै रून्छ भने

गाँउको सास साँच्चै थुन्छ भने

गाँउ साँच्चै आँसु भएर झर्छ भने

लौ आओ साथी हो !

यो मनदेखि त्यो मनसम्म

सजिलै पुग्न सकिने

एउटा विशाल सेतुको निर्माण गरौं हामी

अतिक्रमणको जञ्जालबाट निकालेर

गाँउको गरिमालाई बचाइराखौं

(Bantawa, 2010: p.26)

The Gorkhas have effectively used the concepts of martyr and martyrdom to mobilise the masses and build community solidarity. Yet it is interesting to note that the notion is not always empowering, the fact which has not come to the grasp of the community in its struggle for recognition. However, a brief explication of the concept of martyr and martyrdom is necessary to facilitate the development of this argument. The idea of a martyr has its origin in a Christian dispensation. The Christian idea of the martyr is evacuated of any notion of personal aggrandizement. The Christian idea of a martyr, therefore, would not seek out martyr because that would amount to a manipulation of the institution of martyrdom for self interest. Thomas Beckett's *Murder in the Cathedral* articulates this idea when he says that the greatest temptation for him is to do the right deed for the wrong reason. However, the concept of the martyr has been appropriated both by nationalist and martial discourses in the recent years. The idea of the *Sahid* (martyr), therefore, needs to be contextualized in the martial discourse of honour and patriotism-derived from a limited sense of military nationalism. Here, the soldier is ideologically conditioned to seek out martyrdom as opposed to defeat, for, a soldier would not go out to seek death without such ideological conditioning. Hence, Martyrdom becomes a kind of inducement which leads to both this-worldly benefits (say, for instance, a compensation to family and dependence) and other-worldly benefits (like immortal glory, post-death mythification, etc). Therefore, the idea of martyrdom is a constructed category, wherein the soldier is an interpolated subject made to feel that his martyrdom is serving. Consequently, martyrdom is an ideological discourse devised to generate consent (generation of consent being the base on which the survival of martyrdom finally depends) for the centers of power¹⁰.

The Gorkha concept of martyrdom has incited strong emotions within the community. The Gorkha *Sahids* are of two types: first, those '*Bir Gorkha*' soldiers who have sacrificed their lives for the motherland (India); and second, nationalist-activist *Sahids* who have given their lives for a homeland for the Gorkhas in India—a land that they perceive, would give legitimate recognition to them in the country. The construction of the idea of martyrdom in Gorkha poetic and political discourses performs a function unparalleled by other elements in their struggle for recognition and social justice. This is because of their belief that martyrdom can lead to 'vicarious justice' i.e., *realization* or at least, people being *enthused towards the realization* of the social objective that the martyr stood for—something that becomes effective after martyrdom. A total mobilization of people and institutions for the institutionalization of Gorkha nationalism is evident. This institutionalisation of the symbols of Gorkha nationalism is an attempt to fortify and enforce resistance on an ideological level,

motivating and rationalising struggle for a constitutional recognition. Therefore, in a society like that of the Gorkha where the extension of life is among our most central values, the willingness of martyrs to die for a cause makes them ripe as exemplary emissaries of struggle. In cases such as the one under scrutiny now, the role of the martyr's body as a cultural object by which belief and sacrifice gain material form and are, according to Naveh (1990) and Turner (2003), open to change and contestation, and interpretation (for instance, 'martyrdom of Gorkha soldiers in India' is one of the bases, among many others, of contestation that they be given proper constitutional recognition by the state; and the appeal to the community that the 'sacrifice of those fighting for homeland' is sacrosanct, and that the achievement of the goals desired by the *sabids* is the supreme value that the community needs to cherish). This study, although focusing on poetic literature of the Indian Gorkhas, eschews a psychiatric reading of martyrs as what Parsons (1968) describes as choosing principles over self and instead focuses on how various uses of the corporeal body by reputational entrepreneurs contribute to reputational production, reception, and memory (Fine, 2001). Along with the concept of accepting death for one's beliefs (Cormack, 2002), these entrepreneurial rationales, enshrined in the body, distinguish the martyr from other archetypes, such as the victim, hero or traitor (Smith, 1997). The embodied martyr is a resource for interest groups that seek to provide concrete proof of the rightness and righteousness of a cause (Klapp, 1954; Loades, 1970; Smith, 1997). To elicit desired behaviors, generate collective identities, and persuade a potentially indifferent audience, the leveraging of the martyr's story makes tangible the values and beliefs reputational entrepreneurs seek to promote. Through memorial and commemoration, these actors consistently realize and reprocess the body's cultural power well beyond the moment of death, making martyrs physically present and cognitively memorable (Schudson, 1989). Such is the function of the poetic verses of Kamal Regmi, when he says,

“मृत्यु पचाएर प्रमिलाले

देखाइदिइन् थुप्रैलाई

माटोको माया।”

(Regmi, 2009: p. 44)

According to the poet, Pramila¹¹ digesting her death (मृत्यु पचाएर प्रमिलाले), showed to many the love for the land (देखाइदिइन् थुप्रैलाई माटोको माया). Thousands of people paid homage to Pramila Sharma with shops downing shutters as the funeral procession snaked from Gymkhana Club in Darjeeling to the cremation ground 3km away on 27th July 2008, the day after Pramila's death. In the hills, 1,200 lamps are lit every year for martyrs who were killed during the agitation for Gorkhland in the eighties. The Morcha has claimed that Pramila is the 1201st martyr, and the GJMM party president Mr Bimal Gurung asserted to the people that the sacrifice made by Ms Pramila Sharma will not go in vain; that she was the first martyr of the

movement (second phase under Shri Bimal Gurung) and the incident has made 'us' more resolute to achieve Gorkhaland.

However, a few more poems show how Darjeeling is constructed not primarily as a geographic location but as a nexus of discourses and discursive memories. Poets expose the different kinds of memories underpinning Darjeeling: 'personal memory', 'cultural memory' and 'postmemory' and show the manifestations of and relations between these different kinds of memory, making Darjeeling a site for recovering self-conscious as well as self-reflexive memories of writing. These self-conscious and self-reflexive memories are results of perceived 'non-deliverance of justice' in the aftermath of attainment of some form of 'identity', say, for instance, the DGHC, etc. Such situations are characterized by whatever fruit of long drawn struggle being appropriated by the political elites, leaving the question of identity and justice naked, and therefore, warranting a whole new incarnation of the struggle for identity and justice. However, we shall confine to a select verse (of Kamal Regmi) that captures the present state of affairs in Darjeeling and not dwell with the details of the various forms of memories. Regmi writes,

तमाशाकै अड्डा भो" र
द्रौपदीको साडी भो दार्जिलिङः...
र दामी लिलिपुट
आफ्नै उँचाइ गुमाँउदै रमायौं
कपटी बादलले आकाश छेलेको
पुषकै घाम भो र
विधवाकै सिउँदो भो दार्जिलिङ ।
Darjeeling, Kamal Regmi.

IV

ANALYSIS AND CONCLUDING OBSERVATIONS

It is not possible to present a comprehensive critique of the voice of identity and justice in Indian Nepali poetry through a brief review of the present kind. Since the Indian Nepali poets since the Indian Independence in 1947 are well aware of the social and political reality they inhabit, their poetry has been directed towards creating meaning, building community, promoting solidarity, and imagining possibilities, thereby connecting the individual to the community and the personal to the social/political. The poets, therefore, have not hesitated to direct their writings against what they perceive as oppression, social, economic and political. It is in this interconnectedness contained in the Indian Nepali poetry that we can follow the narratives of social change and resistance, wherein the poetry is embedded in the narratives of

peace, equal rights, justice and freedom. Yet, the poetry is perhaps still an unheard voice amidst the multiple dominant voices.

Notes

¹ Indian Nepali poetry has a long history. The first Indian Nepali poet was Gumani Panta (1790-1846) of Kumaon hills who has established his prominence with his witty poems in Nepali language. Vidyaranya Keshari (1806-1855), who is remembered for two of his most famous poems - *Draupadi Stuti* and *Yugal Geet* is another poet of that time who was educated in Benaras¹. Another great poet of that time was Gyandil Das (1821-1883) who was a Joshmani Sadhu² of Darjeeling; followed by other poets like Motiram Bhatta¹ who published, publicized and promoted Nepali literature that heralded a new era in Nepali language and literature. Gradually, some eminent poets emerged who changed the traditional ways of writing. Dharmidhar Koirala¹, Lekhnath Paudyal¹, Parasmani Pradhan¹, Surya Bikram Gyawali, Rupnarayan Singh, Mitra Sen Thapa, Anand Singh Thapa, Haikam Singh Rai were the poets during pre-independence India who changed the traditional trend and gave new horizon to Indian Nepali literature. The changing times and the experiences of the Gorkha soldiers in war added new dimension to the poetic expressions. Gorkha soldiers who returned home after the Second World War brought a lot of tales about freedom, struggle and awakening. The struggle for freedom was gaining momentum in India. It was a time of great poets like Rabindranath Tagore, Sri Aurobindo, Sumitranandan Pant, Jayshankar Prasad and Kazi Nazrul Islam. Their influence on poets like Achha Rai Rashik, Narendra Prasad Kumari, Ram Krishna Sharma, Harkajang Singh Chhetri, Pushpalal Upadhyaya, among others, was significant. These poets were influenced by both the western and Indian literary movements. With the dawn of independence in 1947 Indian Nepali writing in general and the poetic genre in particular became a free medium of expression; and with the writers beginning to breathe in a free atmosphere, literature became socially oriented with the poets transforming their style and thought- their consciousness gaining a new importance and new dimension. The influence of the western writer like T.S. Eliot, Walt Whitman, Franz Kafka, Jean Paul Satre, Albert Camus, Henrik Ibsen, Lorca and others including Karl Marx, Darwin and Sigmund Freud was felt very strongly. The novelty of theme and style made their poems obscure and their styles very involved. Agam Singh Giri¹, Guman Singh Chamling, Birendra Haribhakta Katwal¹, Tulsi Apatan, Nar Bahadur Dahal, Tulsiram Kashyap, Pushpalal Upadhyaya were the prominent poets of that time. In the 1960s, however, a literary movement called 'Ayamic' or 'Third Dimensional Writing' was launched by the three literary stalwarts Indra Bahadur Rai, Ishwarballav¹ and Bairagi Kaila¹. The chief aim of this movement was to express firsthand experience without any secondary thought or reflection intruding between the act of experiencing and writing. They borrowed the techniques of cubist painting, and used archetypal images, myths, stream of consciousness. Their aim was to express human experience in its entirety. They believed that a man is the sum total of all his senses, heart and mind, and literature should depict this totality of man. Literature of single dimension is unable to define the totality of human beings; the depiction of life should be elevated from the individual level to the universal level. Such literature should be a curious blend of philosophy, politics and intellectuality. For them, this would be the third dimensional writing. Impact of the third dimensional movement was felt strong in Indian Nepali poetry seriously. Prem Sherpa, Naresh Chandra Khatri, Yudhabir Rana, Bhupendra Adhikari, Girmi Sherpa, Abinash Shreshtha, Vabhilal Lamichane are the poets of this trend. However in very recent times a few young poets have begun to write independently of the influence of their contemporary elder poets. Okiyama Gwayin is a unique poet of the contemporary trend. He has a typically individual style of his own. The symbols and images in his poems are well chiseled and carefully selected. Of late, Nepali poetry has once again become down-to-earth, simple, people-oriented, lucid and direct. The names of Manprasad Subba, Norjang Syangden, Rajendra Bhandari, Mohan Thakuri, Nawa Sapkota, Jas Yonzon Pyasi, Prabin Rai Jumeli, Gyanendra Khatiwada especially deserve mention. B. Yonzon is a sharp-edged satirist. He targets ruthlessness and the highhandedness of rich people, while Jas Yonzon abhors hypocrisy and suppression in any form. The newly emerging generation of poets includes Sanjay Bantawa, Remika Thapa, Sudhir Chhetri, Bichandra Pradhan, Puran Giri, Kamal Regmi, Rupnarayan Pathak, Krishna Sharma, Raja Puniyani, Pawan Namdung, Udai Thulung and the like.

² Although Indian Nepali Poetry has been studied from various perspectives by various scholars and researchers, the prominent of which include Ghanashyam Nepal (2009), Asit Rai (2004), Diwakar Pradhan (2011), Haren Allay (1985), Sachin Khawas (2004), Lil Bahadur Chhetry (n.d.), Mohan Thakuri (2006), Bhimakanta Upadhyaya (2006), Irshad Gulam Ahmed (2005), among others, yet the study covering the dimensions of *image* constructions of the Gorkhas in India as reflected through Indian Nepali Poetry, poetry's mnemonic ability and facilitation of collective memory, and role of

poetry in the construction and articulation of Gorkha identity—a broad area of the study of poetry covering the entire gamut of post independent Indian Nepali poetry was long awaited, which this paper made a modest attempt to set the ball rolling in the direction.

³ Imagology is the study that deals with various theories of 'public image' and 'image making'. Image studies, or imagology, was traditionally subsumed under the uncritical notion of 'national character', which was itself replaced by the constructivist term 'national stereotype'. For a detailed understanding of the concept of imagology, its origin and development, see Manfred Beller and Joep Leerssen (eds.) *Imagology: The Cultural Construction and Literary Representation of National Characters. A Critical Survey*, Amsterdam: Rodopi, 2007; Mark C. Taylor and Esa Saarinen, *Imagologies: Media Philosophy*, London: Routledge, 1994; Waldemar Zacharasiewicz, *Imagology Revisited*, Amsterdam/New York, NY: Rodopi, 2010.

⁴ For instance, one of the major demands of the Gorkhaland Movement in Darjeeling Hills in the late 1980s under Ghising was the revocation of Article 7 of the 1950 India-Nepal Treaty of Peace and Friendship under which the two governments agreed "to grant, on a reciprocal basis, to the nationals of one country in the territories of the other the same privileges in the matter of residence, ownership of property, participation in trade and commerce, movement and other privileges of a similar nature."

⁵ On the insider versions of the contributions of the Gorkhas towards the building of modern India, Cf. Basant B. Lama, *The Story of Darjeeling: The Land of the Indian Gorkha*, Kurseong: Nilima Yonzone Lama Publications, 2008; Bharatiya Gorkha Parisangha, *The Role of the Gorkhas in the Making of Modern India*, 2006; among others.

⁶ This is a term used by Lyotard in *The Postmodern Condition: A Report on Knowledge* (1984), where he highlights the increasing skepticism of the postmodern condition toward the totalizing nature of metanarratives and their reliance on some form of transcendent and universal truth. Lyotard proposed that metanarratives should give way to *petits récits*, or more modest and *localized* narratives.

⁷ "Rememory" needs to be distinguished from "memory": the latter refers the act of remembering, while rememory is the act of re-remembering, having to deal with memories that one has attempted to suppress, either as an individual or as a group, having to dig up and confront pasts long buried. It combines the pain and trauma of such memory with its excavation.

⁸ For instance, as Sumit Mukherjee (n.d.) writes, Jagdish Khanal, President of A.A.G.S.U complains that Indra Bahadur Rai who enjoys almost the same stature as the Mamoni Raisom Goswami as a litterateur, will never be awarded Gyanpith Award by the Sahitya Academy.

⁹ Pierre Nora has tried to define a difference between *milieu de mémoire* and *lieu de mémoire*. The sites of memory are the "*milieux*", the real environments of memory, but today, with our lack of memory, we have to be content with *lieux de mémoire*, places which remind us of the past, of a (broken) memory.

¹⁰ For a detailed discussion on how the social and ideological constructions of martyr and martyrdom interests social researches Cf. Johnson, C. and R.C. Sautter, *26 Martyrs: 26 Martyrs for These Perilous Days*. Highland Park, IL: December Press, 2004.

¹¹ 'Pramila' as a martyr here refers to one Pramila Sharma who died in July 2008 while protesting in front of Deepak Gurung's residence (Deepak Gurung was Councillor and close aide of Subhash Ghising the GNLFF Leader and the Chairmain of the erstwhile Darjeeling Gorkha Hill Council) during the Gorkha Jana Mukti Morcha led second phase (since 2007) of the Gorkhaland Movement under the leadership of Bimal Gurung.

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Dr. Sibsankar Pal, Editor-in-Chief

Mobile : 09476183571, 09434165614, 08926666554

E-mail : dr.sibsankar.pal1965@gmail.com or sibsankar1916@yahoo.com

Dr. Barin Kumar Pramanik

Managing Editor

Mobile : 09433128121

E-mail : barinkp1969@gmail.com

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