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CONTENTS

NOTE

BOOK REVIEWS

Problems of Oral Communication in English among Bangladeshi Students

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Abstract

In the mainstream institutional contexts of Bangladesh, students do not have much scope to practice English outside their classrooms. The lessons they have in the classes are not enough to help them speak English effectively. Although English is a compulsory subject from the primary to the higher secondary level of education, students are not sufficiently exposed to opportunities for speaking English. As a result, many students do not possess adequate oral communication skills in English. In the current competitive job market, communication skill is an imperative for any good career, both in national and international settings. It is generally assumed that shyness, pronunciation difficulty, inadequate knowledge of grammar and inappropriate use of vocabulary items badly affect learners' oral communication. The present study aims at spotting different kinds of problems of spoken English of Bangladeshi students with a view to suggesting some possible ways and means to overcome them.

Introduction

The study of oral proficiency in English is a neglected area in Bangladesh. In the academia some emphasis is put on reading skills of English to cope with the demands of higher education. In recent times, both oral and written English communication skills are being emphasized because of the growing needs of effective international exchanges in the context of a globalised world. Understanding more about what kind of oral discourse takes place in the classroom and how teachers tackle them appear to be the main impetus behind

1

such study. The present English teaching and learning situation in the country gives rise to serious concerns that need to be redressed with a better academic and professional outlook, an outlook that is pragmatic and context-sensitive in order to address the problems of oral communication. Furthermore, cross-cultural understanding among users of English all around (native and non-native) the world needs to be developed that it can promote mutual understanding in communication. A knowledge of the syntactic rules of the target language does not necessarily ensure effective communication. Richards and Sukwiwat (1985) have outlined several aspects of cross-cultural conversational competence and discussed how these may be influenced by transfer of native language interaction patterns. They have discussed different facets of communication highlighting some comparative issues like conventional usage in conversation, conversational routines and language transfer, differences of social situation, power paradigm, interactional dimensions of conversation, politeness and face, presentation of self, and so on in the context of Thai, Japanese and American cultures. However, the views underscore the area of conversation that needs to be explored in the light of various aspects of oral discourse; in particular its phonological, morphological, semantic and syntactic categories in order to trace how utterances occur and what level of mutual intelligibility is required for smooth communication.

A successful oral communication can be characterized by its spontaneous use of sub-skills in speaking, intelligible pronunciation, right choice of words, phrases, appropriate sentence constructions and finally, contextualised use of meanings. Slight deviation from any of its categories may not always result in communication breakdown or misunderstanding between interlocutors. However, serious deviations of these categories might lead to an unsuccessful end of a conversation. Sometimes, effective use of speaking strategies, timely use of discourse markers, mutually acceptable body language, and less psychological interventions can sustain a conversation, but again, one might need training or effective initiatives to apply these. The current study will delve into the facets of oral expression of non-native speakers of English along with its tentative solutions in the end.

Literature review

Teaching oral communication skills has been a recent phenomenon with the increase of EFL learner population, especially in the big cities of Bangladesh. The introduction of the new English curriculum in the secondary and higher secondary level, the recent mounting rate of students and job seekers going overseas and the constant demand of communication skills in the internal job

markets demand that the field of English teaching and learning be more effective. As the area of English Language Teaching (ELT) in this fashion is a recent phenomenon here, hardly any investigation has been carried out as to what problematic features characterize the spoken discourse of Bangladeshi speakers of English. However, with the influence of Communicative Language Teaching (CLT) in the last few decades, a number of studies were undertaken highlighting the fascinating paradigms of spoken English in different cultural contexts. Brown and Yule (1983), Bygate (1987), Pattison (1987), Ellis & Tomlinson (1987), and Nunan (1989) have all looked at the facets of spoken English with varied observations and perspectives. However, Richards & Sukwiwat (1985) have shed light on cross-cultural issues that also appear to be crucial in foreign language speaking. Lightbown and Spada (1999) mention second language learning theories and some psychological factors affecting oral production in foreign language. On the other hand, Harmer (1998) discusses this issue with more practical orientation of teaching spoken English. Horak (1999) investigates the issues of oral assessment and outlines the findings relating to the prevalent factors students come across in foreign language speaking situations. Recently, Chowdhury (2000) has outlined how grammaticality of English language influences English language production and pleads for training of learners, revision of the language syllabus and meaning-focused teaching which might be indirectly beneficial to students' spoken English provided right measures are taken in teaching in the country.

Methodology

The study is based on the data obtained from 29 undergraduate level students' interview excerpts that were transcribed into a computer while the author was conducting their viva tests in a Spoken English course. Written responses to a structured and open-ended questionnaire given by 10 experienced EFL teachers were also used for this purpose.

Students at East West University are required to take a course called 'Oral Communication Improvement Skills' in which their oral proficiency in English is assessed through an interview thrice every semester. The data were taken from selected extracts that had been collected earlier for giving feedback to the students. This feedback was mainly based on phonological (pronunciation), morphological (word), semantic (meaning), and syntactic (sentence) problems. Data from extracts have been sorted out under the categories mentioned above. Some of the sorting might have overlapping features mainly in morphological, semantic and syntactic categories; however, a brief explanation of overlapping

features was made in the analysis of data. Responses to open-ended structured questions (see Appendix A) relevant to the topic have been collected from 10 experienced bilingual EFL teachers in order to get a broader view of the problems that our students face while speaking English. Suggestions were also sought from these experienced teachers as to how students can overcome these situations. Data collected from both students and teachers were used for a qualitative analysis.

Summary of the findings

The respondents (total number-29) were called two at a time for the interview; during the interview their fluency, range of expressions, pronunciation and accuracy levels were assessed. They were asked a variety of questions requiring them to describe, narrate, explain and clarify the given topics. While conducting the interview, the researcher was able to spot some problem areas mainly related to unintelligible pronunciation, inappropriate choice of words and phrases, obscure meanings and faulty sentences; spotting these problem areas provided him useful feedback to rectify their oral communication problems in English as well as gave him potential data for this study. Therefore, only those relevant features (see Table 1) were immediately transcribed and later used for discussion. Besides, teachers' opinions and suggestions (see Table 2) in the light of already identified difficulties regarding student talk were sought in order to get a broader overview of the problems and possible solutions. In addition to many common problematic areas of student talk, teachers pointed out some other features that appear to be pedagogically significant.

Table 1			
Students' responses			
Phonological (pronunciation)	Morphological (word & phrase)	Semantic (meaning)	Syntactic (sentence)
Sons,/sons / people /ph_phol/ Sugar /sug_r/ bouquet /buket/, bury/ /b_r_/ grew/greu/, flew/fleu/ potato /poteto/, nation /ne_n/, present(v)/prezent/, threw/threu/,	*I can't cook (make) tea. Abroad (foreign) education. Previous (old) friend, 3 'nong' bus (bus number 3), 'bishal' (Bangla word for huge) building, visa price, (visa fees) form cost (fee), feel boring (bored), moffossil (Bangla*	*I will try my best (often said in Bangla in a response to an invitation; is just the literal translation from L1 to L2). I come from Shantinagar (means: I live in Shantinagar. I want to talk about one of my girl friend.*	*What are you doing in your free time? (what do you do in your free time) Are you like playing cricket? (Do you like playing cricket) I am admit in this university. I can't like fish. (I don't like fish) Have you any idea about village life.*

Phonological (pronunciation)	Morphological (word & phrase)	Semantic (meaning)	Syntactic (sentence)
driven /draivn/, kettle /ketl_/, boat /bot/, coat/ /kot/, decade/d_ked/, entrepreneur/ /ente rprener/ democracy /d_ mokrec_/ history /h_stor_/ congratulations / k_ngr_t_ule_n /, fashion /fes_n/, search ch_ rch/	word for small town) area, Bush is a dangerous public (man). I cordial (cordially) request you, last (end) of the road, They mashed (smashed) Baghdad. She is very proudy (proud) of her mother. we're very frustration, Safe your time, America is very jealousy (jealous). after some way (some distance), few way (little distance), 'achcha', 'hae', 'maney', 'tou',(all Bangla filler words) big oil stations (refinery), Army has a honourable (decent) life. Over-crossing is unavailable (prohibited), You can mobile (give a call at my mobile) me. American army doing very hardly (hard job), but can not success (succeed). My house 'nong' (Bangla word for number) besides (beside) ladies stadium, What are the criterias (criteria)? I read the last (latest) magazine, We round (moved around) the whole Chittagong city. I can't choice (choose)	(I want to talk about one of my female friends). More than in front of, (further ahead), Bush don't know what is Saddam; Saddam is 'son of father' (translation of Bangla idiomatic expression which means 'brave son'), he is (Bush polluted (perhaps, destroying) the world. He want Iraqi people relief (relieved) from Saddam. My cousin is army (an army officer). I go for marketing (when I go shopping). They (army) have to strong in English and punctual. In private job somebody can not late for office. Lower service holder (Low paid job). You can anybody say my name, near to my house. Then return back home. He was minded seriously. (He felt bad about it) Before somedays ago. Another brother is reading in this university. Give more additional news. But I am poor marks in English. Al Jajira not my dish. I am	Went for shopping. Batsman are taking runs. Many people, childs and women killed. Everybody read Bangla medium school. Bush want all country in his hand, isn't it? How I approach your home? My sister's marriage ceremony date fixed. What should I told the taxicab? Would you free next day? Where, I start from where? If the ball go in the bar, they have one goal. There have very facility in the army. Yes, I am meaning that. My older sister read in Dhaka University. I do not gone to other universities, you can preparation, Then you got a rickshaw, Another brother coaching for cadet. Bush said war held short time. When a terrorist saw a civil, they hijack. Sometime army can tight them. How many days you want my camera? After two hours later. I broken my leg. I have passed my HSC in 2002. I am come from Comilla. I too

Phonological (pronunciation)	Morphological (word & phrase)	Semantic (meaning)	Syntactic (sentence)
	my subject. Many past (former) students credit transferred (transferred credits) to other foreign universities. I and my friend (my friend and I) gossiped (chatted). I may die (drown) in the river, what is the fare (cost) of the journey. No surity (security) of permanent job. My mother learnt (taught) me that. Our country gained independency (independence) fighting with Pakistan. Put tea plant (leaf) in the kettle. Bus will left (drop) you in Kamlapur. They are responsibility (responsible). Private job is costly (lucrative).	*arranging my sister's wedding. More or less good. (it's ok) I am not doing anything. (a response from a student who did not grasp the meaning of 'how are you doing?'). I worked until 3 O'clock at night (in the morning)*	*much afraid. I want to education MBA outside university. Corruption is create by government. I am also agree with you. I don't chance in NSU (I didn't get chance at NSU) Some time private job cancelled,*

Discussion of students' interview excerpts

Data from the interview excerpts in the viva test of students were the main source of discussion here. The data that seemed to be revealing some interpretive message in relation with four linguistic categories mentioned before were considered more important and thus transcribed. Therefore, data presented here cover four categories (For detailed data, please see Table 1) along with their relevant words, phrases, meanings and sentences. Under phonological category phonetic transcriptions are given. The following data are of some selected extracts from the interview in which students talked about the following topics: introducing each other, describing family & friends, current affairs, inviting a friend on an occasion, describing a person, comparing, giving direction and

instruction, requesting, talking about future plan of career etc. Non-native pronunciations, appropriate words, meanings and sentences are given in the bracket (See Table 1). For the convenience of analysis in the following discussion phonology, morphology, semantics and syntax will be narrowly termed as pronunciations, words, meanings and sentences respectively.

Pronunciation

Variety of phonological differences in L1 often influences learners' L2 pronunciation patterns. However, if the learner's L2 pronunciation is comprehensible to the interlocutors of his/her own culture and also in cross-cultural settings; conversation can continue. If the conversation is hampered because of unintelligible pronunciation, then it is likely to cause communication problems. It is not a realistic goal to target native speaker-like accent, stress and intonation for ESL/EFL learners. On the other hand, many learners may not get enough opportunities to interact with the natives, in most cases they interact only with speakers of the same culture. Sometimes they may even have to interact with speakers other than ones with an English speaking background. Therefore, understanding cross-cultural issues and gaining more experience of interaction may give them better confidence in speaking. Brown and Yule (1983, p. 53) make an important point in this connection.

> In this stressful task the student needs all the support he can get from the teacher, not criticism of relatively extraneous features like pronunciation. … It is very hard for teachers, especially those particularly interested in pronunciation, to hear a student consistently making a pronunciation error. If this occurs, the teacher should note the error along with other segmental and suprasegmental problems and deal with it separately, after the task the student is concerned with is completed.

If learners have to improve their fluency, frequent interruption for pronunciation or grammar error by the teacher may not lead to increased fluency or accuracy. Unstressed pronunciation (*potato* /pəteto/), no rise and fall while pronouncing (*congratulations* /kəngrætʃuleʃns/), no use of diphthong (*make* /mek/, nation /neʃn/, boat /bot/), and L1 influence on L2 pronunciation are the main problems of English pronunciation. Most learners tend to produce pronunciation following English spelling patterns. For example: son /son /, bury /bʌr/, grew /greu/, *bouquet* /buket/, *kettle* /ketl/, *history* /hɪstor/ etc. Moreover, some students having regional dialect background especially, those from Sylhet, Chittagong, Noakhali, and Rajshahi-ChapaiNawabganj region, have different

kinds of pronunciation difficulties. Some examples are *people* /phiphol/, *police* /phuliʃ/, *fashion*, /fesʌn/, *search* /chʌrch/ (For more data please see Table 1). Stress and intonation are hardly found in their pronunciation perhaps because students' L1 Bangla is basically an unstressed language. As a result, utterances occur unstressed and are delivered without any rise or fall regardless of the mood the particular expression is being conveyed in. The findings of such study imply a need for formal phonological instruction in the class that might improve overall pronunciation difficulties of students.

Words

Students sometimes use noun words for verbs (*choice* for choose, *loss* for lose, *success* for succeed), adjectives for verbs (*you have to careful/ it will safe your time/ they can't late for office/ army can tight them*), because they do not know the rules for conversion of parts of speech. Sometimes they construct unusual collocations (*visa cost, past student*), perhaps because they tend to depend excessively on the literal translation without knowing that such phrases are unusual. In case of prepositional use they tend to take the literal meaning of words and are reluctant to consider exceptional cases (for example: *I went for shopping. He wants to go to home*), No use of preposition (*we listen music, our class starts 10.30*) in their expressions is very common. Double use of synonymous words (*after 2 hours later, before few days ago, repeat again please, more additional news*) sometimes occur in their expressions. Wrong choice of words (*big oil stations* for refinery, *tea plant* for tea leaf, *marketing* for shopping), faulty use of adjectives (*prowdy, crowdy, independency, jealousy*) are also common due to overuse of other adjectives with y ending and also lack of practice and awareness. Furthermore, lack of experience in using suffixes and prefixes, overuse of synonyms or antonyms, over dependence on translation from L1 to L2, absence of appropriate strategy in communication appear to be the main reasons for these kinds of expressions. They are likely to misconstrue meanings and in extreme cases communication may break down. Why do these utterances occur? Possibly because students either do not know appropriate words or are not used to uttering those words in real life situations.

Meanings

Misleading meanings are often causes for communication breakdown that may be for over dependence on translation, lack of cross-cultural understanding, polysemous words, homophones, and traditional ways of language expressions. Students often sound bookish in their utterances such as, *my sister's marriage ceremony will be held 3rd April.* Formal and informal boundaries, politeness issues,

notional differences in language use, (e.g. *1 O' clock at night* instead 1 O'clock in the morning), idiomatic expressions, use of slang words and euphemistic expressions are perhaps the other reasons for misleading listeners in some conversational situations.

Sentences

Lack of knowledge and practice of tenses often lead to faulty construction of sentences (e.g. *I have passed my HSC in 2001*). Students often mix up present perfect and past simple, present continuous and present perfect continuous tense in their expressions. Passive voice (*corruption is create by the government, or I am admit in this university*), word order, questions & tag questions (*isn't it?* - which is a literal translation of L1 tag question), positive and negative agreement, second and third conditional sentences, reported speech, dependence on L1 syntactic patterns, absence of auxiliary verbs (*for example: I broken my leg, another brother coaching for cadet college*) are common mistakes in their sentence construction. Direct translations, lack of strategy application in conversation are also reasons for inappropriate constructions of sentence.

Some overlapping features have been traced in morphological, semantic and syntactic areas due to several problems evident in those particular expressions. For example: in *'Al Jajira not my dish'*- the possible intended meaning is, I can't watch *Al Jajira* channel on my TV. This particular expression has all three categories of mistakes.

Psychological factors

Learners' shyness, nervousness, inhibition and narcissism result in many external syndromes. These are mainly clearing throat, scratching head, unnatural facial expression, repetition, fumbling, pauses, false start, avoiding eye contact, losing normal color of skin, shaking hands and legs, sweating, feeling thirsty, showing unusual gestures, finishing a description abruptly or briefly, leaving the sentence incomplete or half way through. A recent study dealing with adult Bangladeshi students reveals (Wahid 2002, p. 13) that language shock, culture shock, motivation and ego-permeability often hamper students' speech production in foreign language communication. As she sums up "… students have shyness and lack of confidence in their oral communication of English. They take less [sic] initiative and hardly believe in taking any risk of speaking". When students try to speak English, they often fear that their expressions might sound funny and wrong and that as a result, peers will laugh at them. They are sometimes haunted by doubts as to whether their words actually reflect their ideas. As the adult

learners are conscious about their weaknesses, they fear public impression and criticism. They often think that speaking on impromptu topics is more risky and tend to consider this a situation when they may lose face. Teachers can inevitably intervene in removing such erroneous notions about speaking. Moreover, frequent practice in speaking in English on familiar topics, friendly and stimulating classroom environment, informal conversation with friends, who have better proficiency in English, might reduce students' psychological burdens in speaking.

Fluency and accuracy in oral speech are crucial. It is not unusual to meet students with reasonable fluency but their accuracy level is unfortunately very low. Should we prioritize fluency at the cost of accuracy or emphasize accuracy at the cost of fluency? Hadley's (1993, p. 283) comments seem to be significant in this regard.

> Attention to accuracy does not imply a classroom environment where grammar rules reign supreme and correction is rigidly imposed. Rather, the proficiency-oriented classroom is one in which students have ample opportunities to use language creatively and to obtain appropriate feedback with which they can progressively build and refine their interlanguage to approximate the target language norm. This feedback is provided in an atmosphere characterized by acceptance or error as a necessary condition for linguistic growth, an atmosphere in which the teacher is seen as a valuable resource in language learning process.

Other factors

Body language difference (such as, showing the thumb, shrugging, nodding head and waving hands), lack of communication strategy knowledge, shortage of useful vocabulary, English filler words, inadequate knowledge of phonology and communicative grammar, lack of perception and politeness issue are commonly regarded as the main problems of English conversation. Discourse markers have not been used in the excerpts although they are indispensable components of oral discourse. Some understanding and training of oral discourse features are important as students appear to be unaware of many of them such as back channeling, status, face, turn taking, interruption, filler words, non-linguistic words, hesitation devices and pauses.

Some more important data

Students sometimes use native words to complement their intended meaning (*for*

example *Markin* military attacked Iraq or phrase like *bishal* building *and* session *jot.* Here words '*markin*', '*bishal*' and '*jot*' are from their L1 and meant to qualify Americans, huge and jam respectively. They also use Bangla filler words like '*maney*' (means), '*tou*' (filler word), '*achha*' (a word for positive feedback), '*hae*' (yes in informal sense) etc in their speaking, as they are not much aware of equivalent English filler words. Redundant use of words is another feature of students's spoken English. For example, *more additional news, after two hours later, before some days ago.* These utterances occur possibly because of their carelessness about what and how they speak.

Table 2			
Teachers' responses			
Phonological (pronunciation)	Morphological (word & phrase)	Semantic (meaning)	Syntactic (sentence)
-Students often consider many Bengali letters are equal to English letters -tend to pronounce words depending on English spelling patterns - some students pronounce 's' as tf for example; search is /ch arch/ -do not follow stress patterns of English pronunciation. -Regional accents of the Bengali pronunciation get in the way of pronouncing words. -They especially have troubles with letter 'b' & 'v' and 'g', & 'z'. Sometimes 'g' becomes 'z' and 'b' becomes 'v' or vice versa. -Usually there is no rise and fall in	-use unusual collocation like little building - use noun for verb like 'I can't admission in public university, mum choice for me' - use hardly, lately for adverbs of hard and late. Example: I worked hardly. - Can not convert words from one part of speech to another. - Use very limited words, do not know appropriate synonyms. For example: On Eid ul Ajha Day Muslims kill cows. - Do not know difference between parts of speech especially between nouns and verbs - Do not know how to use prefixes and suffixes with words	-Use synonyms for equal substitution -tend to get the literal meaning like girlfriend for female friend -get the idiomatic meaning literally like 'you have to put up with this change of class time. -Says one thing to mean the other. For example 'My father understood me this point.' Instead 'Father made me understand this point.' -Sometimes they are misinformed of the appropriate meaning of words. For example, slang means abusive words. - use bookish English instead of colloquial expression. For example: Have you	-do not follow sub-verb agreement -do not add 's' or 'es' in case of 3rd person singular present simple tense -can not use words orderly in a question sentence for example; Your class is what time? - Can not construct second conditional sentence like 'If I am the Prime Minister of the country, I will kill all corrupt politicians.' - In conversational situation hearers listen silently. They are not used to giving oral feedback to the speaker. - While framing sentence, use wrong tense and wrong preposition. - Often use Bangla

Phonological (pronunciation)	Morphological (word & phrase)	Semantic (meaning)	Syntactic (sentence)
expressions. -Students' pronunciation is influenced by regional dialect especially students from Sylhet, Chittagong, Noakhali, Rajshahi and Chapainawabganj have got this difficulty. - Usually do not pronounce words with diphthongs. For example in pronouncing make, boat, they use single vowel sound. - Do not use long vowel sounds. For example, bird, father, food etc. - L1 habit constantly interferes while speaking in English	- Sometimes can not distinguish meaning between sometime & sometimes, and beside & besides. - Use substitution of nouns for verbs or vice versa or use adjectives for adverbs. - Do not always use 's' in case of plural and sometimes use 's' in exceptional/unnessary cases. For example, womans, childs, and informations and equipments.	finished your work? Instead, Are your finished? - Do not get the nuances of meaning. For example dislike and hate or like or love. - Can not distinguish meaning between listen/hear, watch/see, speak/talk etc. - Sometimes construct unusual collocation like 'girl police' for policewoman, 'funny eating' and 'laughing story' for delicious meal and interesting story. - Often use the same adjective.	syntax and sometimes do not use auxiliary verbs. - While making sentence they have troubles of using prepositions, adverbs - Tend to translate literally from L1 to L2. - Sub-verb agreement, tenses, prepositions always create a big problem in speaking English.

Discussion of teachers' response

Pronunciations: Most teachers agree that many students are often not familiar with stress patterns, intonation. Sometimes they confuse bilabial sounds in their L1 with the labio-dental in L2 (for details, see Table 2). They take F and V equivalent to *Pha* and *Bha* letter in their L1 Bangla. There are other differences of sounds between L1 and L2; for example, long and short vowels in English and some consonants (g, j and z) are problematic. They often tend to pronounce English words based on spelling and syllables (for example, Wednesday) although these do not always correspond with the pronunciation. Students have problems with consonant and vowel sounds as well. On the other hand, students often believe that their pronunciation has to be like a native speaker, preferably up to American standards.

Now a day, however, with the rapid increase of cross-cultural communication in English, both speakers (native and non-native) are expected to be equally

respectful and accommodating toward each other's cultural identities. As regards pronunciation, the most reasonable attitude is that it should be mutually acceptable or intelligible to the interlocutors. In this regard, some varieties of world Englishes, regardless of their native and non-native origins, should be familiarised among students in the class through audio support as non-native varieties of English are coming into their own.

Words

Students have difficulties in converting different parts of speech. They often fail to distinguish between a verb and a noun or a noun and an adjective, for example, 'choice' and 'choose' and 'responsibility' and 'responsible'. Furthermore, they often face difficulties in using the right word or phrase and consequently keep speaking on using limited vocabulary to convey a topic somehow. Alternatively, they sometimes, take shelter in circumlocution, being unable to use the exact word or phrase.

Meanings

Students often cannot contextualize words and phrases. Unfamiliarity with commonly used phrases and idioms, overuse of words from formal and informal use, and slang and taboo words, lack of extensive reading habits and tendency to translate it directly often mislead them. Overdependence on literal translation from L1 to L2 without considering cultural and social differences is also one of reasons why meaning often does not get across.

Sentences

Students face difficulties in arranging words in a sentence. Framing complex and question sentence appear to be the basic problem as far as their oral communication is concerned. Sometimes paying more attention to sentence construction hampers fluency. In addition, they make wrong collocations and consequently often sound inadvertently funny. Dissimilar linguistic features linguistic (specifically in case of auxiliary verbs, sub-verb agreement, pronoun, preposition, tenses, word order in L1 sentences) between L1 and L2 might also interfere in way of L2 sentence construction.

Apart from the above responses, teachers also gave some thoughtful suggestions regarding how students, teachers and institutional systems can combindly bring some changes in order to promote satisfactory development in oral communication in English (for details, see in Appendix B).

Implications and conclusion

It is undeniably true that language teachers have to be well aware of learners' problems and difficulties in language use. In addition, in order to increase their perception and skills, teachers have to undertake training so that they can provide better opportunities for effective learning. ELT training materials should include components relevant to the problems emerging from classroom teaching situations. Cross-cultural understanding has often been a neglected area in the teaching-learning contexts and consequently students, while using English, do not perceive cultural differences that exit in foreign language culture properly. On the other hand, teaching spoken English does not appear to be as easy as it is generally thought to be. Brown and Yule (1983, p. 25) elaborate,

> Spoken language production, learning to talk in the foreign language is often considered to be one of the most difficult aspects of language learning for the teacher to help the students with. The practical problems are obvious. In written production, each writer can get on by himself, without disturbing the rest of the class, at his own speed. In comprehension classes, whether written or spoken, the whole class can receive the same stimulus at the same time and each student can do whatever task is required of him by himself. In the production of speech, however, each speaker needs to speak. He needs to speak individually and ideally he needs someone to listen to him speaking and to respond to him.

Teaching pronunciation is not often given due importance perhaps because non-native teachers of English are not able to teach the exact pronunciation of vowel and consonant sounds. However, Wong (1993, p.119) responds to this allegation thus "… if the goal of teaching learners is to enable them to communicate in English, we can see that communicative effectiveness depends not only on the pronunciation of these vowel and consonant sounds but on being intelligible speakers". She further declares, "Non-native speakers of English typically have an advantage over native speakers in that they can learn to perceive and manipulate rhythm and intonation more easily than native speakers, for whom these are unconscious features (ibid)".

Furthermore, enhancing perception and awareness regarding different oral discourse features, body language and the use of speaking strategy are considered to be useful tools in English oral communication. Speaking strategies can be an effective tool in overcoming communication difficulties. Recently, a study dealing with Bangladeshi immigrants living in New Zealand shows positive feedback about strategy training. Khan (1998, p. 31) has stressed its academic importance thus:

In situations where language curriculum and course contents are to be designed for the non-native speaking background learners, strategies of communication can be taught for effective use in their real life situation. This will improve learners' confidence in selecting and implementing appropriate strategies in communication.

The problems spotted under the categories seem to be the most common phenomena in oral communication of English among our students. Outside these investigations there might be some other features that may hamper communication. However, as the interlocutors belong to the same culture and L1 background, many of their expressions, despite being problematic, have got some positive acceptance and thus communication may not suffer total breakdown or abrupt postponement. Current study might enhance awareness among English teachers, researchers, course designers, language policy makers and non-native speakers of English with a view to providing effective support in the language classroom. Future study in the same area with a greater volume of data might offer more interesting and insightful observations for all who think oral communication in English matters.

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Appendix A

Dear Colleagues:

I am carrying out a small-scale research entitled 'Problems of Oral Communication in English among Bangladeshi Students' which will be presented in an international conference soon. May I request you to write few sentences in the given space about the following questions? Data obtained from you will be kept confidential and used only for this research purpose. Thank you very much for your cooperation.

01. What, in your experience, are the common problems our students face while speaking in English? Could you please briefly write under the following categories?

Pronunciation:

Word & phrase:

Meaning:

Sentence:

02. What would you suggest to overcome these problems?

Appendix B

Teachers' suggestions

Suggestions from experienced teachers may appear to be of some significance. Here, teachers have made the following suggestions in response to question 2 (See Appendix A) to overcome the problems our students face while speaking English.

- Students should be taught different stress patterns and intonation of English speech.

- They have to be familiar with different syntactic forms of English sentences.

- They should be encouraged to speak more in variety of situations uninterruptedly.

- At least six months intensive English language training at the beginning of undergraduate program will be more effective.

- Frequent practice in spoken English with good friends will be very useful

- Extensive reading and listening might improve speaking quickly.

- Reading whatever is at hand, watching BBC & CNN and other English TV channels and using a good monolingual dictionary and consultation with someone who knows better English, may be useful.

- Teaching small group (25-30 students) based on needs based syllabus, will be effective for learning.

- There should be a special emphasis on increasing useful vocabulary.

- Occasional discussion on notional difference between Bangla and English culture and language is important for raising cross-cultural understanding

- Graded English courses with integrated skill development should be offered rather than separate spoken English course.

- More listening practice with different accents can improve students' exposure to varieties of English

- Students should be frequently engaged in debate, set & extempore speech making, presenting seminar, story-telling situations so that they can individually expose themselves to speaking as well as reduce their shyness and nervousness.

- Occasionally, they should be made aware of common mistakes, unusual collocation, translated version of Bangla phrases & idioms and inappropriate questions.

- *As adda* in Bangla culture is very typical can be applied to chatting in English under the banner of '*Adda* in English' or 'English Conversation Club' where students can informally speak on any agenda and gain their fluency.

Learning From Learners: Constructing Evaluation and Feedback Methodology from Error Analysis

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Abstract

Errors function as important links between teachers and students. In the attempt to teach a language it is vital for the teacher to be aware of *how* language is learnt. The process of language learning is currently recognized to be a creative construction process. Errors are a vital source of information in the language teaching process since they provide information about the language learning process by indicating the learner's innate strategies of learning. This is what is currently termed 'Error Analysis' (EA). This paper discusses the significance of errors in second language acquisition. It attempts to elucidate both the theoretical and practical aspects of error analysis and is correspondingly divided into two parts. The first part of the paper focuses on the theoretical concepts, utility and limitations of Error Analysis. The second section concentrates on evaluation and feedback methodology by presenting a set of recommendations on error correction policy for teachers based on both EA research and the paper writer's contentions.

Research suggests that the assessment process has the greatest single influence over the way students orientate themselves to learning. Cortrell (2001) argues that students will generally take a strategic approach to gaining good marks even if this is in conflict with their learning aims or the stated objectives of the course. If a piece of work is returned graded with constructive feedback regarding the grading students will naturally seek strategic ways of improving grades based on feedback explaining their errors. Thus errors function as

important links between teachers and students. In the attempt to *teach* a language it is vital for the teacher to be aware of *how* language is learnt. The process of language learning is currently recognized to be a creative construction process. It is a process whereby the learner advances through systematic stages of acquisition of a language by using logical and creative methods, such as hypothesis testing and trial and error, to investigate and arrive at an understanding of the systems of the new language.

Errors are a vital source of information in the language teaching process since they provide information about the language learning process by indicating the learner's innate strategies of learning. The identification, analysis and classification of errors are part of the methodology of the Psycholinguistic investigation of language learning. This is what is currently termed 'Error Analysis' (EA). Error Analysis has become an established methodology of research to investigate the language learning process in order to construct appropriate teaching strategies for second language learners.

This paper discusses the significance of errors in L2 acquisition. It attempts to elucidate both the theoretical and practical aspects of error analysis and is correspondingly divided into two parts. The first part of the paper focuses on the theoretical concepts, utility and limitations of Error Analysis. The second section concentrates on evaluation and feedback methodology by presenting a set of recommendations on error correction policy for teachers based on both EA research and the paper writer's contentions.

Error Analysis: Concept, Utility and Limitations

Studies on the speech and writing of learners or "learner language" (James 1990) have revealed that in the process of language learning, second language learners' construct a separate system that has a structurally intermediate status between the native and target language. Selinker (1972) coined the term *interlanguage* to describe the learner's second language system that is constructed at any given stage in his development. Learner's errors are indicative of this system. Corder (1981), and others point out that though this system is not the right system, it should not necessarily be treated as an imperfect system; it is such only insofar as native speakers compare their own knowledge of the language to that of the learners. Second language learning systems should be viewed as variable, dynamic approximate systems. As Ellis (1985) points out, errors are an important source of information about second language learning, because they demonstrate conclusively that learners do not simply memorize and reproduce target language

rules in their own utterances. Errors also indicate that learners construct their own rules on the basis of input data and that, in some instances at least, these rules differ from those of the target language.

The most influential researcher on EA seems to be S.Pit Corder who from the late 60's presented a series of papers on the creative aspects of language learning, starting with his seminal paper on the significance of learner's errors (1967). Corder viewed errors as highly systematic, serving as 'windows' to the learner's progress in the second language. Error Analysis has indeed provided significant insights into the L2 acquisition process. This, in turn, has inspired major changes in teaching practices, often termed as the EA movement. One of its most contentious contributions has been the finding that the majority of the grammatical errors second language learners make do not reflect the learner's mother tongue; instead, they are more similar to those made by young children in the L1 learning process. Corder (1981) points to this parallel saying: "The making of errors then is a strategy employed both by children acquiring their mother tongue and by those learning a second language"(11). This discovery had its greatest significance because it offered an alternative to the Contrastive Analysis hypothesis (CA) approach to errors, and plausible explanations for learner's errors that could not be explained or predicted by the Contrastive Analysis or Behaviorist Theory.

CA attempted to predict learner errors by identifying the linguistic difference between their L1 and the target language, based on the assumption that errors occurred primarily as a result of interference when the learner transferred native language habits into the L2. CA hypothesis began to face problems when researchers found that the number of errors, which could undebatedly be attributed to contrasting principles between the L1 and L2, were in fact a very small percentage of all errors. Lococo (1975) for example, reported from the corpus she studied that errors attributable to L1/L2 contrast   were no more than 25 percent of the total number of non-native forms produced by the learners she studied.

In the 70's EA superseded and became distinct from CA because of its examination of errors attributable to all possible sources and not just those resulting from negative transfer of the native language. Error Analysis provided a theoretical framework for explaining the role played by errors in the process of second language acquisition. The theoretical justification for CA rested on the Behaviorist Learning theory of second language acquisition and its approach to errors. This approach considered errors as undesirable since they were evidence of non-learning

or of the inability of learning to overcome interference from the native language. It was generally agreed among the Behaviorist theorists that errors should be avoided, and CA subsequently saw no use for errors or their identification and opted for prevention of errors as most important to the learning process.

Corder's perspective (1967), for the first time, highlighted the creative aspect of errors. The subsequent interest and research in the field of EA resulted in a change of perspective and elevated the status of errors from 'unwanted forms' (George 1972) produced by lazy and unmotivated language learners to valuable indicators of learning and teaching guides. The positive modern view of errors that has evolved subsequently perceives them as dynamic parts of the circular progression in learning. Nickel (1970; cf. also 1973) claims that through this circular corrective function of errors, the relatively rapid progress in the learning of a language can be explained. This is similar to Corder's assertion that errors are learning strategies that provide teachers insights into learners' progress.

Following on from the work of Corder, errors have been recognized by scholars as having great significance for teachers, researchers and learners themselves. For teachers who undertake a systematic analysis of errors, they indicate how far the learner has progressed towards the goal and consequently what remains for him to learn (Corder 1981). For teachers and curriculum developers alike, errors indicate which part of the target language students have most difficulty producing correctly and which error types detract most from a learner's ability to communicate effectively (Dulay, Burt, Krashen 1982).

For the researcher they provide evidence of how language is learnt or acquired and what strategies or procedures a learner employs in his/her discovery of a language (Corder 1981). Errors provide data from which inferences about the nature of the language can be made (Dulay, Burt, Krashen 1982). They are used as a base for theory construction and classroom practice and have also made a significant contribution to the theoretical consciousness-raising of applied linguistics and language practitioners (Dulay, Burt, Krashen 1982). Finally, and most significantly, errors are indispensable to learners, who use them as a device of language learning, and as a way of testing their hypothesis about the language (Corder 1967).

What exactly, then, does Error Analysis entail? Corder (1974) suggests the following steps after collection of a corpus of learner language:

I   Identifying errors,

II describing them,

III explaining the errors, and

IV evaluating them.

While EA research has contributed much to reveal the complexity of acquisition behavior, it is itself not free from complexity and limitations. There have been a number of critiques of EA (Bell 1974; Schachter and Celce Muria 1977; Long and Sato 1984; Vans Els et.al 1984). The criticism has been levelled at the limitations in both scope and methodology. In this respect, Ellis (1985) asserts EA stands as a limited tool for investigating second language acquisition.

The scope of EA itself is limited, because it provides only a partial picture from the parts of the language that the L2 learner produces. Corder (1971) identified the importance of examining the totality of the learner's productions. Hammarberg (1974) contends that Error Analysis can, at the very least, be considered to have a place, "as a partial and preliminary source of information at an initial stage of investigation" (34). Also it examines learner language only at a single point in time since most studies are cross-sectional in nature. Little attention has been paid to separating the errors made by learners at different stages of development. Thus by not revealing much about the developmental route learners take, we get only a static view of L2 acquisition. EA can be used in longitudinal studies of L2 learners, as in the study by Chamot (1973). Corder (1981) argues convincingly that only longitudinal studies can answer certain theoretical questions.

The strategy of learners revealing only what they wish, and concealing what they do not want to show ties in with the issue of *avoidance*. Schachter (1974) revealed from research that error analysis fails to account for the strategy of avoidance. A learner who for one reason or another avoids a particular sound, word, structure or discourse category may be assumed incorrectly to have no difficulty therewith. Subsequent studies by Kleinmann (1978), Kellerman (1977), Dagut and Laufer (1985) and Hulstijn and Marchena (1989) testify to the prevalence of avoidance in L2 acquisition. Corder (1981) makes the point that the textual data produced by the learner must be supplemented with intuitional data and that systematic methods of investigating these must be devised. Such techniques will, in effect, "enable us to elicit information about the learner's interlanguage that he is not required to reveal by the ordinary tasks we set him or which he does not care to reveal to us voluntarily"(59).

Many problems have also arisen in the process of identifying errors, as well as in categorizing them. During the process of error identification a distinction between error and *mistake* must be made. In this regard, it may be pointed out that often the very definition of error poses a problem. Considering error to be defined as a systematic deviation from the norms of the target language reflecting the learner's transitional (interlanguage) competence, (Corder 1981; Ellis 1994), brings into the question, which variety of the target language should be considered the norm? Also, the distinction between errors as failures of competence and mistakes as slips of performance (which are of no significance to the process of learning), involves some complexity (Corder 1967). Apart from the difficulty of making this distinction, the distinction also assumes that competence is homogenous. But in reality, learners' errors are not systematic in any simple way. This variability in competence thus must be taken into account.

Another problem that arises in the identification process is the issue of, what Corder identified (1972; 1981) as, 'overt' and 'covert' errors. Corder states that "Purely superficial formal correctness is no guarantee of absence of error" (21), adding significantly that, "Every sentence is to be regarded as idiosyncratic until shown to be otherwise" (21). Thus the crucial methodological implication is that we must carefully study what the learner intended to say, for that is what provides us with a means of determining whether an error is in fact present or not. These various distinctions are indicative of the complexity involved in recognizing errors.

The process of the description of errors constitutes comparison of learners' idiosyncratic utterances with reconstructions of those utterances in the target language. The description of errors, like their identification, is problematic. Even if the error is easily identifiable, it is often difficult to decide which is the best target language (reconstruction) version. Descriptive taxonomies have been commonly based on:

- Linguistic categories which classify errors according to, either or both, the language component or the particular linguistic constituent the error affects.

- Surface strategy; this 'highlights the way surface strategies are altered' (Dulay, Burt, and Krashen1982: 150) by means of such operations as omissions, additions and regularizations.

- Comparative analysis; this is based on comparison between L2 errors and

developmental ones, as well as interlingual, and unique/ambiguous errors.

- Communicative effect; this focuses on errors from the perspective of their effect on the listener or reader i.e. whether they affect comprehension or not. This category includes global and local errors.

Although these taxonomies may have pedagogic application, they generally provide little information on the L2 acquisition process.

In this respect, Corder's framework (1974), based as it is, on the systematicity of errors, is more enlightening. He divides errors into pre-systematic, systematic and post-systematic errors. However, identification of these kinds of errors requires interviewing the learner. Thus this taxonomy assumes that researchers have access to the learners and that the latter are capable of explaining their errors. Reliance on the learner as informant has been criticized on the grounds that their retrospective accounts cannot be considered to be reliable (Van Els et al.1984) and that the assumption that they possess the metalingual knowledge to explain their performance does not always hold.

Explanation of errors to account for why they were made is the most important stage of EA for SLA research as it involves an attempt to establish the process responsible for L2 acquisition (Ellis 1985). The source of an error may be psycolinguistic, sociolinguistic, epistemic, or may reside in the discourse structure (Taylor1986). SLA research has, however, generally only attended to psycholinguistics. Richards (1971) identified three sources of competence errors: interference, and intralingual, and developmental. Lott (1983) further subdivided transfer errors into: overextension of analogy, transfer of structure, interlingual/intralingual errors. Intralingual errors, on the other hand, have been subdivided into: overgeneralization errors, ignorance of rule restrictions, incomplete application of rules, false concepts hypothesized. Detailed explanations of these divisions are beyond the limited scope of this paper, but suffice to say that these distinctions are not clear-cut as it is not easy to distinguish transfer and intralingual errors and even more difficult to identify the different types of intralingual errors. This is another of the methodological weaknesses of EA.

Like all other stages of EA the evaluation of errors also poses a variety of problems. There are no distinct criteria for judging error and responses are subjective and are also influenced by the context in which they are made. Based on the considerations discussed above, we can conclude that it is obvious from

the complexities that are integral to the EA process that it is impossible to identify errors 100% accurately. Also, research on error correction methods is not at all conclusive on the most effective techniques for error correction. Nonetheless, it has been conclusively indicated that students generally expect and want errors to be corrected (Cathcart and Orsen 1976). Students are often desperate to make sense of requirements. Constructive feedback on errors helps students to know what they can do to perform better, while EA research helps teachers find out why students are making errors and plan remedial lessons accordingly.

Evaluation and Feedback Methodology: Recommendations for Error Correction Policy

The preceding discussion establishes the value of Error Analysis and correction systems. The lessons learned from EA suggest that approaching error correction carefully and constructively is beneficial for both teachers and students in the long term. Teachers should ideally formulate or adopt a set of guidelines for error correction. This systematic framework or "Error Correction Policy" will provide students constructive and appropriate feedback, while teachers will have a consistent framework to work on. This section of the paper compiles a set of recommendations that teachers might find useful in constructing their own policies.

- A reference log of individual/general learner errors is useful both in the short-term and long-term. Teachers should maintain a log of error types and frequency.

- It is important to distinguish between error and mistake. Teachers must also be careful to make students aware of the difference between major and minor errors.

- Teachers should be aware that simple provision of the correct form might not be the most effective method of correction since mere repetition of a correct form does not prove that the learner has learnt the system (Corder 1981).

- Teachers should carefully study the sample to determine what the learner intended to say so that the presence of covert errors are not overlooked (Corder 1981).

- Teachers should not consider the errors in isolation but relate them to the context from which they are taken while correcting. Also individual differences should be considered, such as levels of competence, input etc.

- Teachers should contemplate carefully which errors are worthy of correction and feedback with respect to the importance of the error to the current pedagogical focus on the lesson. Errors that are global in nature should be corrected promptly and systematically while mistakes and local errors might be overlooked or left for consideration at a later stage in the learner's learning period (Hendrickson 1980, Hanzeli 1975).

- Feedback should be given with careful consideration as to whether it will improve performance, since correction of every error is not only time consuming, but also does not guarantee improvement. It might even be detrimental as being marked down for each minor error affects confidence of learners and may even result in loss of ability to use the language. Also, teachers could try to perceive whether negative feedback might elicit correct performance.

- Teachers must be sensitive to students' preferences and individual needs in deciding how and when to give feedback (Holley and King 1971). Moreover they should choose the appropriate technique from a range according to student need: self-correction, script correction; written comments and footnotes; and oral, or class explanation through illustration.

- It is important to not concentrate just on error critique but make an effort to give positive feedback on achievements by offering praise where due (Allwright1975). One key to successful learning lies in the feedback that a learner receives from others (Long 1977). Teachers must try to give incentive to stimulate effort, reinforcement to promote maintenance of the response, and information to contribute to changes (Annet1969).

- Finally, teachers must always maintain a positive non-threatening attitude towards student errors. It is vital to always keep in mind that the teacher's task is to value learners, prize their attempts to communicate, and then to provide optimal feedback for the system to evolve in successful stages until learners are communicating meaningfully and unambiguously in the second language.

Integration of theory, practice and introspection, on the teacher's part is essential for an effective evaluation system. Teachers who attempt to fulfill theoretical recommendations derived from EA in their teaching practices must reflect on issues such as diagnosing student problems, providing useful and varied feedback methods and reflecting on their own understanding, attitudes, and

limitations while making decisions about student work. Lindblom-Ylanne and Lonka (2000) state that, "To achieve a qualitative change in their mental models of their own teaching, teachers must also become conscious of their own teaching *in relation to their students"*(19). They also add that this consciousness must include knowledge of their students' skills. EA research reiterates the need for critically reflective teaching methodology. EA has made a significant contribution to the theoretical consciousness-raising of both applied linguistics and language practitioners.

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The Postmodern Turn: Irony and Parody in 'A Valediction Forbidding Mourning'

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Abstract

'A Valediction Forbidding Mourning' by the contemporary American poet Adrienne Rich incorporates some ironies in its structure and at the same time parodies the 17th century English poet John Donne's 'A Valediction: Forbidding Mourning'. These instances of irony and parody in Rich's poem point to its postmodern nature – its subjectivity, self-consciousness, historicity and self-critical distance – and thereby dehistoricize and deconstruct Donne's poem and its conventions. But before turning to the discussion of the nature and function of the irony and parody inherent in Rich's poem, it is necessary to engage with the nature of these two tropes so that the discussion receives an adequate theoretical foundation.

Parody and irony are the two rhetorical devices/modes of representation that fit postmodernism most because the 'postmodern indecidability' of texts can be left open and ungrounded in 'an unstated meaning' (Wheale, 1995, p. 44-45). Parody, whose meaning in classical Greek is 'to sing beside' (Wheale, 1995, p. 44), mocks and burlesques a previous work in such a way that the new re-presentation evinces in itself the absurdities/incoherences/incompleteness etc. of the other/the different and of the previous/the deferred. The differences between the parodic and the parodied are manipulated in the parody by an explicit/implicit reference to the differences between them, which are being deferred singly or collectively, synchronically or diachronically. The differences of modes of existence and representation between the two, that is the postmodern/the parodic and its other/the parodied, are demonstrated at the

expense of the parodied through *différance,* i.e. difference and deferral (Derrida, 1988, p. 385-406.). This demonstration can be accomplished with a self-consciousness that can critique the postmodern text itself in its relation with the historic, which is to be dehistoricized. Thus a postmodern text can view itself as the different and as the deferred one too. Thus through a *différance,* a deferral of the difference(s), which are both the constituents and the constituted, i.e. the elements and the composite, the postmodern work is a parody of the other, often in a self-parody.

Like parody, irony too functions through *différance.* Irony, as its original Greek meaning 'dissimulation, pretended ignorance' (Wheale, 1995, p. 45) suggests, works with differences, simulation(s) of the other, pretensions, not the original, and the 'pretended ignorance' indicates self-consciousness that works in ironies. The discrepancies or the differences that irony signifies, like those of parody, have identicalness in the differences and it helps them to be repeated as the different. In an irony one meaning is stated with the knowledge of the deferred meaning, the two meanings being different from each other but to have the difference they have some similarity in constitution too.

The scope and strength of *différance* corroborate the pertinence of irony and parody for postmodern signification because both self-consciously alert the reader/the addressee of the *differences* between and the deferral of meanings, continuously creating a fertile ground of proliferation and variegation of meanings. *Différance* in irony and parody thus produces the polysemic signification of postmodernism. Embodying the concept of *différance,* employing ironies and executing parodies, Rich's 'A Valediction Forbidding Mourning' evidences the nature of postmodern signification, where ironies and parodies often coexist and collaborate, giving significance to each other, assisting each other to signify emphatically, differently. When Rich's poem, with its ironies, parodies Donnes' 'A Valediction: Forbidding Mourning', which is devoid of ironies, it evinces both the plurivalence and the inherent inconsistent/unfixed nature of postmodern signification. The fundamental deconstructive dichotomy of postmodernism, which considers itself as the other of the deconstructed other, different from the different, engenders this *différance,* or rather is engendered through this, and creates irony and parody as techniques of signification. As the subtlest tools of deconstruction, irony and parody satisfy the postmodern concern of deconstruction and deconstructivity, as is evident in the Rich poem's deconstruction.

Pointing to the differences and manifesting them one after the other, that

is giving one meaning after the other (e.g. by establishing one and then destabilizing that), parody and irony also defer meanings. This corresponds to the Derridean concept of *différance*. Through multiple, not always binary, play of meanings they designate the play of traces, of the intertexts, and naturally, of the past. They speak of a subject that is, like them, multinodal and multicathected, that is to say, they represent a signification that is polysemous and plurivalent.

Irony and parody indicate a consciousness, of the author/producer/receiver, that they are exposing some inconsistencies, some differences, some contradictions. And as they do not categorically privilege one over the other, but maintain an aleatoric compromise, always pointing to this very action that they are executing, they can be considered as self-conscious. With self-consciousness, Rich's 'A Valediction Forbidding Mourning' ironizes, parodies and criticizes as well, and with this consciousness it demonstrates that it is aware of its possibilities and its limitations. The poem's consciousness is basically the subject's, which acknowledges the presence and performance of the Other's consciousness, and it is aware of the meanings it produces, especially the meaning that different significations are possible without any sustainable totality or constricting centrality. A consciousness that parodies and ironizes itself, that speaks of pluralism and eclecticism and that shows that this performance of speaking/inscribing is an integral part of the consciousness can be regarded very much as a postmodern one. And a consciousness that interrogates itself on these points and exposes the strategies (i.e. irony and parody) that it applies in doing so and incarnates itself in the process of that very action does in fact deconstruct itself and attest that this self-deconstructibility is not only possible but also inevitable.

Adrienne Rich's 'A Valediction Forbidding Mourning' can be understood on the surface to be a poem where a speaker, whose gender identity is absent/absented, enunciates his/her passion/desire/love and complaints about the cold indifference of the partner and a consequent illness, expresses a desire for estrangement from and enlightenment of the other on matters of love/reciprocation and consequences of failures. Rich's poem is remarkably eloquent more of the problems of enunciation of a relationship than of the relationship itself, and is interspersed with the strategies and objectives of such a communication and the subsequent results thereof whereas Donne's poem is unambiguously straightforward in the expression of a love relationship that verges more on self-assertion than on complications or failures.

The cognition of the self-consciousness in Rich's poem, the conscious

look and reflection of the various selves and complex phenomena, the conscious application of the tools of irony making and the conscious appraisal of the ironies made about the consciousness, do not look innocent and imbecile, unthought-of and unplanned, accidentally occurring there and precariously left behind. This rather appears to be a systematic intellectual reflection of relationship/signification, a systemic overhauling, 'To do something very common, in my own way' (Rich, 1995, p. 400), as the poem's addresser utters. Such a performance seems to be common or very common, but it is neither insipid nor commonplace; moreover, it is communal and collective and at the same time individual and particular also, poised in self-exploration and poignant in ironies. All these ironies demonstrate the nature of the postmodern relationship and at the same time the futility of seeing the Rich poem as an exploration of human relationship only; rather, it validates the poem as a theoretic exercise in the problematics of signification and deconstruction which ground human relationship in postmodernity.

A valediction forbids mourning if it is for the well-being of at least the partner from whom the departure/separation is being sought and effected and to whom it is being addressed. But if the separation, in Rich's poem, is meant to be permanent ('When I talk of taking a trip I mean forever') and if the charges of the causes of separation are directly and indirectly heaped on the partner ('Your frozen lips'), what sort of a well-being can be predicted after such a communication of predictions, insinuations and implications? Or, after all these allegations and suspicions , is it anticipated that the analysis of the total experience of relationship meant for the partner's acquisition of the knowledge (' I want you to see this before I leave') of the past, present and future states of such a union will bring about a change not for the worse but for the better, even though in the absence, or absenting, of the Other, which is, however, not possible till the trope of the tropes, 'destiny', as Lacan metaphorically calls it (Lacan, 1977, p. 97), intervenes? Is only showing the truths or giving the knowledge important? Or does such an insinuation involve a shade of revenge also by showing the truths and giving the knowledge by means of subtle and deliberate ironies, decipherment of which will only show the ultimate truth that all this trouble has been glorified and implored to be taken only to make it known that the separation from the (m)Other, the original object of desire, the lost signified, the menstruating/castrated subject desiring to fill the void of the absent phallus, is perpetual? That is, if separation is perpetual, why should there be love, and regret for loss of love? why should there be revenge or the desire to impart knowledge or take revenge through enlightenment or separation? When all the contradictions

coincide and cohabit, it becomes the ultimate irony that a valedictory address is being articulated but a message of suspicion, insinuation, allegation and vengeance is intimated.

If and when such a revenge of separation or enlightenment becomes effected in Rich's 'A Valediction', need mourning for the departed be still forbidden, or can mourning over the revenge be still forbidden? If s/he had known that the drug would delay the therapy, why had s/he taken it? Or if s/he had no knowledge of what would happen in case s/he had taken that drug, how can s/he know a truth and show it to the Other? If s/he wants the cure of the 'wounds', why is s/he leaving and why is s/he talking of not coming back? All these internal inconsistencies, logical and temporal incoherences, deconstruct the idea of an undivided subjectivity or coherent identity of a modern man and establish in its stead a postmodern identity. This postmodern deconstruction of identity is not only necessitated by the infinite possibilities and instances of signification, but the inconsistencies, or rather the ironic consistencies that also demand such a deconstructive signification. Thus the deconstructed, postmodern identity of a being becomes analogous to the postmodern deconstructive signification, where identity is constantly changing, shifting through space and time, aligning and adjusting itself with numerous individual and social factors, which are themselves evolving all the while, taking on new forms and new meanings.

If this is suggested in Rich's poem to be a farewell forbidding lamentation, how can s/he say that grief will be restrained? With the *ironic* inscription in the poster? Or with the 'unglossed' images/metaphors when they will be decoded and deciphered? 'I want you to see this' is what is said but 'notations' are left 'empty' as they are, and images 'unglossed', for 'you' to decode, though inadequately and ceaselessly. If 'mourning' is a natural consequence of departure, there will be such an experience, an experience of signification through deconstruction, after the experience of departure, that departure will not be able to engender grief or lamentation. A valediction is for that person for whom affection is there and, all the more, from him/her who has been, and at that particular time is, supposed to demonstrate reciprocal affection. That is why desires ('wants') can run wild/hot, and production of signifiers and satisfaction of desires are desired neither to be prohibited nor inhibited ('frozen'), and then language ('grammar') of love-making/leave-taking in conversation/copulation cannot reverse ('turn'). After/while the departure of the hated/beloved takes place since I leave them 'unglossed' and since I cannot (neither able nor ready to) communicate ('I could

say', and 'I could not say'), if decipherment and decoding of signs/metaphors are not worth doing for a meaningful relationship, what is? If I am verbally ironic, meaning the opposite of what I say, then learn what I could say and what I could not, and also that what I could say I could/would not. I see, and I say, but I do not want you to say; you see and/or hear what I say and see, but *you* can/would/do not say anything in the sayonara since *your* lips are 'frozen', which criticized/interpreted *me/my* valediction/poem without succeeding to see and tell ('locate') the source, the origin, of love or of criticism. So even I enumerate 'a [not *the*] last attempt' with a casually pronounced profound formula, I would leave the notations 'empty' as I found them with you. Still, I see and I say only because *you* will see, though not say; *your* seeing/saying is possible when I withdraw from *you* as it was not possible when I remained with *you* who is the Other/the reader. So though the 'criticism' failed to see the origin, it may succeed to see that, as I have supplied the clues, from the end.

All these ironies deconstruct the idea of valediction as it is and as it has been in the two 'valediction' poems of Donne, 'A Valediction: Forbidding Mourning' and 'A Valediction: Of Weeping'. 'Donne's 'A Valediction: Forbidding Mourning' carries in the title a colon, (:), after 'valediction', indicating a pause, a separation between the two parts of the title that are divided and linked by the colon only to emphasize the sense that this poem is a valediction, the nature of which is that it forbids 'mourning' (lament, dirge, requiem or feeling/expression of sorrow, pain or distress) since, though that is a natural consequence, that will be meaningless for there is the desire and hope of reunion. Rich's title, on the other hand, implies continuity in the signification of the title in a fluent and fluid sense, indicating at the same time the function of the valediction that it 'forbids' mourning. As the use of colon in the title of Donne's poem indicates essentially the type and nature of the valediction, its absence in Rich's title and, even more, presence of the present participle, (-ing), basically point to the continuous function of this valediction. Donne's poem, as is manifest in the title, conveys its message explicitly that 'mourning' is 'forbidden' in/for this type of valediction while Rich's poem is an explicit irony, delivering in the body of the poem the ambivalent opposite of the title. A poem that gives out a notion of unfixed periods and natures of alienation and, consequently, continuous scope of signification is cogent enough to ironically (mis-)direct the readers with a title which literally means something different and which is, and here is deliberately made to be, redolent of that poem of Donne's for them to be awakened to other truths.

The phrasing of Rich's title incorporates another inherent irony inasmuch as a farewell cannot ensure that 'forbidding' of such a 'mourning' will be heeded to; 'mourning' can be 'forbidden', but it cannot be forestalled, i.e. anticipated and prevented at the same time. A valediction anticipates mourning, but that which is anticipated is not present at the present moment and therefore cannot be checked at the same instant, and when it will come, there will be no scope of anticipation for a thing already present, and, therefore, it will not remain a valediction any longer. While Donne's 'A Valediction: Forbidding Mourning' and 'A Valediction: Of Weeping' demonstrate a consciousness that is aware of the consequent physical distance between the two partners due to the departure but is mute on mental distance/separation, Rich's poem does not have any desire to exhibit any such inseparable desire/connection between the two partners and, furthermore, talks about an impending irreconcilable separation. These poems by Donne employ, like Cartesian *cogitoes,* conceits, not to generate multiple layers of meanings and that too through ironies, but to direct the readers to the central theme of the imperishability of love, the 'center' like that of the compass of 'A Valediction: Forbidding Mourning'. The wit of the poet that produces the conceits and the wit for the readers that is a result of the conceits point to a modern consciousness, not to a postmodern one, at least partly because this wit does not critique itself. Rich's 'Valediction' is self-consciously self-effacing in appearance and self-scrutinizing in spirit, a critique of the Cartesian *cogito* and its clearness and distinctness. It is not a 'forbidding' of mourning but a foreboding of it; thus this valediction is a forbidding one and the title ironic. Yet the title of the poem/address, phrased by the poet/speaker/performer, means what it means, forbids what it wants to forbid for an one-to-one signification is not required since there is no need for it as the experience, in all its senses, is re-experienced artistically. Donne's valediction poems are valedictions in love, but Rich's is primarily a valediction of valediction, neither of love nor in love, a valediction of any determinacy and finality, and hence a cogent valediction, a valediction *per se.*

Despite their spatio-temporal existence, texts 'incarnate the Derridean network of traces in their own self-reflexive textuality' (Hutcheon, 1988, p. 81) because of their ironical self-consciousness from the positions of producer/receiver of the historicity in the textuality, and are thus capable of defying their historicality and contextuality *per se.* The postmodern text maintains with the deconstructed text a historic connection that is parodic, not to historicize itself or the other text, but to dehistoricize the other with a deconstructive parody or a parodic deconstruction, and in that very process it dehistoricizes itself too so far as it establishes detachment from a temporal, causal and sublimatory sense of historicity/historicality. In this dehistoricizing parody, the new

text is not unconscious of what it is effectuating, but rather is conscious of its representation and the receiver of the representation who may ironically receive the parodic representationality. Hutcheon (1988) declares, 'In the light of the structuralist focus on *langue* and on the arbitrary but stable relationship between signifier and signified, postmodernism might be called the "revenge of parole" (or at least of the relationship between the subject, as generator of parole, and the act or process of generation)' (p. 82). Rich's 'A Valediction Forbidding Mourning' validates, partially with the parodying of Donne's 'A Valediction: Forbidding Mourning', the same idea that in spite of being engendered within and by the system, which is constituted by temporality, the Rich poem, as the 'other' of Donne's poem and with a construction of an ironic subject and ironic other, exposes and questions that very structure of the system and its temporality, which generates such paroles, including poems, and their meanings also. And Rich's poem maintains, ironically, that this revenge is not a paramount event in history, but rather 'something very common'.

The conventions of lover-beloved in the male-female binary system have also been parodied in this poem through an establishment of a link with the past, that of Donne's Valediction poems. That link has been established thematically and formalistically. First, let us note the thematic parodization. Though a metaphysical union in both philosophical and critical-historical senses is being sung in the poem, Donne poem's rootedness in the historic sense of the prevalent cultural conceptions like virtues/'profanation' and the newly expanding sciences of cosmology and mathematics, ground it in a particular cultural time-frame where the concept of gender identity was unproblematic and heterosexual. But in Rich's poem, because of the postmodern culture in which the poem is grounded, the concept of a gendered identity rooted in anatomical sex and a dominant culture is ignored, and, in fact, parodied. 'Your frozen lips' – but who is this *you,* the usual female that has been traditionally sung as the only repository of desire's manifestation or the male that desires the lips? And who is this I, the male lover or the female lover? A lesbian love or a homosexual one? In Donne's poem the body was negated, being 'Inter-assured of the mind' (Alison *et al,* 1983, p. 212), and thereby desire was denied its due weight. In Rich's poem desire is not denied its customary importance, rather it is glorified through parody, its satisfaction can be deferred, if compelled to repress it, in endless 'repetitions', in endless metaphors and ironies.

Formalistically, the use of a colon can be very important in parodying, and thus deconstructing a text like Donne's poem. Donne's use of colon in the title and its abuse, or rather multiple use, in Rich's poem indicate the historic connection and the dehistoricized deconstruction of that connection. Rich

dropped the colon deliberately in the title of her poem 'A Valediction Forbidding Mourning'. This is a phenomenon that plays with the reader's consciousness, often eluding his/her attention to the fact that the colon has been dropped in the title, and used in the body of the poem instead. The colon, in the light of what Derrida asserts about a trace, is 'not a presence but is rather a simulacrum of a presence that dislocates, displaces, and refers beyond itself' and is established through 'effacement' which establishes 'the trace in a change of place and makes it disappear in its appearing' (Derrida, 1988, p. 403). Rich used the colon five times in her poem to indicate ('I want you to see this before I leave:'), to demonstrate ('the poster in the bus that said:'), to define ('A last attempt: the language is a dialect called metaphor'), to enumerate ('These images go unglossed: hair glacier, flashlight!') and to articulate ('I could say: those mountains have a meaning'). This polyvalent use of the colon not only parodies Donne's use of categorical definition and definitive categorization of 'valediction' and its nature, it also expounds the polysemous nature of one single trace like a punctuation mark.

The ironies in 'A Valediction Forbidding Mourning' enunciate the postmodern concepts of subjectivity and consciousness, and their link with history. This poem at the same time dehistoricizes its relationship with its predecessor, the Donne poem, through a parodic re-presentation of human relation and communication. The past has been self-critically presented and through this the present has been modified. The application of the irony and parody, two of the best tropes of postmodernism, has effectuated this re-inscription of the Donne poem.

Appendix

A Valediction Forbidding Mourning

Adrienne Rich

My swirling wants. Your frozen lips.
The grammar turned and attacked me.
Themes, written under duress.
Emptiness of the notations.

They gave me a drug that slowed the healing of wounds.

I want you to see this before I leave:
the experience of repetition as death

the failure of criticism to locate the pain
the poster in the bust that said:
my healing is under control.

A red plant in a cemetery of plastic wreaths.

A last attempt: the language is a dialect called metaphor.
These images go unglossed: hair, glacier, flashlight.
When I think of a landscape I am thinking of a time.
When I talk of taking a trip I mean forever.
I could say: those mountains have a meaning
but further than that I could not say.

To do something very common, in my own way.

A Valediction Forbidding Mourning
John Donne

As virtuous men pass mildly' away,
And whisper to their souls to go,
Whilst some of their sad friends do say
The breath goes now, and some say, No;

So let us melt, and make no noise,
No tear-floods, nor sigh-tempests move,
'Twere profanation of our joys
To tell the laity of our love.
Moving of th' earth brings harms and fears,
Men reckon what it did and meant;
But trepidation of the spheres,
Though greater far, is innocent.

Dull sublunary lovers' love
(Whose soul is sense) cannot admit
Absence, because it doth remove
Those things which elemented it.

But we by'a love so much refined
That our selves know not what it is,
Inter-assuréd of the mind,

Care less, eyes, lips, and hands to miss.

Our two souls therefore, which are one,
Though I must go, endure not yet
A breach, but an expansion,
Like gold to airy thinness beat.

If they be two, they are two so
As stiff twin compasses are two;
Thy soul, the fixed foot, makes no show
To move, but doth, if th' other do.

And though it in the center sit,
Yet when the other far doth roam,
It leans and hearkens after it,
And grows erect, as that comes home.

Such wilt thou be to me, who must
Like th' other foot, obliquely run;
Thy firmness makes my circle just,
And makes me end where I begun.

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Borders and Multiculturalism: A Reading of *The Namesake* and *Brick Lane*

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Abstract

Hyphenated identities are crucial elements of a multicultural setup. And cultural conflicts are perhaps inherent in individuals who strive to exist with two identities imposed on them. What we know today as Diaspora Literature, is perhaps an attempt to put forth the complexities behind hyphenated identities. Jhumpa Lahiri's *The Namesake* and Monica Ali's *Brick Lane* trace the identity crisis that underlies an immigrant's life. Both works also depict the conflicts between the first-generation and second-generation immigrant's. In my paper I have analysed *The Namesake* and *Brick Lane* closely to show how the novelists have portrayed immigrant lifestyle in their works. My paper also deals with the vision the novelists have of an ideal multi-cultural setup. For instance, how assimilation of another culture can make an immigrant's life better if not perfect.

> My name is Karim Amir, and I am an Englishman born and bred, almost. I am considered to be a funny kind of Englishman, a new breed as it were, having emerged from two old histories . . . Perhaps it is the odd mixture of continents and blood, of here and there, of being and not, that makes me rootless and easily bored. (*The Buddha of Suburbia*, p. 3)

The Alis, the Lahiris, the Chadhas[1], the Raghavs[2], the Kalpana Chawlas[3] or for that matter the curry restaurants in East London could be objects of pride. But these multi-cultural specimens who are "neither just this / nor just that" (Dayal, 1996, p. 47) have a complex history beneath their glitter – a history of struggle

for existence in a foreign land and then a race to give this existence a name.

Fulfillment of cherished dreams seduces throngs of 'Third World' citizens to migrate to the First World. No doubt, the dreams are realized amidst the 'desh'[4] nostalgia for the first generation. But even in the next generation there remains an identity crisis that is the cause of great anxiety. A multicultural society is a site of hyphenated identities (e.g. American-Indian, American-Bangladeshi) with its own set of power structures, strikingly different from a homogeneous monocultural setup. But does a multicultural world, where "emigrants and others preserve their cultures with the different cultures within one nation" (Wikepedia), really exist? Or has it created 'boundaries' within nations and are we yet to discover a multicultural utopia? This essay tries precisely to answer these questions by analyzing the diasporic existence depicted in Monica Ali's *Brick Lane* and Jhumpa Lahiri's *The Namesake.*

In his essay "Diaspora and Double Consciousness", Samir Dayal (1996) observes that "The discourse of multiculturalism has often proved inadequate in accommodating the complexity of race or migrancy..." (p. 46). Indeed, multiculturalism brings with it several 'borders' - borders not only imposed in the alien world but also in one's own 'desh' where the immigrant is not at ease because she has "moved to another country and made a separate life" (Lahiri, 2003, p. 233). While writing about migration, James Clifford (1992) has pointed out that "we are seeing the emergence of new maps" and in this essay I will focus on these maps, which are not geographical but more related to 'borders' which surround the existence of a diasporic[5] persona. Being a product of these "borderland culture areas" (Clifford), Diaspora Literature has given us various stock characters whose lives are ruled by 'borders' or 'boundaries'. The characters feel "the strangeness of the familiar" and not only place themselves in the borderline but also build borders around them. The boundaries could be imposed by the four walls of their apartments or by their physical appearance. The formation of these boundaries is actually a two-way process. At one level it is developed by the immigrants themselves and at another level imposed by the hosts [6]. In an interview, Jhumpa Lahiri confessed that she looked different and felt like an outsider. The gaps in a multicultural setup are broadened owing to a constant pursuit, both by the hosts and the immigrants, to identify themselves with only one homogeneous cultural identity position having failed to realize that a multicultural framework does not acknowledge such positioning.

In Diaspora Literature, the apparently caste-free Western world proves to be a fragmented "hidden world" with a darker reality where characters are forced to

build 'boundaries', as they are cornered primarily on the basis of religion and colour. I will now try to locate the various borders which Jhumpa Lahiri and Monica Ali have subtly highlighted in their works. My reading of *The Namesake* and *Brick Lane* reveals that so-called multicultural society has enhanced the formation of three major borders. The first border is the border between immigrants (first and second generation collectively) and the original inhabitants of a country. The immigrants "believe that they are not – and perhaps cannot be – accepted by their host society and therefore feel partly alienated and insulated from it" (Safran, 1991, ix-x). In contrast, the hosts fear a destruction of their Anglo-American-Christian heritage and also find it difficult to accept the fact that some less fortunate whites are often employed by economically prosperous immigrants. In this context, Zadie Smith (2001) writes in her novel *White Teeth,* "There are still young white men who are angry about [successful immigrant stories]; who will roll out at closing time into poorly lit streets with a kitchen knife wrapped in a tight fist." (p. 327). It is this first border between the hosts and the immigrants which is responsible for the formation of extremist groups like The Lion Hearts and the Bengal Tigers depicted in *Brick Lane* and also the cause of riots described at the end of the novel.

The second border I will underscore is the border that culturally separates the second generation from the first generation. This gap is a heightened version of the generation gap. Instances like an angry Shahana exclaiming, "I didn't ask to be born here" (Ali, 2004, p.181) abound in the two books. I take up this issue more elaborately later in this essay. The third border is that created by immigrants amidst the diasporic framework itself because "racial and ethnic divisions exist… among the Hindus and Muslims and the Indo- and Afro-West Indians" (Ramraj, 1996, p. 223). This boundary is one which arises because of diverse experiences of geography, history, beliefs, and language / dialect differences, and is often overlooked by readers. We find that Lahiri surrounds the Ganguli family with Hindu Bengalis, whereas in *Brick Lane* we come across only Muslim Bengalis. Insecurity is the main reason for such associations. Also, the clashes between Bangladeshis and Somalians in Britain tell us that an immigrant's life could be ruled by the fear of being overtaken by some other group of immigrants. Thus, although the immigrants are responsible for the heterogeneity of a multicultural setup, they live constantly under the fear of the same.

Brick Lane and *The Namesake* have given us two memorable characters, Nazneen and Ashima respectively. Both women leave their homelands to realize the dreams of their new husbands. *The Namesake* begins with Ashima trying to

revive the taste of Kolkata *jhal muri* [7] by "combining Rice Krispies and Planters peanuts" (Lahiri, p. 1). Ali brings us to Tower Hamlets where Nazneen, "the unspoilt girl [from] the village" (Ali p. 22), who in her eighteen years of unmarried life had scarcely spent a solitary moment, now fights loneliness by listening to a lavatory flushing in the next-door apartment. Ashima, unlike Nazneen who can only say "sorry and thank you" (Ali, p. 19), is a woman acquainted with the poetry of Wordsworth and Tennyson. Yet both lead enclosed lives, doing "regular prayer, regular housework" (Ali, p. 51), and performing remarkably similar chores like cooking lamb curry with potatoes to suit their husband's palate. More than the similarities experienced in their routine life, both women endure the foreign land initially with the same homesickness, as "nothing feels normal" (Lahiri, p. 5) to both Ashima and Nazneen and something always appears to be missing from their lives. We can conclude from this that many diasporic individuals, irrespective of their nationalities, educational backgrounds, and religion tend to have the same sense of incompleteness. Nazneen feels suffocated in her box-like apartment when she recalls the vast expanses of open fields in her village, and, in the last few days of her first pregnancy Ashima recounts, "In India, … women go home to their parents to give birth, away from husbands and in-laws and household cares, retreating briefly to childhood when the baby arrives." (Lahiri, p. 3) Incidentally, both women give birth to their children in a "foreign land", "far from home, unmonitored and unobserved by those [they] love" (Lahiri, p. 4).

When Ashima cannot let go her tattered copy of *Desh*[8] it immediately becomes more than a literary magazine and is one that carries layers of meanings associated with 'desh' sensibilities. Similar sensibilities are attached to the letters Nazneen and Ashima receive from their 'desh'. 'Desh', though the centre of the cultural identity of many immigrants, is the cause of much anxiety. The exaggerated 'desh' nostalgia makes many immigrants outcasts in their new homes and also distances them from their children. Some first generation immigrants, it may be noted, have tried to construct their "imaginary homelands" by residing in places like Bangla Town in East London or Edison in New Jersey[9] to resist assimilation into the host country's culture. Thus very often we find that a microcosm has been created in Diaspora Literature, which prevents their characters from trespassing into 'whiter'[10] grounds — diasporic characters tend to keep company of people from their community only — "… the baby has visitors, all Bengali" (Lahiri, p. 24). Such confinements have given rise to the phenomenon of the 'traditionalists', a term used by Victor Ramraj in his essay "Diasporas and Multiculturalism". Traditionalists are people who vehemently

resist any sort of assimilation and protest against anything accultural. *Brick Lane* also leaves little space outside the Bangladeshi community of Tower Hamlets (Karim could very well have been a Kirk)[11]. This very-Bangladeshi world, though appearing superficial at times, has been delineated vividly by Monica Ali. There is barely any mention of any noteworthy white British figure. Though Chanu in *Brick Lane* severely criticizes the Sylhetis who build villages around themselves, his own home is a perfect example of a villager's household - he does not let Nazneen go to English classes or allows his daughters to speak English at home. His constant bickerings with his elder daughter Shahana reveal that Chanu with all his certificates has remained a traditionalist at heart who plans to return 'home' before his children get spoilt. These traditionalists still see their new world in shades of "gray"[12] as they have consciously kept themselves in the periphery.

The trope of 'desh' ultimately fails to keep up the hopes of the immigrants and is ultimately reduced to a mere metaphor because although immigrants prefer being traditionalists, they seldom avail themselves of the opportunity to return to their 'desh', primarily because of the material comforts of the new land. And even if immigrants return to their real homes, in most cases the real 'desh' appears to be starkly different from their nostalgic construct of 'desh'. For Nazneen, it is not Karim (Nazneen's lover) but her sister Hasina's letters, which make her turn away from Bangladesh. Because it is through these letters that Nazneen comes to know about Hasina's constant struggle for existence (we come to know that Hasina is raped and that she also works as a domestic help). Thereby the letters inform Nazneen of her shattered 'desh'. Chanu, it is true, returns to Dhaka but readers cannot, but be very skeptical about the success of his soap business.

In spite of the hard-earned security which makes many settle in a foreign land the diaspora community is constantly tormented by two harsh realities. The first reality is the cultural uprootedness epitomized by the children of these settlers and the second is the discrimination encountered by them and their next generation because in a multicultural setup, the dominant "Power uses difference as a way of marking off who does and who does not belong" (Hall, 1997). In fact, the derogatory word 'Paki' [14] had been coined to denote an uncultured, brutish immigrant. Incidents like the police raids in East London and the arrest of innocent immigrants show the kind of oppression a section of immigrants go through. *Brick Lane* offers us riots and other traumas experienced by the Bangladeshi community in London. In the novel Nazneen laments, "My husband says they are racists [his promotion would take longer than a white man] … if he painted his skin pink and white then there would be no problem." (Ali, p. 72). So

while at one level many immigrants fear competition from other immigrants, at another level, they are wary of discrimination from the larger 'host' community. Thus we can see how fear and insecurity have entwined to form borders within a single nation. More importantly, such traumas lead to the formation of layers of borders in the diasporic individual's psyche whose doubled insecurity forces him to struggle twice as much for survival.

According to Victor Ramraj, 'assimilationists' are those immigrants who try to incorporate the culture of their new homes in their lives. Ashoke, who was born a "third time in America" (Lahiri, p. 21), rebuilt himself to fit into a particular system. Lahiri devotes two pages (pp. 64 -65) of her novel elaborating the assimilating acts practiced by the Gangulis: celebrating Christmas, Thanksgiving, and preparing American dinners form a crucial part of their lives. Talking about the transformations the successful immigrant goes through, Fredrick Buell (1994) observes, "Model immigrant success stories … [are] models because they remind us on every page that the author [of the success story is] an 'other', while simultaneously celebrating the supposedly complete transformation of that identity" (p.148) Diasporic authors in some way or the other tend to take the side of the 'assimilationists'. "The Gangulis have moved to a university town outside Boston. . . [where] they are the only Bengali residents." (Lahiri, p. 48) Then "Ashima and Ashoke are ready to purchase a home" where "all the houses belong to Americans" (Lahiri, p. 51) Lahiri distances the family from the Bengali community and makes them climb the stairs of progress but Chanu in Tower Hamlets remains confined to Bangla Town. "The job is everything Ashoke has ever dreamed of" (Lahiri, p. 49) whereas, Chanu's state (afflicted by the "Going Home Syndrome") steadily declines and he ends up as a cab driver in London. In contrast Nazneen ventures outside the borders of her apartment in an act of assimilation which boosts her confidence and ultimately makes her financially independent. "Nazneen had never seen this England but now …the idea formed that she would visit it" (Ali, p.438). Thus, on one hand the traditionalist Chanu is shown as limited, whereas, the assimilationist Nazneen is depicted as capable of growth. With the traditionalist-assimilationist framework, yet another border has been formed within the diasporic community. The liberal Nazneens will always tend to be in conflict (concealed or exposed) with the more conservative Chanus.

Rosemary Marangoly George (1996) has noted, "The literature produced out of diasporic experiences has always been in the business of constructing fictions that fit realities and don't fit realities." (p.180). Following her, I point out

47

that a homogeneous national identity is something that is usually detested in a multicultural setup but the closeness of an individual to the dominant national identity makes her an ideal immigrant. And this is the greatest irony of Diaspora Literature. The constant shifting of point-of-views from one generation to another, as in *The Namesake,* reveals not only the double consciousness i.e. the diasporic's ambivalent allegiance to 'desh' on one hand and to the host country, on the other, but also the shifting point-of-views are used as a means to highlight the differences in perceiving the world by two frames of thought.

"Our names contain our fate."[15] (*Midnight's Children*, p. 304)

The name Gogol is crucial to Lahiri's novel. Its significance is highlighted through a series of co-incidences. But the name also assumes a greater significance because of the discourse of diaspora. The name, not Indian or American (as opposed to Nikhil's firm Indianness), is oddly enough a Russian last name, which acts as a signifier of the complicated dual identity of second-generation immigrants. Instances like the Indian classical music cassette his father Ashoke gifted Gogol months ago still lying sealed in its wrapper highlights Gogol's rejection of his parent's culture. In diaspora literature, growing up, a strange case of duality and rejection, at times can culminate in hatred of one's dual identity. Gogol and Sonia are more attached to Christmas than Durga pujo (a Hindu religious festival). Gogol ends up denying his own childhood, which is unquestionably more entwined with his Indian roots. Gogol "remembered wishing that his parents would walk through the park, take him to the Museum of Natural History ... but they had had no interest in such things." (Lahiri, p. 127). Thus the 'past', so nostalgic for one generation, becomes an object of hatred for another. By comparing Ruth's family with Gogol's, Lahiri clearly posits the difference experienced by second-generation immigrants. Gogol "wishes his parents could simply accept her, as her family accepts him." (Lahiri, p. 117) and Maxine's "Why on earth would they mind?" (Lahiri, p.129) almost leaves him baffled. Gogol's life with the Ratliffs (Maxine's family) opens an unknown America to him. Words like 'vacation' have a new meaning for him now, for "he realizes now that they were never really true vacations at all. Instead they were overwhelming, disorienting, expeditions" (Lahiri, p.155). Yet he cannot situate his parents in a setup where he feels free. But ultimately the fact that he changes his name to the very-Indian Nikhil tells us that it was his 'hyphenated borderline'[16] identity he resented.

Moushumi, Gogol, and Sonia – all feel they are confined within boundaries. Their professions, their marriage, everything about them seems to be

determined by an overpowering alien culture. Thus Moushumi rebels by vowing never to marry a Bengali man and then secretly double majors in French, again not anything American or Indian. Moushumi suffocates and as an outlet for her sufferings "she began to fall effortlessly into affairs. With no hesitation, she had allowed men to seduce her…She gave herself openly, completely, not caring about the consequences." (Lahiri, p.215). Bibi and Shahana in *Brick Lane* fear their return to Bangladesh. Shahana's arrogance disturbs Chanu, who shouts, "Tell the little memsahib that I am going to break every bone in her body" (Ali, p.180), again, "I'll dip her head in boiling fat and throw her out of the window" (Ali, p.180). Ali informs her readers:

> Shahana did not want to listen to Bengali classical music. Her written Bengali was shocking. She wanted to wear jeans. She hated her kameez and spoiled her entire wardrobe by pouring paint on them. If she could choose between baked beans and dal it was no contest. When Bangladesh was mentioned she pulled a face. She did not know and would not learn that Tagore was more than poet and Nobel laureate, and no less than the true father of her nation. She did not care. (Ali, p. 180)

Shahana's voice could be the voice of a teenage second-generation immigrant. Eventually to escape the family's return 'home', Shahana runs away.

At one level in her novel Lahiri makes an attempt to bridge the gaps by letting East mix with the West. Thus Gogol in *The Namesake* falls for two very American women, Ruth and Maxine. But we seldom find first generation immigrant families readily accepting such associations. Ashima and Ashoke point out that Bengali men marrying Americans have usually ended in experiencing divorce. When it comes to marriage or love affair, diaspora authors strangely play the role of traditionalists. Lahiri breaks Gogol's relationship with both Ruth and Maxine and Sonia is married off to the not - so - American Ben. Similarly in Krutin Patel's film *ABCD* [17] (American Born / Bred Confused Desi), Nina ends up marrying a white American and Raj breaks his Indian engagement to flare up an affair with a white colleague. But the ending of the film exemplifies the 'confused' in the acronym posing serious doubts about the choices made by the siblings. Readers, thus are relieved when Gogol ties the knot with the Bengali Moushumi. Both shared strikingly similar childhoods – "the same parties to attend", "the same frequent trips to Calcutta", "both routinely assumed to be Greek, Egyptian, Mexican" (Lahiri, p. 212). Gogol and Moushumi's marriage is assumed by all traditionalists to be perfect. But the marriage collapses. Why? The

rebellious Moushumi's cultural identity is constructed of some immoral experiences, which ultimately make her unfaithful. "There were days she slept with one man after lunch, another after dinner." She keeps company with people who sleep with one another and we can't see her "with some Indian guy."(Lahiri, p. 215) Similarly for Nazneen, Dr. Azad appears to be eternally suffering because of his accultural wife who smokes and wears short skirts. The borders appear to indicate a world where one's roots are to be respected, and where the *lakshmanrekha*[18] cannot be crossed.

Diaspora literature often attempts to give a holistic picture of immigrant existence. The initial struggle reflected in the beginning usually leads us to a stronger and mature version of the immigrant as we approach the ending. We are amazed at the changes that Ashima and Nazneen go through (as we saw, Ashima and Nazneen as assimilationists and here I am pointing out the transformation the assimilationists go through)– both grow stronger to be *ashim,* that is to say, without borders. Nazneen is confident enough to raise her two daughters in London without Chanu. And Ashima too "has learned to do things on her own" and "is not the same Ashima who had once lived in Calcutta." (Lahiri, p. 276). And strangely Ashima muses, "For thirty-three years she missed her life in India. Now she will miss her job at the library…She will miss the country in which she had grown to know and love her husband" (Lahiri, p. 279). This confession reveals the bond first-generation immigrants develop with their host nations.

The last line of *Brick Lane,* "This is England … You can do whatever you like" (Ali, p. 492) which symbolizes an attachment to the host nation, shared by both Nazneen and Ashima, is a stark contrast to Ashok's sarcastic, "In America anything is possible. Do as you wish."[19] (Lahiri, p. 100). Assimilation for these women signifies freedom and strength that at once places them on a higher pedestal compared to their counterparts, back 'home'. It is undeniable that a second-class citizen's existence is preferable to Ashima's mundane middle-class North Kolkata existence. On the other hand, Nazneen shudders at the thought of Hasina's struggle for existence in Bangladesh. Some works also take us beyond the 'happy assimilation' in *Brick Lane*. For instance, Lahiri gives us a picture of the last years of one's life in a 'foreign land'. "Ashima feels lonely suddenly, horribly, permanently alone…"(Lahiri, p. 278) A rawer picture is depicted in *ABCD* where Nina's mother Anju, a widow, dies lonely in a kitchen, talking to her dead husband with no dear ones by her. We also cannot help wondering what will happen to Nazneen in the autumn of her life.

The isolated life depicted in the initial chapters of *Brick Lane* is not desirable

and is almost an impossibility in a multicultural world. There has to be some sort of assimilation, some sort of negotiation with the dominant culture to situate oneself in a multicultural setup. In the beginning of the novel ice-skating is something strange for Nazneen but at the end of the novel we find she is attempting to ice-skate. "To get on the ice physically – it hardly seems to matter. In her mind she was already there." (Ali, 492). This is symbolic of Nazneen's breaking the boundaries to carve a space for herself in a world which no longer seemed alien. Thus "she was already there" to face the future which is "a conceptual space for identification and misidentification; and an arena of struggle" (Hua).

Diaspora authors have a vision of a 'Happy Multicultural Land' (no doubt very ironic at times) and so *The Namesake* ends with, "For now, he starts to read." (Lahiri, p. 291) Gogol's reading of Nikolai Gogol's short stories signifies his acceptance of his dual or plural identity. Thus both novels recognize "the endless transformation and translation…of the migrant self" (Dayal, p. 54). Borders are inevitable in a multicultural setup but if one does not "move away from the anachronistic, sentimentalized notion of home as a safe haven, to explore how home can become" (Hua) or if one fails to acknowledge one's dual identity, the borders are simply going to multiply. The straightforward words of 'assimilationist' Mrs. Azad are aptly indicative of the model immigrant in a multicultural framework :

> Listen, when I'm in Bangladesh I put on a sari and cover my head and all that. But here I go out to work. I work with white girls and I'm just one of them. If I want to come home and eat curry that's my business. Some women spend ten, twenty years here and they sit in the kitchen grinding spices all day and learn two words of English… The society is all wrong. Everything should change for them. They don't have to change one thing. That … is the tragedy. (Ali, p.114)

In both novels we come across perplexed characters in strikingly different setups – in *The Namesake* the setting is largely an upper middle class society, whereas in *Brick Lane* it is a lower middle class setting. Although their homes, professions and tastes are not alike, the characters of both novels experience the same anxieties because of their bordered existence. But the greatest similarity between the two works is the optimistic vision of both writers. The happy ending of the two works is a vision of a multicultural land not only the characters, but also the writers themselves have embraced. Thus both *The Namesake* and *Brick Lane* explore the politics behind hyphenated identities. In both the novels the novelists have identified the difficulties that arise from hyphenated identities. Yet

at the end of both works the reader can identify a process to overcome the difficulties a multicultural society imposes on its citizens. In this process an individual is bound to assimilate new cultures to survive, yet he cannot set himself free from the awareness of another culture which moulds him.

Notes

1   Gurinder Chadha was born in Kenya, and grew up in Southall, London, England. She began her career as a news reporter with BBC Radio, directed several award winning documentaries for the BBC, and began an alliance with the British Film Institute (BFI) and Channel Four. In 1990, Chadha set up her own production company: Umbi Films. She is the director of popular films like *Bend it like Beckham* (2002) and *Bride and Prejudice* (2004).

2   Raghav is a Canadian-Indian (his family originated in Uttar Pradesh in India), who was brought up in a trilingual community speaks English, French and Hindi fluently. He is a talented singer whose music is a fusion of R&B, Asian, a little Bollywood and a little rap…English and Hindi lyrics blending into a magnificent multicultural jamboree. *Storyteller* (2004) has been his most popular release.

3   Kalpana Chawla was an astronaut with NASA. She hailed from Haryana, India and perished in the Columbia space shuttle disaster.

4   *Desh* in Bengali means homeland.

5   In this essay I have looked at a particular section of immigrants from South Asia as depicted in *The Namesake* and *Brick Lane.* Thus the term diaspora here is linked only with this group of people.

6   The hosts here are the original inhabitants of a particular country.

7   A snack sold on the pavements of Kolkata. It is a spicy mixture of puffed rice, peanuts, mustard oil, etc.

8   A literary magazine published from Kolkata.

9   Bangla Town in Britain is inhabited by a large number of Bangladeshis and hence the place is called Bangla Town. Edison in the United States is the home of many Indian (Gujrati) immigrants.

10 I have used 'whiter' here to signify the dominant culture of First World host nations as this culture is quite different from the culture shared by the non-whites.

11 Ali could have replaced Nazneen's lover Karim with a white British figure. But she refrains from doing so to portray a more vivid picture of the Bangladeshi world in Britain.

12 Jhumpa Lahiri uses gray to denote the America where Ashok had not yet landed. I have used the same word for the traditionalists as even after staying in the host nation for decades, they barely try to associate themselves with the host culture.

13 Ashima and Ashoke feel distanced from their children who sound all – American. So they enroll disinterested Gogol and Sonia in "bor-*ing*" Bengali classes and Chanu teaches Shahana and Bibi *Amar Shonar Bangla* (the national anthem of Bangladesh written and composed by Rabindranath Tagore) to impose the lost culture on them. Sonia prefers hair colour and "argues violently" with her mother. Similarly Shahana wants to wear tight-fitting jeans which Chanu vehemently opposes) Ashima and Ashoke too feel distanced from their children who sound all too American. So they enroll disinterested Gogol and Sonia in "bor-ing" Bengali classes and Chanu teaches Shahana and Bibi *Amar Shonar Bangla* [12] to impose the lost culture on them. Sonia prefers hair colour and "argues violently" with her mother. Similarly Shahana wants to wear tight-fitted jeans which Chanu vehemently opposes.

14 'Paki' does not anymore refer to an emigrant from Pakistan. It was perhaps initially used to derogatorily refer to the conservative Pakistanis who first came to Britain, but now the word is used as a hate word to designate emigrants in general.

15 I have used this quote as in the next section I am going to focus on Gogol who represents the voice of second generation emigrants. Gogol's name is symbolic of the dual identity which torments him for the larger part of the novel.

16 Here I am referring to hyphenated identities like "American-Indian" or "British-Bangladeshi" as borderline identities. Generally such identity is attributes to the second generation.

17 The film *ABCD* also traces the conflicts between first-generation and second-

generation immigrants in America.

18   According to the *Ramayana* it is only after crossing the sacred border that Lakshman drew that Sita was kidnapped by Ravana

19   An angry Ashok used the words when Gogol decided to change his name.

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Modernity and its Discontents: Studying Environmental History of Colonial and Postcolonial Bangladesh

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Abstract

In the context of rapid environmental changes in modern Bengal and Bangladesh, this paper suggests that the problem of well-being—eg. availability of and entitlement to food, nutrition and social and economic stability—in the region has been intimately related to declining ecological conditions. The paper then offers a critique of an all-pervasive modern knowledge and modernization process that contributed towards this ecological decline. Referring to the fact that the ontological connotation of modernity excluded environmental considerations, this paper argues that contemporary environmental crisis can be effectively dealt with by an holistic approach through fostering 'ontological unity' which refers to a state of internally coherent relation between various branches of knowledge.

<div align="center">

O Moonsheegunge, thou spot beloved
Of paddy-bird and duck;
Where all the land is water,
And all the water's muck;

Where never, by remotest chance,
A Sahib shows his nose;
And where there's no society
But that of Ram Nath Bose!

What have I done, relentless Fate,
That thou shouldst stick me here,
Remote from horses, dogs, and men,

</div>

From all I hold so dear?

As I sit in the verandah
A-smoking my cheroot,
I come to the conclusion
I'm a miserable brute.

There's Jones has gone to Shikarpore,
There's Smith at Spinst'rabad,
While I am left to linger here
And probably go mad.

To post a European here
Is cruelty refined;—
'Tis rigorous imprisonment
with solitude combined.

O may some future ruler
In charity expunge
Thy name from each gazettee and map,
"O slimmy Moonsheegunge!" (CS., 1896, 65)

The above poem was written by an English officer of the Indian Civil Service in the 1860s while he was posted in Munshiganj, a small town near Dhaka. That this poet-cum-civil servant really thought he was going insane became clear from an incident that took place about the same time he wrote the poem. One day he went hunting in a nearby district where there was plenty of deer in the forests. As the evening was setting in, he was only able to wound a swamp deer by gunshot. Since the deer managed to flee into the jungle, he began to search for it next morning by setting the entire jungle on fire. He described the event in the following manner:

As expected the jungle was not everywhere dry enough, but when the fire did get a good hold it was a sight to watch, now burning low in the short grass, then suddenly catching some high bush and leaping up, sputtering triumphantly as if in delight at finding something worth burning, and gradually advancing till a clear space was left...' (CS, 1896, 65)

Because of the 'Prairie fire', however, the deer disappeared. And so ended the story, but it remains as an interesting example of the different ways in which the ecological system of nineteenth-century Bengal was damaged. This particular instance of course typified the way in which the modern man's alienation,

emotional upsurge or possibly psychic malfunctioning manifested itself at its worst. But this was one of instances of its kind; by the late nineteenth century the impact of the forces of modernity on the environment was remarkably felt everywhere in what is now Bangladesh. The deltaic ecological system, particularly the water regime, deteriorated to a great extent by the late-nineteenth century. This was largely caused by extensive railway and protective embankments which crisscrossed the country leading to water logging, unpredictable flooding due to the bursting of embankments, absence of overflow irrigation, declining rate of spatial spread of silt and the raising of river-beds. The problems caused by embankments were complicated by the spread of water hyacinth, which choked all types of water bodies affecting water transport and agricultural fields from the first decade of the century. The combined effect of the presence of the embankments and the water hyacinth was reflected in lower agricultural output, abandonment or non-utilization of land leading to the growth of cultivable waste, and the spread of a number of fatal water-borne diseases. (For a detailed study of the state of the water system and the havoc caused by embankments and water hyacinth in early twentieth century Bengal, see Bentley, 1925; Iqbal, 2005; also Iqbal, 2006)

Keeping in mind such environmental changes during the colonial period, this paper proceeds on the assumption that the problems of well-being, eg. availability of and entitlement to food, nutrition and social and economic stability in the region was intimately related to deteriorating ecological conditions. The paper also offers a critique of the all-pervasive modernization process that contributed towards such ecological decline.

It is a well-known fact that the modernization process that was initiated during the colonial period was perpetuated by the western-educated Bengali middle class. In nineteenth-century Bengal, the foremost problem of the middle class seemed to have been its failure to develop a critique of the emerging modernity. The uncritical adulation of Western scientific progress by nineteenth-century Bengali bhadralok was transformed into a critique of the same only in the early twentieth century. The critique, however, did not reject or question the essential features of Western science and technology. Instead, it assumed that modern science was no monopoly of the West and could be directed towards 'deriving a programme commensurate with the aspirations of the Indian people'. Along with attempting to 'neutralize the cultural import of the term "modern science"', this program represented science as 'morally worthwhile and politically emancipatory' (Raina, D. & Habib, S. I. (1996, 31). In this sense, Western science itself was above any doubt; the causes of the failure of social and economic

transformation in South Asia should, therefore, be sought not in the introduction of Western/modern science itself, but in the colonial conditions which left the project of modernity 'incomplete'. Interpreted in another way, it can be seen that such acceptance of the Western modernization process has largely been informed by the classical Marxist approach which eagerly welcomed British rule in India as a prelude to a proletarian revolution. As Marx remarked, 'England has to fulfil a double mission in India: one destructive, the other regenerating the annihilation of old Asiatic society, and laying the material foundations of Western society in Asia'. (For a critique of the Marxist approach, see Chakrabarty, 2002, 21-29)

A fundamentally different critique of modernity was offered by a group of radical intellectuals who questioned the claim of objectivity and universality of the European Enlightenment and the modernity that resulted from following such a path. It is argued that the Enlightenment was a Eurocentric historical experience and the relevance of modernity in the non-Western world became dubious precisely because it was essentially embedded in a sense of superiority of the colonizers who found modernization the means of dominating the colonies as well as sustaining a self-satisfying 'civilizing mission' (Said, 1978). Such a critique of the Enlightenment is mostly offered by subaltern and post-modern historians who question the validity of the grand narratives of modernity or nationalism. An extension of such an assertion is the attempt to drive the discourse of the Enlightenment and modernity out of the erstwhile colonial world to its place of origin, that is to say, 'provincializing Europe'. (Chakrabarty, 2000)

Some scholars have sought a middle ground between such diametrically opposite representations of the modern and the traditional. For instance, Ashis Nandy (Nandy, 1988) argues that since India was exposed to Western knowledge for about six hundred years it had developed the capacity to appropriate Western knowledge within its own traditions of knowledge. He, therefore, suggests that India did not have to necessarily reject modern science completely and fall back upon the purity of its traditional systems of knowledge. Instead, it was able to 'choose the option of creatively assessing the modern system of knowledge, and then integrating important segments of it within the frame of its traditional visions of knowledge.' Nandy further suggests that 'the Indic civilization today, because it straddles two cultures, has the capacity to reverse the usual one-way procedure of enriching modern science by integrating within it significant elements from all other sciences - premodern, non-modern and postmodern - as a further proof of the universality and syncretism of modern science.' (Nandy, 1988). Thus, a creative engagement between the tradition and the modern is

emphasized, signifying that different systems of knowledge are not mutually antagonistic. But the problem with this discourse of bridging modernity and tradition seems to be that its efficacy in addressing the most pressing issues of human well-beings, particularly the relationship between man and nature, can not be verified precisely because, in the wake of the monolithic process of modernization, this synthetic approach has not been put into practice either in the colonial period or in the five decades of the postcolonial period. If it has taken us several decades to formulate a substantial critique of modernization, then it will take a similarly long time to for us to identify the merits and demerits of the proposed synthesis between modernization and tradition.

In the meantime, from our reading of historical developments in colonial Bengal, it may be argued that irrespective of the total acceptance or denial of either modernity or tradition, or of the proposed synthesis of the two, the problem of human well-being will remain unresolved until the problem of the *unity of knowledge* itself is restored, be the knowledge modern or traditional. By *unity of knowledge* we refer to a state of internally coherent relation between various branches of knowledge, in the absence of which disciplines either become mutually exclusive or tend to dominate each other, resulting in an interdisciplinary fissure in the practical world. The consequence of this disunity has a direct bearing on man's relations with nature and hence his well-being. For example, in a deltaic landscape such as Bengal, the free flow of water bodies and proper drainage may be considered simultaneously important for cropping patterns, food productivity and human health. If the idea of the *unity of knowledge* however, were properly appreciated, a medical doctor would focus on the free flow of water as well as his professional remedies. Similarly, an engineer who was trained in building railways or highways would take every precaution to allow as much freedom for water as possible. In this sense, both the doctor and the engineer, who have different professional expertise, could meet on a common ground. But if they fail to appreciate the relationship between disease, crop production and the free flow of water, both nature as well as its endowment could be affected.

In other words, traditional South Asian society, like all other traditional societies, does not seem to have struck a perfect harmony among different branches of knowledge. But it seems plausible that in the pre-industrial world and in a world where fragmentation of knowledge into innumerable sub-branches occurred, the human and the natural world had more mutual proximity and did not have to suffer the consequence of conflicting relationship among mutually exclusive disciplines. With the arrival of modernity, with all its disciplinary

specializations, the inherited knowledge about man-nature relationship faded. Occasional attempts to restore such a balance have failed painfully in the face of either the apparently lucrative ready-made solutions offered by modernization or by ghastly historical counter-developments. For instance, in 1846, a committee, appointed to examine the problem of embankments of the rivers of Bengal, made some recommendations which presented a remarkable conceptual challenge to the emerging drive toward modernization. After pointing to the manifold demerits of embankments for the water system of the Delta, the Committee, comprising of two engineers and a botanist, proposed a 'return to that state of nature, which, in their opinion, ought never have been departed from.' To achieve this goal, the Committee recommended the total removal of all existing embankments to allow the free flow of water. The proposed system, to be built in consonance with 'local experience', amounted to reversing the existing system of embankment by substituting them with drainage. (Government of Bengal, 1846). But the possibility that arose out of the recommendations was soon overshadowed by the emergence of the railways which, with certain aspects of scientific wonder and a powerful capitalist lobby attached to it, had to be built on high embankments. 'Tradition' was easily replaced by a 'science of steam engine'.

The problem of *disunity of knowledge,* largely informed and nourished by a deformed modernization process, remains unresolved in South Asia, as do the problems associated with it. To be specific, in Bangladesh, high-embankment railways and motorways continue to encroach into the landscape and in the popular mind-set. At the same time, because of the success of plant genetics in coming up with hybrid rice, for instance, the focus on sustainable ecological conditions for rice production has been replaced by attention to the emancipatory power of genetic science which can in some way compensate for the loss of rice due to ecological deterioration. However, in a practical sense, human well-being is not entirely dependent on a high level of food production or resultant consumption, but also on health, for example. Since *knowledge* remains disaggregated at its roots, an overwhelming faith in modern medicine or the linear sophistication of the methods of treatment are sustained without any appreciation of the ecological sources of diseases. In the same vein, recurring devastating floods and water-loggings are dealt with not by removing the obstacles to the free-flow of the water bodies of the Delta, but by technology-intensive and hugely expensive river training and embanking plans. Thus, in a cyclical order, one adverse impact of modernization is dealt with by another modern remedy, leaving a gap in between. In other words, in the absence of a holistic approach, the more society and the landscape became modernized, the

more the idea of ontological unity weakens.

Such perceptual anarchy has, however, provoked debates about reviving the possibility of the *unity of knowledge.* Part of the debate draws inspiration from metaphysics. It is argued that metaphysics is capable of bringing unity in knowledge since it 'stands as a universal science which provides the general background for each science and which brings to light the universal and symbolic significance of the discoveries of each science, a process which the sciences cannot carry out themselves by virtue of the self-imposed restriction of dealing with facts and generalizations or mental constructions based upon them'. (Nasr, 1968, 129). Nasr places God at the centre of this 'universal science of metaphysics'. He points out that whether one pollutes water resources in a single bombing or does so over a twenty-year period, the result is essentially the same: man is waging war against nature. In the two cases, the net result is same for in both instances 'man is waging war against nature'. Nasr then argues that 'there is no peace among men unless there is peace and harmony with nature. And in order to have peace and harmony with nature one must be in harmony and equilibrium with Heaven, and ultimately with the Sources and Origin of all things.' (1968, 135)

Another perspective on the possibility of the restoration of u*nity of knowledge* is rather earthly. It finds metaphysics as merely a factor in, rather than something capable of presiding over, the process of *unification*. Edward Wilson thus declares that 'science offers the boldest metaphysics of the age'. If for Nasr, it is *Sapienta* or the Universal Wisdom which is capable of restoring the *unity of knowledge,* for Wilson the key to *unification is Consilience* or the scientific method of the inter-linking of disciplines. Wilson argues that most of the pressing issues, including environmental problems and endemic poverty, that torment humanity daily, cannot be solved without integrating knowledge from the natural sciences with that of the social sciences and humanities. He remarks that 'only fluency across the boundaries will provide a clear view of the world as it really is, not as seen through the lens of ideologies and religious dogmas or commanded by myopic response to immediate need'. (Wilson, 1998, 11-12)

From our reconstruction of the specific history of the 'modern' Bengal Delta, it becomes clear that pressing social and economic problems such as poverty and disease mainly originated in the deteriorating ecological conditions of the region. Nationalist agitators had a romantic as well as rational vision of a postcolonial world which would be free from poverty, hunger and disease. In the last fifty or thirty-five years of independence this dream has not yet been significantly realized. After decades of indulgence in political, social and cultural

discourses, it is now time that we also appreciate that most of the problems affecting human well-being have had their origin in the displacements of existing ecological regimes by a process of modernization which has been informed by neither *Sapienta* nor *Consilience*. It seems only reasonable that if we are to learn at all from history, it is not merely from historical change itself, but from the epistemological forces that have influenced this change.

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Asrayon- Rural Rehabilitation Program of the Government:

Contribution to the Quality of Life of the Poor

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Abstract:

Since landlessness is considered as one of the prime causes of poverty in Bangladesh, different governments at different times have initiated rural rehabilitation programs aiming to improve the quality of life of the poor through giving them access to land and housing facilities. Asrayon Project is one of such attempts providing shelter and self-employment opportunities to the landless rural poor.

Under Asrayon project, 49,090 landless families were rehabilitated during between 1997 to 2002. But no study has yet been carried out to assess its impacts. Observing this gap and realizing the importance of examining the performances and roles of this government-rehabilitation program, this study attempts to evaluate the Asrayon project in improving the quality of life of the rehabilitated poor. Ignoring the purely economic aspects, social aspects such as literacy, education, housing condition, food consumption, health and family planning services, water supply and sanitation have been appraised to analyze the changes in quality of life. Empirical studies in different Asrayon villages reveal that the social status of the beneficiaries has improved significantly. But it is perceived that there is lack of supervision, logistic and other financial support, which are essential to continue the benefits and thus to prove the program as an efficient tool for improving the quality of life of the rehabilitated poor.

Key Words

rehabilitation program, quality of life, rural poor, landlessness, housing.

Introduction

Bangladesh is one of the most densely populated poor countries in the world with a population density 839 per sq. km. About 36.0% people of the country earn less than US $ 1 per day, which is the international poverty line (UNDP, 2004) and about 14.2% households are landless (BBS, 2002). According to the Agricultural Census of 1996, about 67.36 % rural households are effectively landless with 10.18 % having neither homestead nor cultivable land and 28.06% having homestead but no cultivable land (BBS, 1996). Again, the Population Census 2001 reveals that from 1981 to 2001, that is to say, within two decades agricultural land ownership for rural households was reduced from 61.30% to 52.38%. Due to the vicious circle of poverty, marginal landholders have become landless and gradually homeless. As a result, in spite of different Government pro-poor initiatives, the number of landless and homeless households has been increasing day by day. But housing is a basic need; and it is the fundamental responsibility of the state to provide shelter to its citizen. Keeping this in mind the Government of Bangladesh has initiated and enacted different laws and policies in favor of the poor, especially for the rural landless and homeless for increasing their access to land and land-base services in order to reduce the plight of poverty. Different rural rehabilitation programs have been initiated to provide land and shelter to the landless poor. At the very beginning of independence (1972), the Government of Bangladesh initiated the rehabilitation program by establishing 'Cluster Villages' in Govt. *khas* land (Project Proforma, Asrayon, 2000). The initial program at rehabilitation was followed by a series of land reform initiatives that took different names in different Government regimes but all aiming at poverty alleviation. At present the program of rural rehabilitation through *Adarsha Gram* and Asrayon or *Abashan* projects are being carried out by the Ministry of Land and by the Office of the Prime Minister.

Under the Asrayon project, 49090 landless families in 4909 Barracks were rehabilitated between July, 1997 to June, 2002 (PP, *Abasan*, 2000). But no study has yet been carried out to assess important issues like 'what extent the program has attained its goal and objectives in improving the socio-economic status of the rehabilitated people and what are the views of the rehabilitated people about the program'.

Observing the above-mentioned gap, this study realized that an evaluation of the performance of the Asrayon project in improving the quality of life of the poor was immediately needed. Though the quality of life comprises a wide

dimension, including social, economic and physical aspects, due to its limited scope, this study is restricted to the social aspects only. These consist of literacy, education, housing condition, food consumption, health and family planning services, water supply and sanitation. Impacts of Asrayon project in all these aspects have been assessed to evaluate the contribution of the project in improving the quality of the life of the landless poor. It is expected that the outcomes of this research will not only led to an assessment of the performances of the Asrayon project, but will also give an indication of its limitations in improving the quality of life of the rehabilitated rural poor.

Asrayon - Studied Project

Asrayon is a project that aims to provide shelter and self-employment to the landless rural people and is sponsored by the office of the Prime Minister all over the country. The overall goal of the project is to alleviate poverty of the landless rural poor by providing shelters and imparting training on skill development for income generating activities and to provide small credit, basic education, primary health care and family planning services (PP, Asrayon projects, 2000). The project was launched in 1997 and completed in 2002. Within this five years time period, it has rehabilitated 49090 landless and homeless families all over the country. Project implementation phase i.e. distribution of shelter and housing facilities have been completed but human development and income-generating activities like provision of health and family planning services, education facilities, cooperatives formation and credit supply under the project have been continuing. It should be mentioned here that Asrayon was a project initiated by the Awami League Government and with the change of Government in 2001 the BNP-Jamat alliance which took ochanged the name of the project from Asrayon to Abashan. In fact, except name, all components of Asrayon and Abashan projects (i.e. goals, strategies, approach of works) are the same.

To implement the program a three tiers taskforce was formed at the central, district and upazila levels. Upazila Administration is the prime authority for its implementation and maintenance. 11 upazila level government departments as well as Local Government bodies and local social elites are directly involved with this program. Similarly, to supervise the upazila level taskforce a district level task force has been formed that includes 18 departments and two social elites. There is a Central Advisory Council for guidance and supervision of Asrayon-project activities (PP, Asrayon, 2000).

Each family rehabilitated in an Asrayon village has got a room with attached kitchen, having total 261 sq. ft. dwelling space in a 10 rooms barrack house. Two block latrines and one tube-well are provided for 10 families. The monetary value of the facilities given to each family is about Tk. 25,900. Each of the village comprises a community center and a big pond. Mosques, graveyards and schools or provision for schools exist in some of the villages, depending on the availability of land.

Approach of the Study

There are 588 Asrayon villages in 64 districts. Among these villages, three Asrayon villages in Sherpur district (Baradubi Bekikura and Charramjagannath) and one in Comilla district (Karimpur) were selected as study areas. Out of 230 households in three Asrayon villages, total 110 (48%) households were selected through random sampling for questionnaire survey. This study is based mainly on primary data. Two prime tools of data collection were structured questionnaire and checklist. Data related to the change in different aspects of quality of life was collected through structured questionnaire survey among the rehabilitated people. Further, concerned project officials were interviewed to collect supplementary information. Observation and Key-Informants discussion were two other important ways for better understanding of the project and its impacts.

It was noted earlier that the notion of the quality of life is a comprehensive and wide concept and has multidimensional aspects. But this research focuses on the social dimension of quality of life only. To assess the improvement in quality of life this study comprises of indicators such as education, health and sanitation, family planning and nutrition, safe drinking water and toilet facilities, housing condition and social life of the rehabilitated people. Among the basic needs, income and food consumption were excluded here. Generally, most rehabilitated families' incomes are different in different months or seasons. They are hardly able to recall their exact income. Further, there was no baseline survey to know the income of rehabilitated people before their rehabilitation. Therefore, it was not possible to measure the change in income. It also proved very difficult to get food consumption data. Therefore, considering the limitation of data collection and time constraints this research focused only on the social dimension of the quality of life. In order to get a vivid picture of each of the selected parameter of the quality of life, a series of both qualitative and quantitative questions was distributed among the rehabilitated people.

Information collected by questionnaire survey was organized, processed and analyzed with the use of Statistical Package for Social Scientist (SPSS). The graphic software MS Excel was used for graphical presentation.

Asrayon'S Contribution To The Quality Of Life Of The Poor

Life expectancy, income and education are generally used to formulate the human development index of a nation. Moreover, recent programs of different development organizations such as United Nations, World Bank, and Asian Development Bank have emphasized issues like health and nutrition, sanitation, water supply, women empowerment, human rights and such other aspects to focus on the human development level of a community. All these social and economic indicators of human development ultimately indicate the quality of life of the community. But in case of many of these indicators, assessment of any changes requires long-time observation. Therefore, by ignoring many of the prime dimensions of the quality of life (e. g. life expectancy), this research concentrated its focus on the indicators which directly or indirectly affect the quality of life. It has already been mentioned that these indicators include education, health and sanitation, family planning and nutrition, safe drinking water and toilet facilities, housing condition and social life of the rehabilitated people. In fact, due to the absence of access to all these facilities the poor are not only left vulnerable to social exploitation but also are used and misused, dominated and exploited by the so-called elites of society. So programs intending to eradicate poverty should have concentration on improving the access of these services and facilities to the poor. The Asrayon project has a lot of inputs to improve the quality of life of its beneficiaries and thus eliminate poverty.

Contribution to Literacy and Child Education

Education is the backbone of the nation. Children's education brings long-term social and economic benefits to a family as well to the nation. An educated nation is a developed nation. Education is the key focus of human development and poverty alleviation measures. Education improves the quality of life, eliminates all types of ignorance and superstition and hence illuminates a nation. For this reason a Government must prioritize education. As in other poverty alleviation programs, education has been given priority in the Asrayon project. Impact of the project in improving literacy of the people and facilitating children's education is examined below:

Table1. Literacy Rate of the Rehabilitated People According to Their Age Group						
Age group	Level of Literacy					
	Illiterate		Literate		Total Population	
	Population	%	Population	%	Population	%
0 - 5	63	97	2	3	65	100
6 - 10	15	16	77	84	92	100
11 - 20	26	27	70	73	96	100
21 - 40	86	52	79	48	165	100
41 - 60	45	67	22	33	67	100
Above 60	5	62.5	3	37.5	8	100
Total	240	49	253	51	493	100

Source: Field Survey, February, 2005.

The overall literacy rate of the project people was found to be 51.1% and the literacy rate of the population age 5+ year is 58.7%; while, the national literacy rate (5+ years) was 42.5% (BBS, 2001). The literacy rate of the project is much higher than the national level. The reason is that the project people are required to recognize the signature for getting credit though this rule could not always be followed strictly. For this reason most people who are interested in getting credit learn how to do signature and hence the literacy rate has increased. It should be noted that here examination on the impact on literacy rate included the entire population, starting from the ability of signature giving to higher studies.

It is noticed from the table that the literacy rate of year 6 - 10 age group is the highest because most of the 6 - 10 year children got admitted to school after coming to the project. It was also found that the literacy rate decreased among the people belong to relatively higher age groups. This picture indicates that in recent years the necessity of education is being acknowledged by the distressed rural people and the project people are becoming more and more conscious about educating their children.

Table2. Level of Education with Age Group Distribution						
Age group	Illiterate	Literate				Total
		Only sign	Class I – IV	Class VI– X	SSC/HSC	
0 – 5	63	0	2	0	0	65
6 – 10	15	1	76	0	0	92
11 – 20	26	16	41	12	1	96
21 – 40	86	45	26	8	0	165
41 – 60	45	14	5	3	0	67
Above 60	5	2	0	0	1	8
Total	240	78	150	23	2	493

Source: Field Survey, February, 2005

It is evident in the study area that out of 92 children of year 06 - 10 age group, about 83 % were admitted to school, which is very significant compared to the national level. At the national level the enrollment of year 5-9 age group children is only 49.69 % (BBS, 2001). Out of 188 children of year 06 - 20 age group 77 % read in school or got admitted to school at a certain period of their lives. It was observed that the people of Asrayon villages were very much interested in educating their children. When they were asked about their awareness of education they claimed that the training, motivation from visiting officials, and government facilities had raised their awareness about education. So it is clear that there was an attitudinal change towards education among the project people. But it should be mentioned here that the awareness generation for child education did not result due to project activities only. Further, Compulsory Primary Education Program of the Government, awareness building and motivational programs of government and non-government organizations, and provision of different facilities (free books for primary students, scholarship, incentives for parents in the form of rice or wheat etc), enhanced the level of child education in rural areas.

Contribution to Health Care and Family Planning Services

Lack of knowledge about health, family planning and sanitation and lack of

access to health and family planning services cause severe health problems, malnutrition, child mortality, and high population growth. Poor health and sanitation conditions eventually cause low level of life expectancy, one of the principal indicators of the quality of life. Due to the absence of health care cervices, the poor often suffer from various simple and preventive diseases which reduce their productivity. Consequently, all poverty alleviation efforts prioritize health issues. The rehabilitated landless rural poor were deprived of health and family planning facilities before coming to the Asrayon village. But at present, they are being able to access health and family planning facilities in the villages. It is mandatory for the Health and Family Planning staff of the concerned area to provide health care and family planning services to these village people regularly.
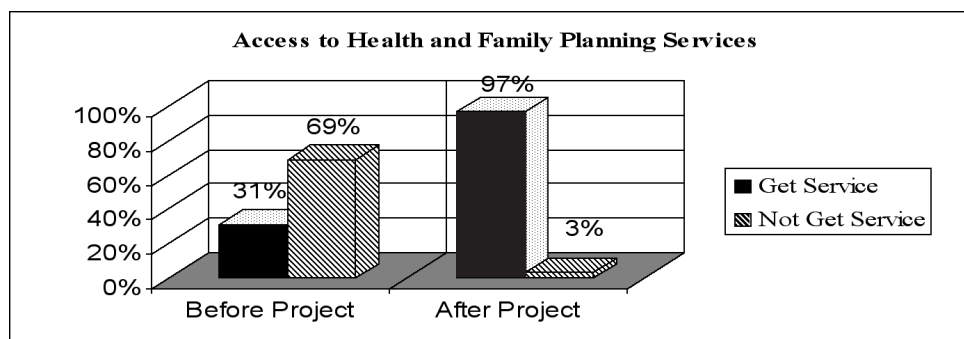
Source: Field Survey, February, 2005

Fig. 1 Access to Health and Family Planning Services

It was found from the field survey that 97 % respondents replied that they were getting health and family planning services after being rehabilitated in the Asrayon project (Table 3). But before being members of the project only 31 % of households got health care facilities. So this is a remarkable contribution of the project. Due to the availability of health and family planning services, most household members, especially female members, knew well about primary health care needs. It should be mentioned that before entering the project the beneficiaries lived in different locations, and that health and family planning staffs did not visit every location. So, most of them did not have access to facilities. But as it has become mandatory for health and family planning staffs to visit Asrayon project, the rehabilitated poor are now getting these facilities easily. Moreover, as they now live in a single complex, family planning staff can serve them all through a single visit. But most households complain that the concerned health and family planning staffs only visit them occasionally instead of regularly.

Contribution to Water Supply and Toilet Facilities

The rehabilitated people claim that there has been significant change in their sources of drinking water and the use of toilets after coming under the Asrayon project. The changes are stated in the following table and diagram.
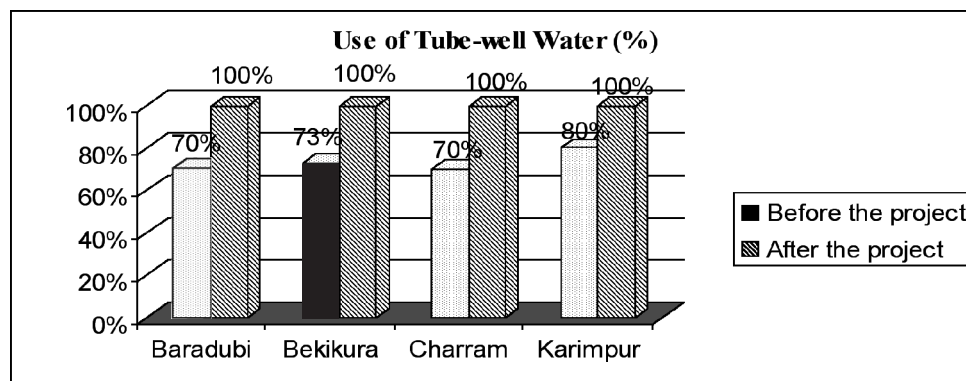
Source: Field Survey, February, 2005

Fig. 2 Distribution of Households by the Use of Tube-well Water

From the field study it was found that after entering the project 100% households have been using tube-well water for drinking whereas, before joining the project the figure was that only 73% drank tube-well water and the rest of the households used pond/river/stream/well water for drinking. It is obvious that access to pure drinking water has improved the health condition of the people and has reduced the extent of water-borne diseases. This positive impact of Asrayon has been appreciated by the almost all people of the project.

Asrayon's contribution is being highly praised not only for providing access to pure water supply but also for ensuring access to hygienic toilet facilities, which were not available previously.

The condition of toilet facilities before the project was initiated was unhygienic. Only 7 % households used sanitary latrine and 93% other households used *katcha* or open toilets (Table 3). But after the project 100% households have been using hygienic, water-sealed toilets. So in the case of water supply and sanitation Asrayon has had a significant impact, which has directly influenced the health and productivity of the poor and is improving their quality of life.

Table 3. Types of Toilets Used by the Rehabilitated People					
Type of Toilet use (%)					
Name of the Village	Before the project		After the project		Total Number of HH
	Sanitary	*Kaccha* and Open toilet	Sanitary	*Kaccha* and Open toilet	
Baradubi	3	97	100	0	30
Bekikura	7	93.	100	0	26
Charramjagannath	4	96	100	0	24
Karimpur	13	87	100	0	30
Total	7	93	100	0	110

Source: Field Survey, February, 2005.

Contribution to Housing Condition

Housing provides shelter, safety, security, comfort and decent living to people. Actually, all activities, whether economic or social ones, are centered around the house. It provides shelter and accommodation, social status and dignity, and overall peace of the family. For this reason housing condition has been considered as one of the prime constituents of the quality of life. Better housing ensures better quality of life. It is evident from the analysis that the housing condition of the rehabilitated people is now much better than the condition they faced where they used to live before (Table 4).

Before, 83 % of the respondents lived in houses made with roof-material comprising straw or thatch whereas, after being rehabilitated by Asrayon project, 100% live in houses made of CI sheet (house is provided by the Government). The fence materials of the previous houses were mainly straw or thatch or bamboo or mud whereas, CI sheet is being used by all after they had become part of the project. About 95 % of the total respondents acknowledge that their present housing condition is better than the previous one. Moreover, 62 % respondents said that the space per person in the present house was more than what they had in the previous house. So the project is highly appreciated for its contribution to producing better housing facilities to the people.

Table 4. Roof and Fence materials of House before and after the Project								
Material	**Roof of the House**				**Fence of the House**			
	Before project		**After project**		**Before project**		**After project**	
	f	**%**	**f**	**%**	**f**	**%**	**f**	**%**
CI Sheet	15	17	88	100	2	2	88	100
Straw/thatch	73	83	0	0	38	43	0	0
Bamboo	0	0	0	0	41	47	0	0
Clay/mud	0	0	0	0	4	5	0	0
Others	0	0	0	0	3	3	0	0
Total	88	100	88	100	88	100	88	100

Source: Field Survey, February, 2005

Contribution to Social Life

All of us are members of society but the status of all members of our society is not equal. The status of social life of a person depends on different indicators such as educational status, wealth and assets, house and housing, honesty and dignity, family and family background, political affiliation, occupation, morale strength and courage, and so on. The people of Asrayon village were once landless, homeless and assetless. Most of them were floating and had no social identity. After the project was initiated they have become owners of house and land, and this has given them social identity and a permanent address. Nobody can consider them as part of the floating population right now. For this reason except for a few, the majority of the project people are happy with their present social life. The study noticed that 88% project people feel that their present (after being rehabilitated) social life was better than the previous one, 7% feel there is no change and 5% think that their social status deteriorated after being rehabilitated (Table 5). In fact, it is only those who were in a relatively better position before coming to the project possess negative views regarding the changes in their social status.

It is clear from this analysis that the social life of the project people has improved significantly. In addition to the ownership of house and land,

there are some other reasons for the improvement in their social life. The landless people are now more united and possess stronger community ties than before as they live together in the single complex. In different groups they have been getting credit and training that have increased income-generating opportunities and have improved human skills. Training has improved their knowledge about social and economic life. They have invested credit in enhancing income-generating activities and creating more employment. These inputs have increased their level of incomes to some extent. These, in turn, have improved their saving-generation capability and enhanced investment opportunities that have brought them more income and employment. This project has played a vital in for empowering the women by providing them training and credit with the male members. By getting training and credit they are becoming more active and aware about society and their own rights.

Table 5. Present State of Social Life Compared to Previous Condition				
Name of the Village	State of social life in percentage			Total number of Household
	Improved (%)	Deteriorated (%)	No. Change (%)	
Baradubi	83	10	7	30
Bekikura	96	0	4	26
Charramjagannath	84	8	8	24
Karimpur	90	0	10	30
Total	88	5	7	110

Source: Field Survey, February, 2005

Table 6. Relationship between Activeness and awareness with Training and Credit		
Dependent Variable = Activeness and awareness		
Independent Variable	Correlation Coefficient	Significant level (2- tailed)
Training	0.344**	0.01
Credit	0.344**	0.01

** Correlation is significant at 0.01 level (2- tailed)

The correlation result in table 6 shows that training and credit are significantly related with activeness and awareness-building of the women. It implies that the contribution of training and credit components of the project to women empowerment is significant. Further, in the community center of the project they are now watching television, which has improved their social awareness and general knowledge. In these ways, all the efforts of Asrayon project have jointly contributed to enriching the social status as well as the quality of life of the rehabilitated poor. In the box given below is the comment of a beneficiary of the Asrayon project. It implies clearly the extent of the contribution of the project in improving the quality of life of the rehabilitated rural landless poor.

Box 1. Impact of Asrayon in Social Status
Julekha (35) said that "I am an abandoned woman living in the Bekikura Asrayon project since 2000. The project has failed to bring any positive change in my economic condition but the training and credit have enhanced my opportunities for survival. The project has given me land and house. Now I can easily collect safe drinking water and get access to sanitary latrine. The project has induced significant positive change in my social life. Now I am able to send my two daughters to school and they have opportunity to watch television. I dream of educating my daughters and marring them to well-off families."

Conclusion

The rural rehabilitation project Asrayon was designed for landless and homeless people in rural areas of Bangladesh. On the basis of the views and opinions of the rehabilitated people in the Asrayon projects, this study has evaluated the performance of the project in improving the quality of life of their members. It is found form the study that the main achievement of the program is to provide shelter to the landless and to give them dignity and a permanent address. It is evident from the study that the social status of the project people has improved significantly though they claim only marginal improvement in their economic condition. The literacy rates of the people and school enrollment have improved. The landless poor appreciate the project for providing them with better housing facilities, for giving them access to health and family planning facilities, safe drinking water, sanitation facilities, and recreational facilities. They claim that their social awareness has been raised significantly. The training component of the

project has enhanced their social awareness. So it can be concluded that the Asrayon project has played an important role in improving the social condition of the rehabilitated rural poor and in turns is contributing to improving the quality of their lives. But the informal discussions with the beneficiaries, key informants, and project officials and the observations of the researches denotes that in spite of inducing positive impacts in the various indicators of quality of life, the project is still suffering from numerous problems and shortcomings. Among the various problems, packaged-type training program, barrack-type houses for ten families, provision of very small amount of land to each household, lack of coordination and supervision, and inappropriate selection of project sites and beneficiaries in some cases have been listed as the salient problems. Though the provision of 8 decimal of land for each household is mentioned in the project proposal, in most cases 1 or 2 decimal of land was given to each family. The general tendency of ignorance and negligence about the existing project with the change of government was another prime problem identified. These issues need to be addressed and given the highest priority in order to accelerate the pace of improvement and enhance the quality of life of the landless rural poor and so as to make them self-reliant and help them come out of poverty.

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Expanding Trade Under a Free Trade Regime: Issues related to Market Access

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Abstract

Market Access issues are increasingly gaining importance due to their revival in the Doha Ministerial Declaration (DMD). Since 2001, the EU has adopted the Everything But Arms (EBA) initiative to allow developing countries increased access to its markets. The policy is expected to benefit poorer countries with increased volume of trade. Since a large number of exporters from developing countries belong to small and medium enterprises, the premise of this paper is to understand the impact of the EBA initiative on increased market access for small and medium-sized enterprises. This paper analyzes four selected export industries of Bangladesh: leather, knitwear, pharmaceutical and the shrimp processing industry and their exports to five EU countries: UK, France, Italy, Germany and Spain. Four categories of barriers were studied in this paper and in-depth interview techniques with top executives from 20 different companies were utilized. Each of these interviews took several days. Based on the responses, the paper shows that technical barriers to trade are the major stumbling blocks for the SMEs in Bangladesh. In most cases, cost of compliance, inadequate technical skills and institutional weaknesses are major problems. Among other types of barriers, the second most important one in terms of market access is related to customs and administrative procedures for customs valuation, classification, formalities, and rules of origin. Therefore, the World Trade Organization (WTO) should address these market access issues explicitly particularly from the perspective of small and medium-sized enterprises.

Key words

Market Access, Everything But Arms, Non-tariff barriers, Small and Medium-sized enterprises, Types of barriers.

Introduction

Despite the fact that new issues are increasingly at the centre of WTO activism (e.g. services, investment, intellectual property, competition policy, and so on); market access issues in merchandise trade have been revived in the Doha Ministerial Declaration (DMD)[1] , which sets out the mandate for negotiations on **'Market Access for Non-agricultural products'**. Trade preferences are considered as a fundamental component in the integration of developing countries particularly the least developed countries, into the world trading system (Brenton, 2003). Inconsistency in export success was observed under various trading schemes such as the Generalized System of Tariff Preferences (GSP) (introduced in the 1970s) and the most recent one, the EUs Everything But Arms (EBA) initiative that was commenced in 2001 (Brenton, 2003). It has been argued that in merchandise trade, developing countries could realize most gains from an improved market access regime (Lucian Cernat, *et al.,* 2002). Over the past decade, incidences of tariff restrictions have come down significantly and developed countries such as those in the European Union (EU) have come up with trading schemes like the EBA initiative allowing imports from developing countries at zero tariff. Hence, market access issues basically relate to non-tariff barriers such as standards, quotas, certification and regulations related to movement of goods and services. It has been observed that some of the expected gains from the removal of protection in textiles and clothing were offset by the use of anti-dumping duties and special safeguards (Lucian Cernat *et al.,* 2002). Stiglitz (2000) and Rodrik (2001) argue that new issues such as trade in services, investment and intellectual property rights and commitments resulting from the Uruguay Round were often poorly understood by developing countries and implementation has been made difficult by the lack of institutional and technical capacity. Furthermore, LDCs are not exempted from NTBs like standards, certification and other regulations which are permitted under several WTO agreements. While a set of the NTBs, for example, Sanitary and Phytosanitary Measures (SPS) are well accepted in the field of international trade; conforming to such standards on the part of exporters from LDCs was a major challenge. Many exporters, particularly Small and Medium-sized Enterprises (SMEs), find it difficult to follow such measures as either the initial investment is too high for them or requires a better skilled labor force who can understand and follow the rules set to produce their products. As a result, SMEs might not be able to compete with their larger counterparts.

This paper, therefore, examines market access issues between Bangladesh and the European Union (EU) and identifies the practical barriers for SMEs in four selected export industries of Bangladesh. The industries chosen are: leather and leather goods, knitwear, pharmaceuticals and shrimp processing. Five major EU importers[2] of Bangladeshi export products[3] were studied. The objective of the study is to generate a micro or firm level understanding to determine practical barriers to trade for SME producers in Bangladesh. This paper ultimately ranks market access issues for SME exporters from Bangladesh to suggest policy changes for future rounds of negotiation to provide a better prospect for expanding trade from least developed to developed nations.

Classification of NTBs

Non-tariff barriers (NTBs) can be segmented into four[4] broad categories. Each category represents a class of barriers. In this study we investigate which one of them is relatively more important or difficult to overcome from our exporters' perspective. Table 1 shows the four broad classes of non-tariff barriers.

Table 1: Classification of Non-tariff Barriers	
Types of Barriers	**Lists of items**
Type I	Government Participation in trade and restrictive practices (state aid, countervailing duties, state trading enterprises, government monopoly practices), customs and administrative entry procedures[5] (anti-dumping duties, customs valuation, classification, formalities, rules of origin)
Type II	Technical Barriers to Trade or TBT[6] (technical regulations, standards, testing, certification arrangement)
Type III	Specific Limitations (quantitative restrictions, import licensing, embargoes, exchange control, discriminatory sourcing, export restraints, measures to regulate domestic prices, requirements concerning marking, labeling and packaging)
Type IV	Import Charges (prior import deposits, surcharges, port taxes, statistical taxes, border tax adjustments, safeguard measures).

Source: Gallezot, 2003.

Both primary and secondary data were collected and utilized in this study. In-Depth Interviews of company executives of 20 companies (5 from each sector of the selected four industries - leather and leather goods, pharmaceuticals, knitwear and shrimp processing industries) were conducted from December 2004 to May 2005 to understand their viewpoints and to identify the barriers that were either barring their access to EU markets or hampering their exports to selected EU countries. Industry operators of both small[7] and medium[8] sized enterprises were interviewed from the leather and leather goods, shrimp processing and pharmaceutical industries. However, only small-sized enterprises from the knitwear industries were interviewed because it was difficult to find both willing and eligible respondents in the medium-sized enterprises in this industry. Finally, the paper utilized the responses from the top executives of these industries to rank the four types of barriers in terms of its effect in hampering smooth market access of their products to these five EU markets.

Section 2 of this paper briefly states the present status of trade between Bangladesh and the European Union. Section 3 identifies practical barriers in the selected four industries (i.e. leather and leather goods, knitwear, pharmaceuticals and shrimp processing) based upon industry responses and provides a ranking of these four types. Finally, section 4 incorporates policy suggestions in its concluding remarks.

2. Bangladesh - EU Trade Status

The Bangladesh export sector has undergone structural changes in the last ten years with a significant shift from jute-centered exports to ready-made garments and knitwear. The balance of trade with EU, over the years, remained hugely in favor of Bangladesh (3.3 billion euro in 2004) (www.eudelbangladesh.org).[9] The main items that Bangladesh exports to the EU are readymade garments (90%), frozen food (6%), leather, jute and tea.[10] The main imports from the EU consist of machinery and mechanical appliances (55%) and chemical products (14%).[11] In 2004, EU imports from Bangladesh were 4.2 billion euros and exports to Bangladesh amounted to 892 million euros.[12] The EU is the biggest export destination of Bangladeshi products (56%).[13] Bangladesh's exports towards the EU are intimately linked to the Community's Generalized System of Preferences (GSP) scheme. Products originating from Bangladesh are eligible for total suspension of import duties and quotas under GSP scheme. The Everything But Arms (EBA) initiative approved by the EU in 2001 further opens the EU market to Bangladesh by granting duty-free access to essentially all products from the least developed countries. As a SAARC nation, Bangladesh also enjoys the benefit

of regional accumulation of the rules of origin.

3. Practical Barriers in four industries - Leather, Knitwear, Shrimp Processing and Pharmaceuticals

Of the four types of barriers listed in Table 1, responses from industry executives were used to rank them in order of importance. In the following paragraphs, we present the analysis of various types of barriers that were observed while interviewing top executives of the four industries in Bangladesh. The analysis is based on twenty in-depth interviews of top executives of these industries.

3.1 Analysis of Type I Barriers

Type I barriers include government participation in trade and restrictive practices such as state aid, countervailing duties, state trading enterprises, government monopoly practices; and customs and administrative entry procedures related to anti-dumping duties, customs valuation, classification, formalities and rules of origin. Among these barriers formalities, customs valuation and rules of origin are the most important barriers in the leather and leather industry (40% industry responses) and in the knitwear industry (80% industry responses) whereas the rules of origin is the most important barrier in the shrimp industry (60% industry responses) and in the pharmaceuticals industry (80% industry responses).

Judging from the industry responses, **'formalities'** referred to formalities related to customs and administrative requirements for shipping, inspection and certification in the industry for leather industry. Lack of knowledge and training with respect to the use of shipping marks and putting hazardous materials shipping labels were also responsible for creating confusion in importing countries that ultimately hampered market access as it resulted in rejection of consignments. In terms of inspection certification, delays and improper surveillance of the inspection authorities in Bangladesh in providing certification and other related documents, complexity and cost of securing these documents served as a strong barrier towards accessing the EU market.

In the knitwear industry, our responses show that raw materials (fabrics) are mainly imported from China and India. During such imports, delays during custom clearance posed a major barrier, although it was more a failure of the host country than one emanating from the importing countries (known as barrier related to **'formalities'**). However, for the exporters this was a major cause of delay in fulfilling their export obligations in the EU markets and hence they were

unable to secure smooth market access in these countries. In general, shipments which exporters are supposed to get in 5-7 days were delayed by another 15-17 days which hampered the production process and ultimately posed a threat towards market access. For a small or medium-sized enterprise, this becomes a major barrier.

Poor '**customs valuation**' procedures are found to have created a significant obstacle towards export in EU markets. Due to poor customs valuation procedures at Bangladeshi ports, exporters were often unsure about the duty amount which affected their quality of bids and offers. This problem was very common in the leather goods industry. Similarly, in the knitwear industry, customs valuation was also identified as a barrier as exporters are unaware of the rules and practices needed to ascertain the value of products for customs purposes. The process of valuation used at Bangladeshi ports is not transparent for exporters and hinders their ability to ensure competitive bidding during negotiating export deals.

In the shrimp and knitwear industries, the '**rules of origin**' (Type I) was cited as an important barrier. Bangladesh cannot produce enough raw materials for the knitwear industry. Similarly, in the shrimp industry, production of shrimp is far below the processing capacity. As a result, these producers often import their raw materials from abroad. The rules of origin only recognize certain countries to enable to them to take advantage of EBA. This was cited as a barrier to market access by exporters. Haque (2004) has shown that shrimp processing firms operate only at 13% level of capacity due to acute shortage of raw shrimps. Compliance with strict rules of origin has also been considered a significant problem in the pharmaceutical industry as it requires major imports of chemicals to function.

3.2 Analysis of Type II barriers

Type II barriers include **Technical Barriers to Trade**-TBTs such as technical regulations, standards, testing, and certification arrangements. Among these instruments technical regulations, standards and certification arrangements are found to be the most significant barriers in the leather (80% industry responses) and pharmaceuticals industries (100% industry responses). In the knitwear industry, however, certification arrangement, standards and testing have been identified as major impediments towards market access (60% industry responses). Similarly, technical regulations, standards and testing are considered to be significant barriers in the shrimp processing industry (100% industry responses).

For leather industry, barriers related to 'certification arrangement' have been identified as significant impediments within Type II barriers. Most of this relate to certification for environmental-friendly chemical usage (e.g. preservative chemicals). In some EU countries, particularly in Germany, leather products have to be certified as AZO free. Many SMEs are not clear about the procedure required for getting such certification, and if they are aware, it is costly for them. In the knitwear industry, certification arrangement problem indicates holding of chemical certificates conforming to health standards in the selection of fabrics (mainly colored fabrics). Most of the time, importers express their preferences regarding companies which provides such certification. This increases the cost for exporters and reduces their competitiveness. In the Pharmaceutical industries, certification arrangements have created significant problems because of high cost and stringent standard requirements. In addition, product registration fees for some of the pharmaceutical products are extremely high (ranging from US$10,000 to US$40,000).

In the leather industry, container rejection based on non-conformity to standards, a Type II barrier has been identified as another barrier in accessing EU markets. Such rejections often cost nearly US$3000 per 20 feet container (in-depth interview results). For a small and medium industry this acts like an entry barrier in the market. In the knitwear industry, importers often have their own preferences in the usage of fabrics. They specify the type and make of fabrics to be used during their shipment which increases the costs of production and reduces flexibility in substitution between orders. Such preference or conditionality to use specific fabrics leads to reduction of profits and becomes an indirect barrier particularly for small and medium-sized enterprises. After a particular consignment is rejected under various standards and testing, exporters often try to rechannel the goods to other places but finding another buyer for these goods can be extremely difficult for small and medium enterprises. The surveys further reveal that a major reason behind cancellation or rejection of consignment is the failure of timely shipment of goods. However, for small and medium enterprises, meeting deadlines is often difficult due to reasons beyond their control such as non-availability of raw materials in the domestic market, delivery failures by small sub-contracting firms and delays in customs clearance for imported raw materials.

In the shrimp industry, 'technical regulations' related to the compliance with the SPS and TBT provisions such as HACCP (Hazard Analysis and Critical Control Point) and criteria set by the Food and Veterinary office (FVO)[15] are the

most important barriers in the Type II category. Complying with these standards requires adequate technical assistance and for small shrimp processing firms they became an entry barrier to the market. Consignment rejection was found to be a known phenomenon in the industry. Estimates show that costs of such rejection (for a 40 feet container) ranges around US$15,000 (in-depth interview results). Haque (2004) shows that training costs for HACCP compliance varies from US$250 to US$1,100 and operating costs for the same varies from US$11,400 to US$ 28,500 for majority of the firms. On an average, a shrimp processing plant has invested US$ 227,450.97 to upgrade its capacities to comply with the HACCP (Haque, 2004). In the pharmaceuticals industry, conforming to the strict conditions of the TRIPS (Trade-Related Aspects of Intellectual Property Rights) agreement and of compulsory licensing (known as barriers related to 'technical regulations') were identified as a Type II barrier. Similarly, traces of unauthorized antibiotics such as Nitrofural or presence of antibiotics above the safe limit have also been mentioned as reasons for consignment rejections. Since raw shrimp is produced outside these processing plants, it is difficult for small and medium processing firms to ensure quality control at the farm level. Large farms, on the other hand, can overcome such barriers by intensifying their production system. Consequently, small and medium processing firms consider it to be a barrier.

3.3 Analysis of Type III barriers

Type III barriers include **specific limitations** like quantitative restrictions, import licensing, embargoes, exchange control, discriminatory sourcing, export restraints, measures to regulate domestic prices, and requirements concerning marking, labeling and packaging. Of them, 'packaging, marking and labeling' related problems are found to create strong obstacles among these barriers in the leather (60% industry responses) and in shrimp processing industry (40% industry responses).

In the leather industry, it was found that because of inadequate training and lack of skilled labor force, SME exporters cannot properly meet the **packaging, labeling and marking** requirements required by respective importers. In addition, affixing these requirements imposes additional costs to exporters. Again, in the knitwear industry, lack of skilled manpower was the major cause of errors related to labeling and marking of products, and placing the required information, which causes withholding of consignments and sometimes consignment rejection, leading to major financial losses. In the shrimp processing industry, too, packaging has to be tailored (based upon the importers' requirements) and perfectly sealed.

Labeling and marking over each package and over the container are to be done according to the importing countries official languages. For small and medium enterprises this means additional costs for each consignment.

3.4 Overall Ranking of Barriers by Industries

This paper further attempt to rank the four types of barriers based upon industry responses. Table 2 shows the ranking of the types of barriers in the selected four industries.

Table 2: Ranking of the Types of Barriers by the affected groups in the selected industries							
Types of Barriers	**Ranking by the Small-sized enterprises in the selected industries**				**Ranking by the Medium-sized enterprises in the selected industries**		
	LI*	KI*	SPI*	PI*	LI*	SPI*	PI*
Type I: Government involvement in trade and restrictive practices, customs and administrative entry procedures	+	+++	++	++	+	++	++
Type II: Technical Barriers to Trade or TBT	+++	++	+++	+++	+++	+++	+++
Type III: Specific Limitations	++	0	+	0	++	+	0
Type IV: Import Charges	0	0	0	0	0	0	0

Note:
+ means the degree of barriers exists in each industry. 0 means not found to be applicable.
* LI = Leather industry, KI = Knitwear industry, SPI = Shrimp Processing industry,
PI = Pharmaceuticals industry
Source: In-Depth interview results

The above table shows that Type I barriers (Government participation in trade and restrictive practices, customs and administrative entry procedures) are **highly dominant** (referred to as '+++') in the knitwear industry and is found to exist for small-sized enterprises. On the other hand, type I barriers are found to be **moderately dominant** (referred to as '++') in the shrimp processing industry and in the pharmaceutical industry both for small and medium-sized enterprises. However, for the leather industry Type I barriers are found to be **less dominant** (referred to as '+') both for the SMEs.

Type II barriers (Technical Barriers to Trade or TBT) are found to be highly dominant in the leather, shrimp processing and in pharmaceuticals industry, both for small and medium-sized enterprises. Type II barriers are found to be only moderately dominant in the industry for knitwear for small-sized enterprises.

Type III barriers (Specific Limitations) are only moderately dominant in the leather industry for SMEs. For the shrimp processing industry Type III barriers are found to be less dominant for both small and medium-sized enterprises. On the other hand, for the pharmaceutical and for knitwear industries, Type III barriers are not found to exist in the industry for pharmaceuticals and in the knitwear industry. Type IV barriers (import charges) are not at all found in any of the four industries.

4. Conclusion

The **primary objective** of this research was to understand issues related to market access from a micro or enterprise level perspective. We have used a simple classification method to understand market access issues among Bangladeshi exporters in the EU market. The study was limited to four industries: leather, pharmaceutical, shrimp processing and knitwear. Four types of barriers were studied: Type I, meaning barriers related to government participation in trade and restrictive practices; Type II, that is to say, barriers referring to Technical Barriers to Trade; Type III, barriers that are related to specific limitations in trade, and Type IV, barriers that include import charges.

In this study, the impacts of Everything But Arms (EBA) initiative of EU were studied for 5 EU member countries: UK, France, Italy, Germany and Spain. These countries are the major importers of Bangladeshi products. It is evident that because of the EBA initiative Type IV measures have been completely withdrawn from Bangladeshi products. However, this did not guarantee market

access for small and medium-sized enterprises. Other types of measures were found to exist while exporting Bangladeshi products to EU markets.

The paper found that **Type II or Technical Barriers to Trade** are the major stumbling blocks for SMEs in Bangladesh who want to venture into EU markets even under apparently free access conditions under EBA. The range of measures in this category includes technical regulations, standards, testing and certification arrangements. In most cases it is cost of compliance, inadequate technical skills and institutional weaknesses that are the major source of such problems. Haque (2004) has estimated the investment needed for shrimp processing plants in Bangladesh to comply with HACCP rules and regulations. This paper further strengthens this argument and shows that other sectors (major export items from Bangladesh) like knitwear, leather, and pharmaceuticals also face such barriers.

In order to deal with Type II barriers, Bangladeshi exporters need to upgrade their plants, alter the production system, and also find arrangements where cross-recognition of certification and testing procedures could be done. Unless these issues are addressed coherently it will be difficult for SMEs to access EU markets. It is also important to know that SMEs are the major source of **employment** for millions of people in developing countries like Bangladesh. If these issues are not properly addressed, **poverty alleviation** through trade will remain a far cry.

Among other types of barriers, **Type I** barrier is the second most important one in terms of market access. This type of barrier includes customs and administrative entry- procedures related to customs valuation, classification, formalities, and rules of origin. Our result shows that of these barriers, custom valuation, custom formalities and rules of origin are the most important ones applicable to Bangladeshi exporters. For the   small- sized enterprises in the knitwear industry this is a major barrier to access EU markets. However, one should note that most barriers exist at the port of entry in Bangladesh where exporters import their raw materials on a back-to-back LC (Letter of Credit)[16] system.

Similarly, shrimp processing and pharmaceutical industries also rated this type of barrier as their second most important set of barriers securing exports to EU. This is true for both small and medium-sized enterprises in these two industries. For the shrimp industry, it was found that low domestic production capacity of shrimps at the farm level forces processors to produce at a very low capacity of production since processing plants were operating at below 13% of

their capacity, on average. There are few ways of dealing with this problem. First, to **increase farm level production** of shrimp would require huge expansion of shrimp farming in coastal regions. For a land scarce country like Bangladesh this would be socially undesirable. Second, **intensification** of shrimp farming system which is often accompanied with adverse environmental effects. Third, **import** of raw shrimp from neighboring countries like India and Thailand. However, here the rules of origin used in international trade for EU markets are a major obstacle for Bangladeshi firms wanting to adopt this approach.

For the pharmaceuticals industry, barriers in this type include the **definition of the rules of origin.** Most producers import their chemicals for processing in Bangladesh. Therefore, strict adherence to the current rules of origin acts as a major barrier for them.

Type III barriers like labeling, marking, and packaging requirements are the third important barrier to market access. This is true for both shrimp and leather industries.

Considering the above findings, this paper shows that the **market access** issue is a major problem even when no tariff or quota restrictions are imposed. Therefore, WTO should explicitly address these market access issues particularly from the perspective of small and medium enterprises. This means that measures should be adopted to reduce formalities related to custom valuations and procedures both at the exporting and at the importing countries, strengthening institutions to provide certification related to technical standards at the exporting country and to remove variations in the labelling and packaging requirements. **Streamlining custom clearance procedures** at the exporting country has been clearly identified as a major bottleneck in securing market access.

The industry analysis undertaken gave us a clear image in terms of policy to handle Type I barriers in the respective countries' and departments. In terms of dealing with administrative and port problems, it can be pointed out that measures should be enacted and implemented in building capacity for both exporters' and the authorities so that the costs of handling shipments goes down at the port. The Government of Bangladesh should seriously consider **capacity building** at various levels to facilitate export of these products to EU markets. Otherwise, a large group of producers, the SMEs, will not be able to gain from the increased volume of trade that are expected to take place in a tariff and quota free trade regime.

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1   From the website of the World Trade Organization, http://www.wto.org/english/thewto_e/minist_e/min01_e/mindecl_e.htm.

2   The importing countries have been selected based upon the amount of volume imported.

3   United Kingdom (UK), France, Italy, Germany and Spain are the major importers of the four leading export sectors of the Bangladesh economy, accordingly 20 companies were randomly surveyed; 5 companies from each sector.

4   Gallezot, Jacques, Real Access to the EUs Agricultural market, 24 July 2003, Jacques Gallezot is Director of Research at INRA and Associate researcher at CEPII, UMR d'Economie Publique, INRA – INAPG, 16 Rue Claude Bernard, 75005 (gallezot@inapg.inra.fr).

5   Customs and administrative entry procedures applicable both at entry and exit points.

6   Technical Barriers to Trade applicable both at entry and exit points.

7   Small-sized enterprises refer to firms with 50 or less full-time employees and with capital   investment between Taka 300,000 and Taka 10 million.

8   Medium-sized enterprises refer to firms with capital investment between Taka 10 million and Taka 100 million and between 50-99 full-time employees.

9   Website of the European Commission Delegation to Bangladesh

10   From the website of European Commission Delegation to Bangladesh, www.eudelbangladesh.org

11   From the website of European Commission Delegation to Bangladesh, www.eudelbangladesh.org

12   From the website of European Commission Delegation to Bangladesh, www.eudelbangladesh.org

13   From the website of European Commission Delegation to Bangladesh, www.eudelbangladesh.org

14   Depending on the size of the consignments exporters sometime sub-contract the work to other   small firms.

15 FVO is based in Dublin, Ireland.

16 Back-to-back LC refers to 'Letter of Credit' to import that has been issued against a corresponding export order.

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Understanding Exclusion – An Analytical Approach

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Abstract

The concept of exclusion although not termed as such, is not new in development practices in Bangladesh. Existence of government and non -government programs such as free education for women, the upsurge of micro-finance etc are all evidence of the fact that certain groups in society are 'excluded' from the regular delivery network. As such special programs or new modes of delivery have to be designed to include the 'excluded'. This paper aims at explaining the process of exclusion through an economic perspective using the typical demand- supply abstract. We have shown that excluded individuals face additional costs in order to gain access to particular spaces which leads them to reduce consumption in these fronts. Using the concept of consumer surplus we have identified certain economic motives that encourage the persistence of exclusion by non-excluded groups.

Introduction

Government and non-government agencies have traditionally engaged in addressing exclusion by targeting services toward those who they deem to be as deprived. In Bangladesh, examples of such programs range from relief operations amongst victims of economic and natural crisis, health & sanitation, upsurge of micro-finance for rural women and, more recently, legal services for establishing citizen's rights and good governance. Clearly, all these programs had well-defined targets — for example, residents of flood-affected areas, rural women without a minimum level of assets, retrenched workers from state owned enterprises, and rape and acid victims. All such programs were designed on the valid assumption

that the target groups were outside the scope of regular service delivery network (all services provided by the state and private sectors). The success of many of these programs is evidence that exclusion is not a static phenomenon. Individuals and groups who were once excluded are 'included' as a result of these programs. The methods that cause this process of transition are diverse and depend on the type and process of exclusion. In the case of micro-finance, for instance, a change in the mode of delivery (defining an innovative form of banking to reach out to those who were excluded from the regular credit market mechanism) has proved to be an effective method, while for health and sanitation awareness programs, the method used was to influence the effective demand (i.e. creating demand for these commodities/services through awareness generation). All these programs are evidence of the presence of exclusion but there is no clear understanding of the cause or process of exclusion. This paper aims to revisit exclusion in order to enrich our understanding of the subject from an economic perspective.

We[1] begin by looking into the existing literature to develop the concept of exclusion in the context of Bangladesh. From there we move on to developing a market framework, to using the basic demand-supply analysis and attempting to look at the incidence and process of exclusion from an economic perspective.

The Concept of Exclusion

The concept of exclusion is not new in the history of social studies. Development practice has been using it implicitly by the implicit recognition of "exclusion" although it was not termed as such. In academic literature the term "social exclusion" was first used by Richard Lenoir in 1974 in the context of France. He defined the socially excluded as those who did not have access to welfare state. These people constituted of 'social misfits', mainly the physically and mentally disabled. Traditionally, sociologists have dominated the conceptualization of social exclusion. They define exclusion as deprivation from social participation.

As mentioned earlier, the discourse on exclusion began in Europe in the context of parts of the population being excluded from enjoying certain government welfare services. In England concerns arose in the nineteen-eighties about social exclusion, whereby individuals were excluded either by active measures against them or passively. Immigrants without the right to vote and the unemployed who are unable to participate in social activities are examples of

instances of social exclusion. Exclusion in developing countries requires a slightly different approach. The socio-political context of a country like Bangladesh introduces the complexities of imperfect markets and poor governance. Explaining exclusion in such a case by using theories developed in the west is too simplistic a procedure. The absence of formal markets and institutions in developing economies makes it difficult to identify exclusion within a conceptual framework that can clearly capture the incidence and dynamics of exclusion for policy formulation.

Poverty and exclusion

The study of poverty has evolved in the literature of social sciences by distinguishing groups of individuals by their income through scrutinizing each individual in the context of his or her unique socio-political environment. Recognition of the fact that the poor are neither homogeneous nor a static group of the population led to studying the many factors that lead to deprivation for individuals. The evolution of poverty measurements from the income poverty line to the Human Development Index shows the growing importance of understanding the multi-dimensionality of poverty. Apart from economic factors, the nature of the interlinkage of the several markets in the economy and the social and political forces determine the process that leads to poverty in its different dimensions. Just as individuals are unique in their position in the economy, markets are also different in the roles they play in each individual's life. The multidimensionality of poverty is yet something that economists are still struggling to deal with. The term "poverty" itself fails to aptly capture the role of non-financial factors in the economy that lead to various forms of deprivation. A theory of exclusion based on a more comprehensive approach to the study of deprivation and inequality, compensate for this problem to a greater extent. There is no doubt that poverty and exclusion are closely related. They are largely overlapping and sometimes indistinguishable. However, there are instances of exclusion that can exist in the absence of of poverty. Exclusion allows a more holistic approach to understanding the inequalities that exist in society.

In tackling exclusion, most academics first try to disentangle the concepts of poverty and exclusion. Spicker (1998) distinguishes poverty and social exclusion clearly by defining the first as a lack of resources and social exclusion as a lack of relative levels of social networks. We take a broader view of exclusion by including social and economic factors as indicators of exclusion. Sen (2000) views social exclusion from a relational perspective. To Sen, poverty is capability deprivation, i.e. the lack of capability to live a minimally decent life, while social

exclusion is both a constitutive part of capability deprivation and an instrumental cause of capability failures. This is more in line with our take on the concept, for we distinguish poverty and exclusion as concepts that are independent but not mutually exclusive in reality. Kabeer (2000) focuses on the exclusionary effect of institutionalization. Her perspective leads her to deal with the creation of relational differences. As we discuss later in the paper this is important in understanding the process of exclusion. Osmani (2003) considers social exclusion as a part of poverty. When poverty is defined from capability perspectives, exclusion adds the relational aspect that enriches the analysis of poverty. However, Osmani recognizes that individuals are often excluded independent of poverty. In our study, we use the terms like "social exclusion", "exclusion" and "poverty" slightly differently. We use "exclusion" as a comprehensive term that encompasses social exclusion and poverty. For our view, any individual who is unable to take part in activities that is the norm for the community, for reasons beyond his/her control, is excluded.

Osmani (2003) draws from Sen's broad explanation of exclusion to investigate who are excluded and why. Here, exclusion is explained in terms of poverty. Sen recognizes that an individual can be excluded from different areas for different reasons. Our discussion attempts to dig deeper into this insight and attempts to reconstruct the concept of exclusion within a framework created through the use of traditional economic tools – in some cases, broadening the concept underlying such tools.

We define exclusion in line with Chakravarty's (2003) discussion on social exclusion: 'a person is excluded if he/she is unable to participate in the basic economic and social activities of the society in which he/she lives.' Exclusion, according to him, is the cause of fragmentation in social relations, and hence the result of a lack of cohesion. Of course, this leads to the valid question on what is 'basic' in his statement. For our purposes, we will ignore this question for the time being and assume that there is a benchmark. This allows us to separate the excluded from the non-excluded in the economy. While Chakravarty moves in the direction of quantifying exclusion, we focus our discussion on the process and reasons of exclusion. We focus on the individual as a unit and try to identify and explain the process of exclusion in a given social context.

The broad goal of this study is to investigate exclusion in the context of Bangladesh. Although there have been extensive studies on poverty in Bangladesh, there is no comprehensive study on exclusion. This paper is an attempt to compile some of the existing thoughts on exclusion and offer a

conceptual framework that facilitates its understanding.

Our take on the concept

The discussion of exclusion for this paper began with a focus on Bangladesh. A child who cannot go to school because she lives too far from the nearest school, a woman who does not find a job that will give her wages equal to her male counterpart and a member of an ethnic minority group who has no electricity at his house because he is politically under-represented are all too familiar cases of exclusion in Bangladesh. Many children in Bangladesh find it difficult to go to school due to the lack of public transportation and inadequate number of schools. Gender inequality and social norms often force a lower wage on women in most occupations. Ethnic groups are inadequately represented in the parliament, which means investment in infrastructure is lowest in their constituencies. In all these cases individuals are deprived from access to rights as citizens of the country. The first step in clearly analyzing each of these cases is to ask the basic questions: Who is excluded? What is s/he excluded from?

In thinking of the answers to these questions, we can distinguish between the two dimensions of the subject. The child in the first case is excluded from access to education. And this occurs due to his distance from the nearest school. The geographical location of this child answers the first question (who is excluded), while access to education answers the second (what is she excluded from?). The first dimension is a characteristic of the individual, which is often beyond his/her control and that leads to exclusion from the second dimension, i.e. access to education. We describe the first dimension as an 'attribute' of the individual which is causing him/her to be excluded from a particular 'space', which is the second dimension. For the other two cases mentioned earlier, the attributes are gender, and ethnicity, while the spaces are employment, and political participation. If an exhaustive list of all those who are excluded in a society was made available, it would be possible to generate a complete list of attributes and spaces related to exclusion.

Each individual is excluded from a number of spaces as a result of a set of attributes. The particular combination of attributes and spaces decides each individual's position in the world of exclusion.

As a starting point in developing this framework, we listed all the dimensions we could gather from the Bangladesh context. Attributes assembled are characteristics of individuals that lead to exclusion in one or more spaces.

Individuals might be born with these attributes (for example, ethnicity), or they might be acquired (example: low holding of financial assets). These attributes might also be permanent (physical disability) or temporary (low assets). The set of attributes considered relevant for the context of Bangladesh are assets (physical, social or financial)[2] , health condition, religion, age, ethnic/cultural background, geographic location and gender.

We define spaces of exclusion as facilities/ services from which individuals are denied equal access compared to other individuals within the same community because he/ she possesses one or more of the attributes (attributes). The list of spaces that we think is most important for Bangladesh in such an exercise is education service, health service, employment/occupation, housing, access to financial markets, and access to markets[3] .

Having thus identified the incidence of exclusion occurring in certain spaces due to a set of attributes, we move on to account for the process of exclusion. It is often seen in Bangladesh that institutions, or social structures, direct the process of exclusion. In certain institutions, such as the traditional patron-client relations of rural Bangladesh, the excluded are broadly identified as those who have low access to markets because they do not benefit from the informal relational network. When institutions change, however, the same group of people might not be excluded. New markets might emerge which either replace or compliment the old markets. When formal institutions replace the informal, existing relations do not determine an individual's position in the economy. The new institution defines who is excluded. Hence when institutions change, some individuals cease to be excluded, some remain excluded, and some among those who were not excluded in the old institution are excluded in the new. Perhaps a look into the credit institutions of Bangladesh will throw more light on the situation discussed above. The introduction of formal markets such as microfinance has changed the face of excluded and non-excluded populations. While it has successfully included large segments of previously-excluded population into the credit market, its strict repayment requirements and high interests continue to exclude segments of the extreme poor in rural Bangladesh. It is important to remember that new institutions do not eliminate exclusion. They change the form of exclusion and hopefully reduce exclusion in some cases.

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[2] Physical assets are productive assets such as agricultural land, property, or domestic animals. Social assets are mainly social networking/ connections or even relative social standard/status. Financial assets relate to financial holdings of an individual.

[3] The ability to participate or enter into markets for regular goods and services without any discrimination.

Although there is much discussion on the absence of markets in the rural economies of the developing world, traditional economies have their own arrangements that work as markets. In the Bangladesh context, rural institutions have been changing rapidly with the influx of NGOs. NGOs essentially identify excluded populations and design programs that are targeted towards them. Many of these programs succeed in reaching their targeted population. However, the 'crowding out' of old institutions might be of consequence for the economy in terms of exclusion. Those who were not excluded in old institutions face the threat of being excluded in new institutions. Hence it is expected that there will always be certain interest groups who will develop mechanisms to strengthen existing institutions, i.e. promote existing exclusion.

Explaining Exclusion

Close observation of the attributes of exclusion reveals that it mainly takes place on two fronts: economic and social. The economic front refers to those attributes that result in a higher cost of participating in a space. For example, if an individual is physically disabled, transportation cost for him/her will be higher in order for him/her to participate in a particular space. The social front (more widely recognized in literature) mainly addresses exclusion resulting from the perspective of social norms and beliefs. Examples include individuals suffering from HIV being considered as *untouchables or social outcasts* and sex-workers being denied access to mainstream housing markets. Even though some cases of exclusion are viewed as cases of social phenomena they also can be translated into the economic costs for the excluded. Going back to our example of the sex-worker, if she were to participate in the mainstream housing market she would most likely have to pay a much higher rent than a regular non-excluded individual. She might even need to bear additional costs such as hiding her identity within her own neighborhood.

Picking up on these additional expenditures we try to use the demand/supply construct to explain the process of exclusion. At first glance, it may appear that the discussion is restricted to the economic front of exclusion. However, we will later reveal that this simple micro model can be used to explain some of the social motives as well.

If we view each of the space as a separate market, then the examples above illustrate that exclusion involves lack of participation in economic activities or limited participation at a higher than market equilibrium price. An analysis of markets will reveal that eliminating exclusion can enhance economic productivity

and thereby generate growth.

Close scrutiny of each of the spaces reveal that a single market model is inadequate to fully encompass incidences of exclusion. Clearly, each of the spaces exists with its own unique characteristic. While health, education, access to markets and access to credit can be described as a normal goods and services market where the 'goods/services' can be availed at a determined market price, employment/ occupation is a space that is better described by factor market analysis. Even within the goods and services markets, complications arise when we look into the different segments. Apart from the obvious segmentation of the government, NGO and the private sector, there exists further segmentation. For example, government schools are free for female children only. Setting aside these segmentations, in our paper we view every single space (apart from employment)[4] as a market where the good/ service is availed at a positive 'price'.

We understand that every individual faces an expenditure when availing any product/service or simply participating in any social activity. The expenditure is in the form of price (determined by the market or administered by the state or a NGO); and also in the form of complementary expenditures such as transportation, sporting proper attires, social cost, or even in terms of opportunity cost. Even when certain goods/services are offered free of charge (example: primary education provided by the state or NGOs), the complementary expenditures will prevail. So the 'effective price' that every individual face in the market includes price as well as complementary expenditures.

We consider each of the spaces in our earlier discussion as a market where the demand is a function of required expenditure for availing the good/service (effective price), income and other non-price factors. So for each of the spaces discussed above there exists a downward sloping demand curve in the effective price/ quantity plain. As long as the expenses of availing the product are high, the demand for the commodity will be low. With falling expenditures, the demand for the commodity will increase. Supply for goods and services are positively related to prices.

With reference to the figure below, demand curve D(p) represents zero exclusion which, in other words, is the potential demand for the good/service in question. With the presence of exclusion the actual demand is depicted by D(a). As the complementary expenditure for the excluded individuals is higher, s/he

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[4] Employment has been described by an analysis of the labor market in a different paper by Huq Iftekhar, Mallik Biva and Rabbani Mehnaz. For this paper, the analysis is restricted to the goods and service market.

faces higher effective price which leads him/her to demand less of the commodity. The relatively higher complementary expenditure is the 'exclusion premium' that the excluded are required to pay. The exclusion premium is similar to the idea of tax imposed on particular consumers (individuals with special attributes), hence it affects the demand curve rather than the supply.

For example, consider a hardcore-poor family living in a remote village trying to avail health services from a hospital at the nearest town. For this family transportation cost would be an obvious complementary expenditure that would increase their reluctance to avail the service. They might also face additional social costs. The hardcore poor, because of their social standing, often fail to present themselves in mainstream markets. Thus even if they could find the means to meet transportation costs they might find the town hospital inaccessible because of their voicelessness. So the family in discussion is required to pay an 'exclusion premium' in terms of both higher transportation costs and possible humiliation resulting from their social standing.

As the figure below illustrates, as long as exclusion prevails in the market, there exists a discrepancy between the effective price borne by the excluded and the non-excluded. While the non-excluded individuals incur the effective price of P(a), the excluded pay P(e), which is the effective price plus the exclusion premium. As markets evolve, and exclusion is eliminated, the exclusion premium will gradually subside for these individuals, leading to increased demand for the goods. Thus when the hardcore poor family in the example above joins an NGO, the institution might bear the cost of transport. Also, if he/she is accompanied by an NGO worker, this will increase the individual's accessibility to the town hospital. Such actions reduce the hardcore poor family's exclusion premium. Eventually, as all of exclusion is eliminated, the two demand curves in the figure will converge to D(p) only. In that case, all individuals in the market will face an equal effective price of P(p).
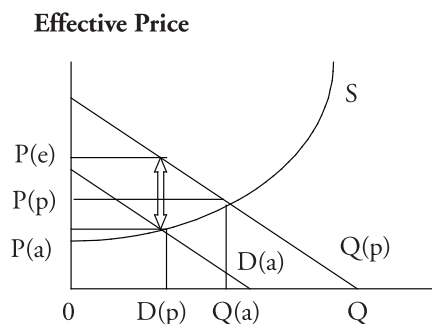
Effective Price

Clearly, from a social point of view removal of exclusion is beneficial. To begin with, market distortions will be eliminated since all individuals, irrespective of their attributes will face a uniform effective price for availing a good/service. Also, the removal of exclusion will result in greater quantities of consumption (and increased surpluses) which leads to increased output for the economy as a whole. Especially when the commodity in question is a merit good such as education or health service, increased consumption will result in synergies that will accelerate economic development.

However, the discussion above brings forward the conflicting interest of the two groups involved in the market (the excluded and the non-excluded). While removal of exclusion seems beneficial to the excluded individuals (since now they are exempt from the exclusion premium) and society at large (resulting from greater quantities of consumption), for the non-excluded group, the situation results in higher effective price. Such high effective prices may result from greater crowding in the market that occurs from increased demand. Going back to the example given above, increased participation of the hardcore poor in the town hospital will result in longer queues. So for these groups, removal of exclusion will actually result in a loss of consumer surplus. To demonstrate the distinct effect on the two groups, we have split the market into two: one for the excluded and one for the non-excluded (see figure below).

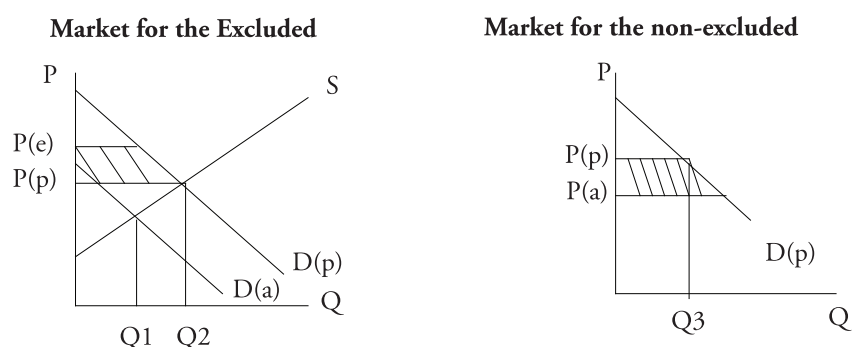**Market for the Excluded**   **Market for the non-excluded**

figure above is a disaggregated illustration of the market situation faced by the excluded and the non-excluded. A horizontal summation of the two markets will give us the complete market model that has been developed in Figure 1.

The left panel shows the outcome enjoyed by the excluded individuals as a result of removing exclusion. The subsequent expenditure that individuals face after exclusion is removed is P(p) rather than P(e). Therefore, these individuals

enjoy a gain in consumer surplus equal to the shaded region.

The right panel illustrates the loss of consumer surplus suffered by non-excluded groups ensuing from the removal of exclusion. After the market demand curve converges to D(p), the effective price rises from P(a) to P(p), thereby reducing their consumer surplus represented by the shaded region. A point to note here is that such loss of consumer surplus would not have arisen if the supply of commodity in question had been increased. For example: increasing the number of hospitals and health centers in remote locations would have made a difference. But in practice, resource constraints lead to situations where the increase in demand through removal of exclusion is proportionately greater than the increase in supply. Thus, in many cases, removal of exclusion lead to crowding in markets that result in higher effective price for the non-excluded.

This loss of consumer surplus may be an implicit economic motive that drives the social fronts of exclusion. In other words, non-excluded individuals have an economic motive that encourages them to retain the traditional norms of society and thereby continue with incidences of exclusion.

Conclusion

The concept of exclusion has been largely dominated by socialists and explained by these groups as a phenomenon arising from inequalities in society. The causes of inequality are largely social and caused by factors such as gender and religion. Using the market model in this paper, we have demonstrated that although not apparent in the market system, these factors may have an implicit economic force behind them. The term "exclusion premium" is used to capture the additional costs that excluded individuals face in order to gain access to particular spaces. Hence in many cases the excluded are not entirely denied the benefits of these spaces, but the additional costs create a barrier, whereby the participation of the excluded are significantly reduced. The latter part of the analysis highlights the fact that the threat of loss of consumer surplus that arises from the removal of exclusion act as a factor that encourages the non-excluded to support and continue exclusion. Even though this analysis fails to provide a complete explanation of the process of exclusion in the social front, it provides readers with some of the economic motives that might prevail in society leading to the phenomenon.

Acknowledgement

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A New Symmetric Key Cryptographic Algorithm for Unicode Compliant Bangla Characters

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Abstract

Cryptography is the discipline that embodies principles, means, and methods for the transformation of data in order to hide its information content, prevent its undetected modification and/or prevent its unauthorized use. Now-a-days most of the organizations are increasingly dependent on electronic data for various purposes. Since data travels electronically the alarming issue is the security. Cryptographic algorithms can play vital role to resolve this issue. There are two basic types of cryptography: Secret/Symmetric Key and Public/Asymmetric Key. Symmetric key algorithms are the quickest and most commonly used type of encryption. Here, a single key is used for both encryption and decryption. This paper describes a new Symmetric Key algorithm which is applied on the Unicode compliant Bangla characters. Algorithms for both encryption and decryption are provided here. The advantages of the new algorithm are also described along with the drawbacks. Since government of Bangladesh is planning to introduce e-Governance this kind of cryptographic algorithm should be applied to secure various important and vital data. As per as literatures are concerned, this kind of work for Unicode compliant Bangla characters has not been done yet i.e. this could be the pioneer work.

Keywords

Cryptography, Encryption, Decryption, Symmetric key Algorithms, Unicode Bangla Characters

1. Introduction

We use security services every day in our workplaces and society has established an intricate set of laws and customs surrounding the use of these security services. For example, if we need to identify someone, we ask him or her to appear in person, perhaps with some credentials. Or, he or she is introduced to us by a common acquaintance. If we need to send a paper document securely, we wrap it in an envelope, a double-envelope, a sealed diplomatic bag, or a strongbox. And, if we need to enforce access to buildings, rooms, facilities, computers or information we do so with locks, keys, combinations and guards. We verify the integrity of paper documents, by checking their signatures and the handwriting. In certain cases, documents are sealed with wax, or stamped, or embossed. Anti-forgery features are used on money/cheques. In the paper world, we authorize transactions like cheques and purchase orders with a signature. Now that we live in a digital world, many of the old Paper World mechanisms are not possible like i) We may never get to meet the recipients of our electronic messages ii) All electronic documents look the same, zeroes and ones are eminently forgeable and iii) We need new services to replace envelopes, locks and combinations. Not only our messages and files need new security mechanisms, but the security mechanisms themselves may require additional security mechanisms. Two main security mechanisms are used to provide the digital equivalents of the Paper World security services: Cryptography and Digital Signature. This paper deals only with Cryptography.

S. William [25] stated that, "Cryptography" derives from the Greek word *kruptos,* meaning "hidden". The key to hiding data is to devise a hiding (encryption) mechanism that is very difficult to reverse (i.e., to find the original data) without using the decryption key. Usually, the harder it is to discover the key, the more secure the mechanism. In symmetric (also called "secret-key" and, unfortunately, "private key") encryption, the same key (or another key fairly easily computed from the first) is used for both encryption and decryption. In asymmetric (also called "public-key") encryption, one key is used for encryption and another for decryption. More specifically, this paper deals with the Symmetric Key cryptography. A new Symmetric Key cryptographic algorithm has been propsed in this paper with its advantages and disadvantages. This algorithm has been applied on Unicode compliant Bangla characters.

This research is basically based on literature study. Initially to understand the basics of cryptography we have studied few books like S.

William [25], B. Schneier [23], W. Michael [22], N. Kibitz [19] etc. and then gone through few proceedings and journal papers, articles from the Internet like S. M. Bellovin and M. Merritt [7], C. David [10], R. Anderson and R. Needham [2], K. Gary [11], S. Goldwasser and S. Micali [12], S. Hebert [13], D. Jhon [18] etc. After learning the basics of cryptography we have studied few renowned cryptographic algorithms in detail. These are: Data Encryption Standard (DES), Triple DES, Advanced Encryption Standard (AES), RC2 , RC5, Rivest-Shamir-Adleman (RSA) etc. We have studied these algorithms very rigorously from various sources like P. Barrett [3], W. Hohl, X. Lai, T. Meier and C. Waldvogel [14], M. I. Jabiullah, S. M. Rahman, M. L. Rahman and M. A. Hossain [16], D. Jablon [17], S. Mahmud, S. K. Dey and M. L. Rahman [20], F. Matthew [21], M. I. Sharif, E. Karim, A.N. Mahmood and M. A. Mottalib [24], an Internet article [28], N. Alexandris, M. Burmester, V. Chrissikopoulos and Y. Desmedt [1], M. Bellare, R. Canetti and H. Krawczyk [4], M. Bellare, O. Goldreich and S. Goldwasser [5], M. J. Beller, L. F. Chang and Y. Yacobi [6], S. Blackburn, S. Murphy and J. Stern [8] etc. As our aim of this work was to develop cryptographic algorithms for Bangla Unicode Characters, so after having the deep knowledge in few cryptographic algorithms we have studied various articles, papers and few other resources (i.e. M. Hossain [15], [26],[27], [31] etc.) to know the detail about Unicode compliant Bangla characters. Then we have developed our new algorithm which is described in this paper. As far as literature is concerned this could be the pioneer work in the field of Cryptography for Unicode compliant Bangla characters.

2. The Purpose of Cryptography

In a typical situation where cryptography is used, two parties (X and Y) communicate over an insecure channel. X and Y want to ensure that their communication remains incomprehensible by anyone who might be listening. Furthermore, because X and Y are in remote locations, X must be sure that the information she receives from Y has not been modified by anyone during transmission. In addition, she must be sure that the information really does originate from Y and not someone impersonating Y. According to K. Gary [11] Cryptography is used to achieve the following goals:

- *Confidentiality:* To ensure data remains private. Confidentiality is usually achieved using encryption. Encryption algorithms (that use encryption keys) are used to convert plain text into cipher text and the equivalent decryption algorithm is used to convert the cipher text back to plain text. Symmetric

encryption algorithms use the same key for encryption and decryption, while asymmetric algorithms use a public/private key pair.

- *Data integrity:* To ensure data is protected from accidental or deliberate (malicious) modification. Integrity is usually provided by message authentication codes or hashes. A hash value is a fixed length numeric value derived from a sequence of data. Hash values are used to verify the integrity of data sent through insecure channels. The hash value of received data is compared to the hash value of the data as it was sent to determine if the data was altered.

- *Authentication:* To assure that data originates from a particular party. Digital certificates are used to provide authentication. Digital signatures are usually applied to hash values as these are significantly smaller than the source data that they represent.

3. Types of Cryptographic Algorithms

There are several ways of classifying cryptographic algorithms. In this paper, they will be categorized mainly based on the number of keys that are employed for encryption and decryption. The three types of algorithms that will be discussed (according to S. Hebert [13]) are:

- Secret Key Cryptography: Uses a single key for both encryption and decryption

- Public Key Cryptography: Uses one key for encryption and another for decryption

- Hash Functions: Uses a mathematical transformation to irreversibly "encrypt" information

3.1. Secret Key Cryptography

In secret key cryptography, a single key is used for both encryption and decryption. As shown in Figure 1, the sender uses the key (or some set of rules) to encrypt the plaintext and sends the cipher-text to the receiver. The receiver applies the same key (or rule-set) to decrypt the message and recover the plaintext. Because a single key is used for both functions, secret key cryptography is also called symmetric encryption.
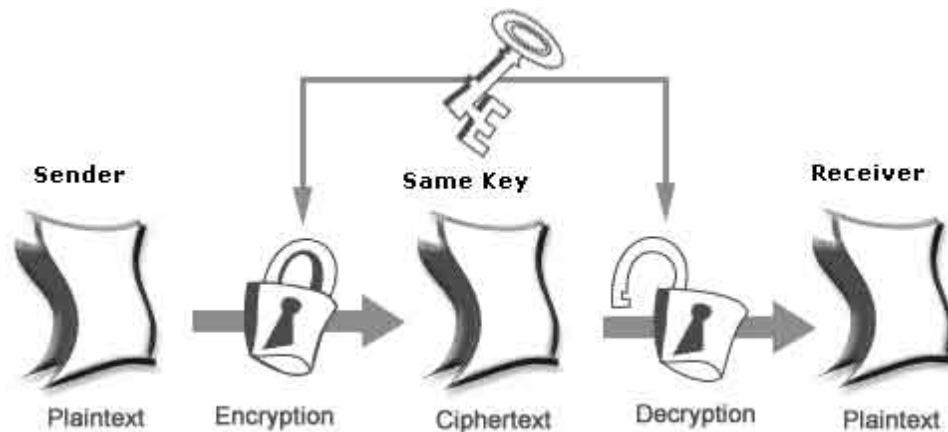
Figure 1: Secret Key Cryptography

With this form of cryptography, it is obvious that the key must be known to both the sender and the receiver. The biggest difficulty with this approach, of course, is the distribution of the key. We have to secure the key from access by unauthorized agents because any party that has the key can use it to decrypt data. Secret key cryptography schemes are generally categorized as being either stream ciphers or block ciphers. Stream ciphers operate on a single bit at a time, and implement some form of feedback mechanism so that the key is constantly changing. A block cipher is so-called because the scheme encrypts one block of data at a time using the same key on each block.

3.2. Public Key Cryptography

The main problem of Secret Key Cryptography is getting the sender and receiver to agree on the secret key without anyone else finding out. If they are in separate physical locations, they must trust a courier, or a phone system, or some other transmission medium to prevent the disclosure of the secret key being communicated. Anyone who overhears or intercepts the key in transit can later read, modify, and forge all messages encrypted or authenticated using that key. The generation, transmission and storage of keys are called key management; all cryptosystems must deal with key management issues. Because all keys in a secret-key cryptosystem must remain secret, secret-key cryptography often has difficulty providing secure key management, especially in open systems with a large number of users. The concept of Public *Key Cryptography* was introduced in 1976 by Whitfield Diffie and Martin Hellman [9] in order to solve the key management problem. In their concept, each person gets a pair of keys, one called the Public Key and the other called the Private Key. Each person's *public key* is published

while the *private key* is kept secret. The need for the sender and receiver to share secret information is eliminated; all communications involve only public keys, and no private key is ever transmitted or shared. No longer is it necessary to trust some communications channel to be secure against eavesdropping or betrayal. The only requirement is that public keys are associated with their users in a trusted (authenticated) manner (for instance, in a trusted directory). When X wishes to send a secret message to Y, she looks up Y's public key in a directory, uses it to encrypt the message and sends it off. Y then uses his private key to decrypt the message and read it. No one listening in can decrypt the message. Anyone can send an encrypted message to Y but only Y can read it. The process is shown in figure 2.
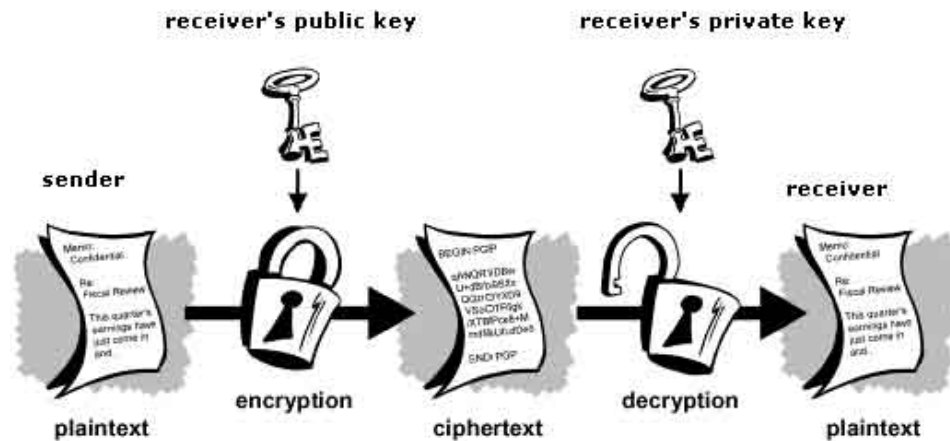
Figure 2: Public Key Cryptography

3.3. Hash Functions

A hash function H is a transformation that takes a variable-size input m and returns a fixed-size string, which is called the hash value h (that is, $h = H(m)$). Hash functions with just this property have a variety of general computational uses, but when employed in cryptography the hash functions are usually chosen to have some additional properties [30].

The basic requirements for a cryptographic hash function are:

- the input can be of any length,
- the output has a fixed length,
- $H(x)$ is relatively easy to compute for any given x,
- $H(x)$ is one-way,

- $H(x)$ is collision-free.

A hash function H is said to be *one-way* if it is hard to invert, where "hard to invert" means that given a hash value h, it is computationally infeasible to find some input x such that $H(x) = h$. Perhaps the main role of a cryptographic hash function is in the provision of digital signatures. Since hash functions are generally faster than digital signature algorithms, it is typical to compute the digital signature to some document by computing the signature on the document's hash value, which is small compared to the document itself, known as Message Digest. Examples of well-known hash functions are MD2, MD5, SHA etc.

4. Unicode Compliant Bangla Characters

Fundamentally, computers just deal with numbers. They store letters and other characters by assigning a number for each one. Initially, there were hundreds of different encoding systems for assigning these numbers. No single encoding could contain enough characters: for example, the European Union alone requires several different encodings to cover all its languages. Even for a single language like English no single encoding was adequate for all the letters, punctuation, and technical symbols in common use. To solve this problem the Unicode Consortium which is a non-profitable organization was founded. Its objective is to develop, extend and promote use of the Unicode Standard [29].

Encryption and decryption of bangla characters requires representing each bangla character into a specific code. Since there is no widely accepted national standard Bangla character code set before 2004, different character code sets are made and used by several software companies like Proshika, Bijoy, Sulekha, Lakhani etc. Bangladesh Standard Code for Information Interchange (BDS 1520: 1995) has been accepted by Bangladesh Standards and Testing Institution (BSTI) on 15th July, 1995 [26]. This code set includes complete set of Bangla characters and symbols including conjunctive characters and in order to send data, the necessary control characters and their codes are kept similar to ISO Latin code set. In the year 2000, this standard was revised by the computer Related National Committee and known as BDS 1520:2000 [27]. According to M. Hossain [15], it contains compound characters and ligatures that are contradictory to the principle of Unicode. To get rid of all of these problems, The "Keyboard Promitokaran Committee, Bangladesh" has been formed in the year of 2003. This committee has proposed a four layer keyboard layout and Bangla character code set which is fully Unicode compliant. In the figure 3, the Bangla Unicode character set and their corresponding Unicode value is shown: [31]
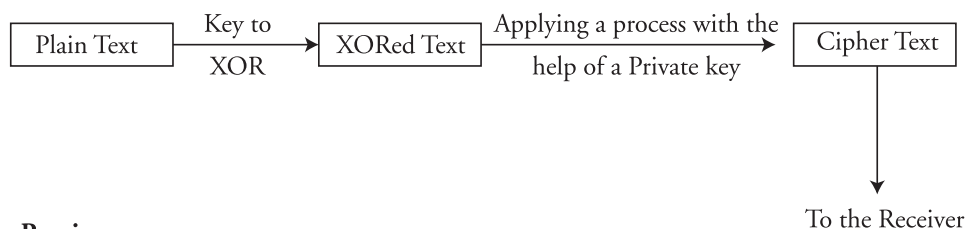
09EE	09EF	0985	0986	0987	0988	0989	098A	098B	09E0	098C	09E1	098F	0990	0993	0994
৮	৯	অ	আ	ই	ঈ	উ	ঊ	ঋ	ৠ	ঌ	ৡ	এ	ঐ	ও	ঔ

09A2	09DD	09A3	09A4	09A5	09A6	09A7	09A8	09AA	09AB	09AC	09AD	09AE	09AF	09DF	09B0
ঢ	ঢ়	ণ	ত	থ	দ	ধ	ন	প	ফ	ব	ভ	ম	য	য়	র

09E3	09C7	09C8	09CB	09CC	09CD	09D7	**	**	0964	0965	**	09BB	09B3	09BA	**
ৣ	ে	ৈ	ো	ৌ	্	ৗ			।	॥	‗	ৎ	঳	঺	঵

09FA	09F4	09F5	09F6	09F7	09F8	09F9	09F2	09F3	09E6	09E7	09E8	09E9	09EA	09EB	09EC	09ED
৺	৴	৵	৶	৷	৸	৹	৲	৳	০	১	২	৩	৪	৫	৬	৭

0982	0983	0981	0995	0996	0997	0998	0999	099A	099B	099C	099D	099E	099F	09A0	09A1	09DC
ং	ঃ	ঁ	ক	খ	গ	ঘ	ঙ	চ	ছ	জ	ঝ	ঞ	ট	ঠ	ড	ড়

09F0	09B2	09F1	09B6	09B7	09B8	09B9	09BD	09BC	09BE	09BF	09C0	09C1	09C2	09C3	09C4	09E2
ৱ	ল	ৱ	শ	ষ	স	হ	ঽ	়	া	ি	ী	ু	ূ	ৃ	ৄ	ৢ

Figure 3: Unicode Compliant Bangla Character Set (Proposed by the Keyboard Promitokaran Committee, Bangladesh)

5. New Symmetric Key Cryptographic Algorithm for Unicode compliant Bangla

In this system, cryptographic algorithms (both Encryption and Decryption) have to apply characterwise. Here, sender has to use two keys. One is the "Key to XOR" and other is the "Private Key". On the other hand, receiver has to know both the keys to decrypt the encrypted text or cipher text. Figure 4 will explain the entire process clearly. So far we havn't think about the key distribution mechanism since our initial goal was to design an algorithm for the Unicode compliant Bangla characters.

Sender

Plain Text → Key to XOR → XORed Text → Applying a process with the help of a Private key → Cipher Text → To the Receiver

Receiver

Cipher Text → Applying the reverse process with the same Private key → Intermediate Text → Same Key to XOR → Plain Text
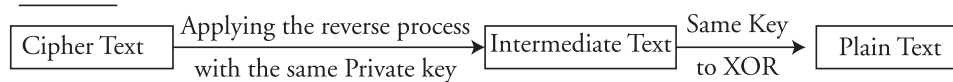
Figure 4: Depiction of the Whole System

5.1. Encryption Algorithm

Step 1: Find out the Unicode value (in binary) of the Bangla character.

Step 2: As we know, each of the Unicode compliant Bangla character is represented by a 16 bit binary number, we must use that 16 bit number in our algorithm. We have to put some leading zeros if it is required. A for example, the Unicode value of is অ 0985 in hex, 2437 in decimal and 100110000101 in binary. According to our algorithm we have to put 4 (four) 0s (zero) in the left hand side to make the value of the character অ as: <u>0000</u>100110000101

Step 3: Take any 16 bit key as the "Key to XOR". XOR the Bangla character using this key to get the XORed character.

Step 4: Take an 8 bit number as the "Private Key" which must be >=10000000

Step 5: Now, divide the XORed character with the private key. After dividing we will have a 9 bit (maximum) Quotient and 7 bit (maximum) Remainder, no matter whatever the character is. We have to put some leading 0s (zero) if the quotient and remainder is less than 9 and 7 bits respectively.

Step 6: Putting 7 bit remainder and than 9 bit quotient from the left hand side i.e. from the Most Significant Bit (MSB) side, we get a 16 bit number which would be the encrypted character i.e. cipher text.

5.2. Decryption Algorithm

Step 1: Take the 16 bit encrypted character.

Step 2: Multiply the 9 bit quotient by the "Private Key" used while encrypting. Then, add the 7 bit remainder with this.

Step 3: Put required number of leading 0s (zero) to make the number (produced in step 2) a 16 bit number.

Step 4: XOR the number with the same "Key to XOR" used while encrypting.

Step 5: The number which is generated in step 4 would be the Unicode value of the original character.

5.3. A Case Study

Let's take অ as the original Bangla character. Its Unicode value is 0985 in hex, 2437 in decimal and 100110000101 in binary. Since the binary value is 12 bits lets add 4 leading 0s. So it would become 0000100110000101. Now let's take 1000100010001000 as the "key to XOR". After XORing 0000100110000101 with 1000100010001000 we will get 1000000100001101 as the XORed character. Let's use 10001000 as the private key. After dividing 1000000100001101 i.e. XORed character by 10001000 i.e. private key we will get 11110010 as the quotient and 1111101 as the remainder. As the quotient is not a 9 bit number we have to make it a 9 bit number by putting a 0 in the left hand side. So it becomes 011110010. Now putting 7 bit remainder and then 9 bit quotient from the left hand side we will get the encrypted character. For this case which would be 1111101011110010. In decimal it is 64242 and in hex FAF2. Corresponding character of this value is □. Table 1 shows process described above.

Table 1: Processes in the Sender's End using the Encryption Algorithm					
Plain Text	**Key to XOR**	**XORed Text**	**After dividing XORed Text by the private key 10001000**		**Cipher Text**
			Remainder	**Quotient**	
অ (0000100110000101)	1000100010001000	1000000100001101	1111101	011110010	□(1111101011110010)

In the receiver-end, 9 bit quotient of the cipher text 1111101011110010 i.e. 011110010 would be multiplied by the private key used by the sender which is 10001000. So after multiplying 011110010 by 10001000 we get 1000000010010000. Now, after adding the 7 bit remainder with this we have 1000000100001101. Finally, the receiver will get the original text by XORing this value with the "Key to XOR" used by the sender i.e. 1000100010001000. So, 1000000100001101 XOR 1000100010001000 is equivalent to 0000100110000101 i.e. অ. Table 2 will explain the entire process.

Table 2: Processes in the Receiver's End using the Decryption Algorithm				
Cipher Text	**After Multiplying 9 bit Quotient by the Private key 10001000**	**After adding 7 bit remainder**	**Key to XOR**	**After XORing**
□(111101011110010)	1000000010010000	1000000100001101	1000100010001000	অ(0000100110000101)

In this way we can encrypt all the alphabets available in a Bangla text file one by one.

6. Advantages of the System

Advantages of this system are described below.

a. It would not be cost-effective to use the various existing algorithms for a small amount of data. This system will work very smoothly and would be cost-effective in such case.

b. It is always more difficult to guess 2 (two) keys than 1 (one) key. That's why this system more secured since 2 (two) keys are used here.

c. This system would be faster since the internal design is simpler.

7. Drawbacks of the System

There are few drawbacks of the system also. These are pointed out below.

a. Since the algorithms are working characterwise the performance would not be lucrative for large amount of data.

b. Key-length is smaller compare to few other existing algorithms.

8. Conclusion

Cryptography is used to achieve few goals like Confidentiality, Data integrity, Authentication etc. of the data which has sent to the receiver from the sender. Now, in order to achieve these goals various cryptographic algorithms are developed by various people. It has been found that the algorithms which are available at this moment are mostly used for English language and those algorithms are more or less difficult or complex in nature, and of-course it is quite obvious since those algorithms are used to maintain high level of security against any kind of forgeries. For a very minimal amount of data those algorithms wouldn't be cost effective since those are not designed for small amount of data. The aim of this work was to design and implement a new algorithm for Bangla language and also to design a cost-effective algorithm to encrypt a small amount of data The algorithms that are discussed here have been designed in a quite simple manner (but of-course not sacrificing the security issues) to make it cost-

effective for small amount of data. As per as literatures are concerned, no extensive work has been done so far to apply cryptographic algorithms in Unicode compliant Bangla characters. That's why we could not compare this algorithm with any existing one. We havn't yet found out the breaking probability of our proposed algorithm. We will try to find out the breaking probability in our next phase of work. Here, a single key is used for both encryption and decryption i.e. it is fallen under secret key cryptographic algorithm. But as public key cryptography is more secured then secret key cryptography our next task would be to develop and design a public key cryptographic algorithm in a simple manner as it is done in this paper.

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Radiation Pattern and Beamwidth Control of Linear and Rectangular Array Antenna System

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Abstract

Antenna array is one of the most prominent techniques of achieving electronic steerable beam i.e. rotation and variation of width of beam as required. This paper depicts a complete theoretical analysis of linear array antenna with transformation of the radiation pattern from a broadside to end-fire direction with change of relative phase, radiation intensity over a spherical surface, implementation of Dolph-Tschebyscheff array in reduction of side lobe of liner and rectangular array and baemwidth control of rectangular array.

Key Words

Antenna array, broadside, endfire, radiation pattern, side lobe control and array factor

1. Introduction

The simplest dipole antennas radiate and receive waves equally well in all directions and are called omnidirectional antennas. An omnidirectional antenna has equal gain in all directions but a directional antenna, on the other hand, has more gain in certain directions and less in other directions. Antennas can also be constructed to have certain fixed, preferential directions called directional antenna like Yagi-Uda of TV reciver. Enlarging the dimension of single elements often leads to more directive characteristics. Another way to enlarge the dimension of the antennas, without necessarily increasing the size of the individual elements, is

to form an assembly of radiating elements in an electrical and geometrical configuration. This new antenna, formed by multi-elements, is referred to as an array. In most cases, the elements of an array are identical; although it is not necessary, it is often convenient, simpler, and more practical [1]-[3].

The main objective of any array antenna system is to control the width of the main beam and its direction. The purpose of our present paper is to analyze the impact of array parameters on the above mentioned phenomena for both linear and rectangular array antenna systems.

It should be noted here that the same antenna may be used as a transmitting antenna or as a receiving antenna. The gain of an antenna remains the same in both cases. The gain of a receiving antenna indicates the amount of power it delivers to the receiver compared to an omnidirectional antenna.

The total field of array is determined by the vector addition of the fields radiated by the individual elements. This assumes that the current in each element is the same as that of the isolated element. This is usually not the case and depends on the separation between the elements. To provide every directive patterns it is necessary that the fields from the elements of the array interfere constructively (add) in the desired directions and interfere destructively (cancel each other) in the remaining space [4],[5]. Ideally this can be accomplished, but practically it can only be approached. The direction where the maximum gain would appear is controlled by adjusting the phase between different antennas. In an array of identical elements, there are five controls that can be used to shape the overall pattern of the antenna. These are: geometrical configuration of the overall array (linear, circular, rectangular, spherical, etc.), the relative displacement between the elements, the excitation amplitude of the individual elements, the excitation phase of the individual elements and the relative pattern of the individual elements

Section 2 of the paper deals with linear array antenna with rotation of beam from broadside to endfire direction; Sec. 3 gives the same analysis for rectangular array along with control of side lobe. Section 4 depicts the results of previous sections and, finally, section 5 concludes the paper.

2. Linear Array

Let us assume a linear array of N elements as in Fig. 1. The elements have identical amplitudes but each succeeding element has a β progressive phase lead current excitation relative to the preceding one. The array factor of such antenna is given by [6],

$$AF = \sum_{n=1}^{N} e^{j\,(n-1)\psi} \tag{1}$$

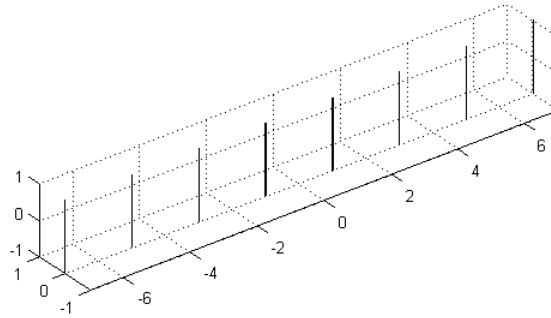where $\psi = kd\cos\theta + \beta$, and θ is the physical angle in azimuthal plane.

Figure 1: Linear array (N=8)

It is apparent that the amplitude and phase of AF can be controlled in uniform arrays by properly selecting the relative phase ψ between the elements; in non-uniform arrays, the amplitude as well as the phase can be used to control the formation and distribution of the total array factor.

2.1 *Broad side array*

In many applications it is desirable to have the maximum radiation of an array directed normal to the axis of the array. To optimize the design, the maximum of the single element and of the array factor should both be directed toward $\theta=90°$. The requirements of the single elements can be accomplished by the judicious choice of the radiators and those of the array factor by the proper separation and excitation of the individual radiators employed in [6],[7]. The maxima of the array factor occurs when

$$\psi = kd\cos\theta + \beta = 0. \tag{2}$$

Since it is desired to have the maximum directed toward $\theta=90°$, then

$$\psi = kd\cos\theta + \beta\big|_{\theta=90^0} \tag{3}$$

2.2 End-Fire Array

Instead of having the maximum radiation broadside to the axis of the array, it

may be desirable to direct it along the axis of the array (end-fire). To direct the maximum toward θ=0° or 180⁰,

$$\psi = kd\, cos\, \theta + \beta\big|_{\theta = 0^0} \quad = kd + \beta = 0 \tag{4}$$

$$\Rightarrow \beta = kd.$$

If the maximum is desired toward θ= 180°, then

$$\psi = kd\, cos\, \theta + \beta\big|_{\theta = 180^0} \quad = kd + \beta = 0 \tag{5}$$

$$\Rightarrow \beta = kd.$$

3. Planar Array

In addition to placing elements along a line (to form a linear array), individual radiators can be positioned along a rectangular grid (Fig. 2) to form a rectangular or planar array. Figure 2 shows an 8/8 planar array with bowtie antenna as the elements. Planar array provide additional variables which can be used to control and shape the pattern of the array. Planar arrays are more versatile and can provide more symmetrical patterns with lower side lobes [8]. In addition, they can be used to scan the main beam of the antenna toward any point in space. Applications include tracking radar, search radar, remote sensing, communications, and many others.
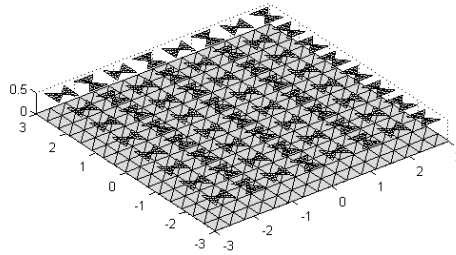

Figure 2: Rectangular array with bowtie antenna *(N=8,M=8)*

3.1 *Rectangular Array factor*

If M elements are initially placed along the x-axis, its array factor can be written as:

$$AF = \sum_{m=1}^{M} I_{m1} e^{(m-1)(kd_x\, \sin\, \theta\, \cos\, \phi + \beta_x)}, \tag{5}$$

122

where I_{mj} is the excitation coefficient of each element. The spacing and progressive phase shift between the elements along the x-axis are represented, respectively, by d_x and β_x. If N such array are placed next to each other in the y-direction, a distance d_y apart and with a progressive phase β_y, a rectangular array will be formed. The array factor for the entire planar array can be written as [9],

$$AF = \sum_{n=1}^{N} I_{1n} \left[\sum_{m=1}^{M} I_{m1} e^{(m-1)(kd_x \sin\theta\cos\phi+\beta_x)} \right] e^{j(n-1)(kd_y \sin\theta\cos\phi+\beta_y)}. \qquad (6)$$

3.2 *Dolph-Tschebyscheff Array*

In Dolph-Tschebyscheff array, excitation coefficients of array elements are related to Dolph-Tschebyscheff polynomials to reduce side lobe of beam in a controlled manner. The array factor of an array of even or odd number of elements with symmetric amplitude excitation is nothing more than a summation of *M or M+1* cosine terms. Taking,

$z = cosu,$

$m=0$	$cos\ (mu) = 1 = T_0(z)$	
$m=1$	$cos\ (mu) = z = T_1(z)$	
$m=2$	$cos\ (mu) = 2z^2 - 1 = T_2(z)$	
$m=3$	$cos\ (mu) = z^3 - 3z = T_3(z)$	(2.10)
$m=4$	$cos\ (mu) = 8\ z^4 - 8z^2 + 1 = T_4(z)$	
$m=5$	$cos\ (mu) = 16\ z^5 - 20\ z^3 + 5z = T_5(z)$	
$m=6$	$cos\ (mu) = 32\ z^6 - 48\ z^4 + 18\ z^2 - 1 = T_6(z)$	
$m=7$	$cos\ (mu) = 64\ z^7 - 112\ z^5 + 56z^3 - 7z = T_7(z)$	
$m=8$	$cos\ (mu) = 128\ z^8 - 256\ z^6 + 160z^4 - 32z^2 + 1 = T_8(z)$	
$m=9$	$cos\ (mu) = 256z^9 - 576\ z^7 + 432z^5 - 120\ z^3 + 9z = T_9(z)$	

For the ratio of signal strength of main to side lobe R_0, z is replaced by z/z_0; where

$$z_0 = \frac{1}{2}\left[\left(R_0 + \sqrt{R_0^2 - 1}\right)^{\frac{1}{P}} + \left(R_0 - \sqrt{R_0^2 - 1}\right)^{\frac{1}{P}} \right] \qquad (7)$$

and P is an integer equal to one less than the number of array elements. The array factor of linear array is as follows

$$(AF)_{2M} = \sum_{n=1}^{M} a_n \cos[(2n-1)u],$$ (8)

where $u = \pi d \cos\theta / \lambda$.

Equating (8) with corresponding Dolph-Tschebyscheff polynomials gives the coefficients a_n. Situation becomes very complicated for rectangular array as is shown in Appendix A.

3.3 *Beamwidth control*

Beamwidth of rectangular array antenna is defined as [10]-[12],

$$\Delta\theta = \tan^{-1}\left(\tan\theta_0 + \frac{1}{\alpha}\frac{d_y}{d_x}\right) - \tan^{-1}\left(\tan\theta_0 - \frac{1}{\alpha}\frac{d_y}{d_x}\right),$$ (9)

where θ_0 and $\Delta\theta$ are the direction of main lobe and beam width, and α is a constant known as beam width parameter. For $d_y=d_x$ above equation simplifies to,

$$\Delta\theta = \tan^{-1}\left(\tan\theta_0 + \frac{1}{\alpha}\right) - \tan^{-1}\left(\tan\theta_0 - \frac{1}{\alpha}\right).$$ (10)

For known value of θ_0 and $\Delta\theta$, the constant term α can be determined as,

$$\alpha = \frac{\tan\Delta\theta}{-1 + \sqrt{1 + \tan^2\Delta\theta + \tan^2\Delta\theta\tan^3\theta_0}}.$$ (11)

4. Result

Radiation intensity of two element end-fire array is shown in Fig. 3(a) on elevation plane, and in Fig. 3(b) on spherical surface; where color bar shows minimum (black) to maximum (white) intensity. Actually, the sphere in Fig. 3(b) gives the distribution of radial component of electric field. Array factor of the same antenna on elevation plane is shown in Fig. 3(a) for $d=\lambda/3$, $f=75$MHz. The same is done for broadside array in Fig. 4(a) and Fig. 4(b) respectively. Transformation of the radiation pattern from a broadside to end-fire as a function of phase shift for $N=2$, and N=4, taking $d=\lambda/4$, is shown in Fig. 5(a) and Fig. 5(b) respectively. Array factor of Dolph-Tschebysecheff linear array with major-to-

minor lobe ratio *10dB, N=10, d=λ/2* (Polar coordinate system) is shown in Fig. 6. The same is done for rectangular array of 10x10 in Fig. 7. It is easily visualized that side lobe control is better for rectangular array compared to linear array. Variation of beamwith control parameter, α, against beamwith, taking direction of main lobe as a parameter, is shown in Fig. 8, which is a helping tool for getting antenna parameters for control of beamwidth of a smart antenna. It should be mentioned here that all the graphs of radiation pattern of this section are derived from Matlab Software.
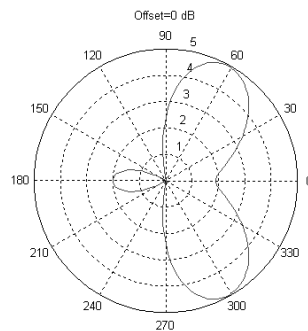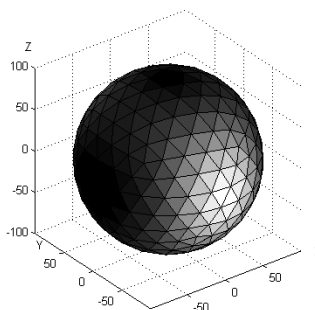

Figure 3(a): End-fire array with *N=2*, Phase shift =-2π/3, d=λ/3, *f=*75MHz
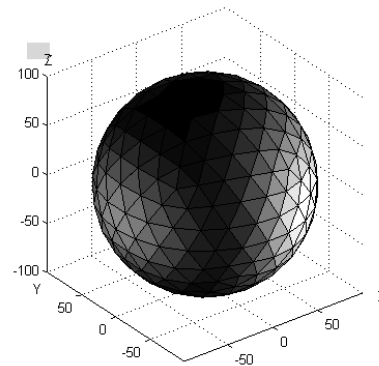
Figure 3(b): Radiation intensity over a spherical surface (end-fire)
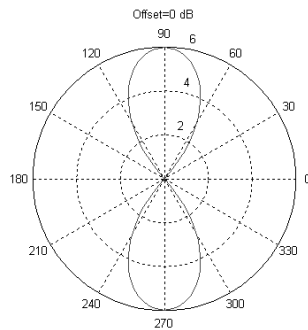
Figure 4(a): Radiation intensity over a spherical surface (broadside)

Figure 4(b): Broadside array with *N=2*, Phase shift =0, d=λ/3, f=75 MHz
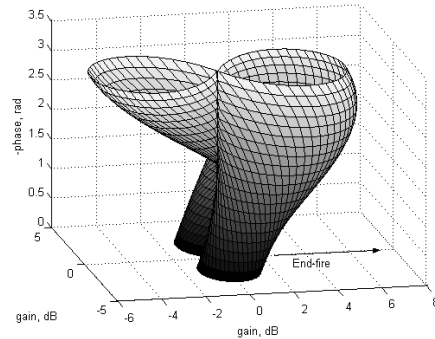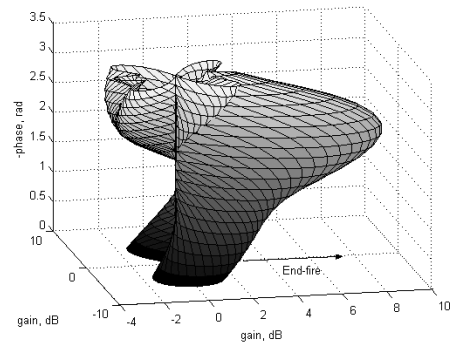
Figure 5(a): Transformation of the radiation pattern from a broadside to end-fire as a function of phase shift for $N=2$, $d=\lambda/4$

Figure 5(b): Transformation of the radiation pattern from a broadside to end-fire as a function of phase shift for $N=4$, $d=\lambda/4$
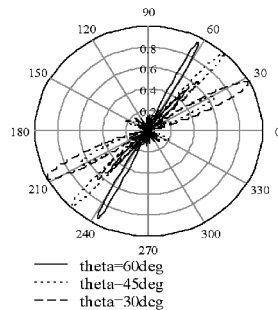

— theta=60deg
······ theta=45deg
– – – theta=30deg

Figure 6: Array factor power pattern of Dolph-Tschebysecheff linear array with major-to-minor lobe ratio *10dB, N=10, d=λ/2* **(Polar coordinate system)**
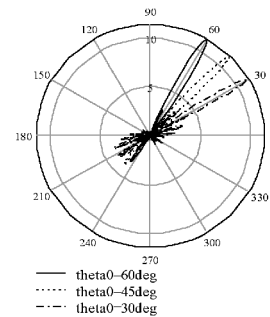

— theta0=60deg
······ theta0=45deg
–·– theta0=30deg

Figure 7: Array factor power pattern of Dolph-Tschebysecheff rectangular array with major-to-minor lobe ratio *10dB, N=10, M=10, d=λ/2* **(Polar coordinate system)**

5. Conclusion

In this theoretical analysis, all the array elements have been considered as dipole antenna. The smooth variation of radiation pattern of linear array from broadside to endfire, with variation of relative electrical phase, is a distinct finding of this paper. Side lobe and directivity control is visualized more prominently from polar radiation pattern; hence, rectangular array is recommended for smart antenna. More over, beamwidth control technique of
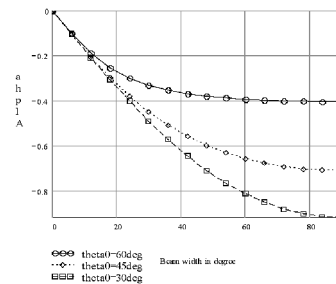

theta0=60deg
theta0=45deg   Beam width in degree
theta0=30deg

Figure 8: Beam width parameter α **as a function of beam direction** θ_0 **and beam width** $\Delta\theta$

rectangular array which is also depicted explicitly, would be a helping tool for a network planar in controlling traffic based on space division multiple access technique. This paper deals only with linear and rectangular array antenna but circular and cylindrical array could also be incorporated for comparison. It would be better if theoretical results of all the antennas discussed here could be compared with the practical result to validate the analysis.

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Appendix A

The array can be written as,

$$AF(\theta) = 4\sum_{m=1}^{N}\sum_{n=1}^{M} a_{m,n}\left[\cos\left[(2m-1)\frac{\pi d}{\lambda}(\sin(\theta_0)\cos(\phi) - \sin(\theta_0)\cos(\phi_0))\right]\right]$$

$$\times \cos\left[(2m-1)\frac{\pi d}{\lambda}(\sin(\theta)\sin(\phi) - \sin(\theta_0)\sin(\phi_0))\right],$$

where

$$a_{m,n} = \sum (-1)^{N-s} 2\frac{(2N-1)}{N+s-1} C(N+s-1,2s-1)C(2s-1,s-n)\left[\frac{\cosh\left(\frac{1}{2N-1}a\cosh(R)\right)}{2}\right]^{2s-1}$$

and

$$P(x,y) = \begin{cases} x, & \text{if } x \geq y \\ y, & \text{if } x < y. \end{cases}$$

Here ϕ_0 and θ_0 are the directions of the main lobe in the azimuthal and the elevation plane.

NOTE

Advertisement Restriction and Tobacco Consumption: A Case Study of Dhaka Rickshaw-pullers

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Abstract

Tobacco control policies are essential to improve the life of the poor as well as the economic welfare of the country. Bangladesh loses 5% of its GNP due to malnutrition. The level of poverty increased because of tobacco consumption both at the individual and national level. The consumption of a pack per day of an inexpensive brand like Navy can constitute 4% of household income. If tobacco consumption can be eliminated, it will save US $ 15 million annually which is used to import tobacco, and will increase job opportunities by 18% if smokers spend their money on other goods and services, as well as increase investment in housing, education and health care. This paper investigates the null hypothesis that increase of advertising restriction will not decrease tobacco consumption among the poor rickshaw-pullers of Bangladesh and uses a limited version of the rational addiction model. This paper shows that advertising restriction has a positive impact on the poor rickshaw pullers of Bangladesh since it decreases the consumption of tobacco. If the new law becomes effective, it can save the lives of millions of citizen from health hazards and death.

Introduction

Bangladesh is one of the poorest and most overpopulated countries in the world. Half of its population live below the poverty line (defined as consuming less than 2122 calories/day). According to the Bangladesh Bureau of Statistics (BBS), most households are not capable of spending more than $82 dollar per month. Thirty percent of the households are classified as very poor, twenty-two percent as poor,

and less than 1% as rich (Efroymson et al., 2001). The Bangladesh government and NGOs are trying to figure out numerous solutions for hunger and poverty; millions still do not get enough food for their daily need, and do not have access to adequate housing, education and healthcare.

Tobacco control policies are essential to improve the life of the poor as well as for the economic welfare of the country. The level of poverty and malnutrition has increased because of tobacco consumption both at the individual and the national level. Bangladesh loses 5% of its GNP due to malnutrition. The consumption of a pack per day of an inexpensive brand like Navy can constitute 4% of household income. For the poorest 6%, smoking a pack per day can consume 46% of their household income or 76% of household expenditure. Expensive brand like Marlboro would require 56% of the average income of a Bangladeshi. (Efroymson et al., 2001)

Overall, if tobacco consumption can be eliminated, it will save US $ 15 million annually, the amount used to import tobacco, and will increase job opportunities by 18%, if smokers spend their money on other goods and services, as well as increase investment in housing, education and health care. As a result, approximately 10.5 million children can be saved from hunger while 350 children under age five can escape death daily from malnutrition. (Efroymson et al., 2001). Even though administration can not eliminate the consumption of tobacco overnight, it can implement a strict tobacco control policy to reduce tobacco consumption.

Dr. Nurul Islam, a nationally recognized professor and physician, has felt that it is imperative to implement a law to control tobacco usage for Bangladeshi citizens. His observation was that the previous laws were very weak and were never implemented adequately. After considering his petition, the National Assembly, in order to control smoking and tobacco-related product's production, usage, marketing and advertising, enacted a legislation which prohibits any person from smoking in public places and on public transport vehicles on March 15th, 2005,. The law also prohibits any citizen of Bangladesh from distributing or even proposing to distribute any free sample to the public to promote tobacco sale. Citizens should not make agreements or contracts with other person to donate, give prize or scholarship or arrange tournament to promote tobacco usage. The legislation also restricted any citizen from

a) Broadcasting, and advertising tobacco in movie theatres, or government and non-government radio and television channels.

b) Selling any film or audio containing tobacco advertisements

c) Publishing any books, magazines, leaflets, handbills, billboards, newspaper or even print tobacco advertisements in Bangladesh.

d) Supplying or distributing among the public any leaflet, handbill or document containing any tobacco product's brand name , color, logo, trade mark, sign, symbol, and advertisement.

e) The management at all public places or public transportations should display the cautionary sign "Stay away from smoking, it's a punishable offense" both in Bengali and English.

f) Every tobacco producing industry should label the packet of the tobacco product with the following cautions in big letters, clearly, visibly and boldly (covering at least 30 percent of total space):

> a) Smoking causes death
>
> b) Smoking causes strokes
>
> c) Smoking causes heart diseases.
>
> d) Smoking causes lung cancer.
>
> e) Smoking causes breathing problems

However, since most tobacco consumers of Bangladesh are illiterate i.e. unable to read and write, those rules literally have no impact on them because they spend their whole life to gather necessities for the family.

Objective

The main objectives of the study are as follows:

1. To investigate the effect of the increase of advertising restriction on tobacco consumption among the poor rickshaw-pullers of Bangladesh.

2. To investigate consumption patterns and consumption sensitivity to increased price of tobacco of this group of people.

3. To study the feasibility of implementing the law or awareness to reduce tobacco consumption.

Background Reading:

Cigarettes and other forms of tobacco use are addictive, Patterns of tobacco use are

regular and compulsive and a withdrawal syndrome usually accompanies tobacco abstinence. The pharmacological and behavioral processes of tobacco addiction are similar to addiction to drugs such as heroin and cocaine. In the ranking of addictives of psycho-active drugs, nicotine was determined to be more addictive than heroine, cocaine, alcohol, caffeine and marijuana (Islam, 2005).

Tobacco consumption leads to fatal diseases such as cancer, lung and heart diseases, causing about 3.5 million deaths each year, which is to say about 10,000 deaths throughout the world per day. One million deaths occur in developing countries such as Bangladesh (Islam, 2005). Tobacco smoking is a major cause of chronic bronchitis, emphysema and lung cancer as well as a major risk factor for myocardial infraction, certain pregnancy-related and neonatal disorders etc. Smoking has been associated with cancer, cerebrovascular and peripheral vascular diseases and peptic ulcer disease; smokers also suffer from acute respiratory illness.

The global tobacco epidemic is predicted to claim premature death of some 250 million children and adolescents. At present a third of these occur in developing countries. It is also predicted that tobacco will soon become the leading cause of death and disability, killing more than 10 million people annually- 2 million in China alone by 2020. Tobacco causes more deaths worldwide than HIV, Tuberculosis, Maternal Mortality Rate, Motor Vehicle Accident, homicidal and suicidal deaths combined (Islam, 2005). Passive smoking also has a dangerous effect on infant deaths, respiratory illnesses and middle ear diseases in babies and children, and leads to lung cancer, and heart disease in adults. Children are put at risk because smoking by their parents increase the likelihood that in time they themselves will take up smoking (Islam, 2005).

Tobacco consumption has fallen over the past 20 years in most high-income countries such as Britain, Canada, the United States, Australia and most northern European countries. Demand is projected to continue to fall, dropping to 2.05 million tons in 2010. This is 10 percent lower than the 1998 figure (2.2 million tones). (Action on Smoking and Health, 2004)

As smoking prevalence in the developed countries is gradually declining, international tobacco manufacturers have targeted underdeveloped countries like Bangladesh to revive sales. The general rural people who consume tobacco based products are illiterate and completely unaware of the dangers and harm of consuming tobacco (Islam, 2005). As a result, tobacco consumption rates in developing countries are expected to increase to 5.09 million tones - a 1.7 percent growth rate between 1998 and 2010. If the present trend continues unchecked, tobacco-recorded deaths in

developing countries will rise from one million to seven million a year until 2030. The report of the World Health Organization starts that tobacco kills 11000 people per day world wide. By the year 2020 it will cause 17.7% of all deaths in developed countries and 10.9% of all deaths in developing countries (Islam, 2005).

As a pre-emptive measure to fight back such encroachment into their profits, the tobacco industry is now engaging in aggressive marketing tactics and hitting soft targets in countries like Bangladesh gearing their promotion to the teenage population (Islam, 2005). Studies of WHO shows that prevalence of tobacco usage (smoking and non-smoking) in Bangladesh is 55% in the population and 57% among hospital outpatients aged 30 years and above. Males consume more tobacco than females in Bangladesh unlike any other developing country. Population data show that 9% of people aged 30 and above suffer from eight tobacco related diseases (ischemic heart diseases, pulmonary disease, lung cancer, strokes, oral cancer, cancer larynx, chronic obstructive pulmonary diseases, pulmonary tuberculosis, and Burger's disease), and 41% of them are attributable to tobacco. Hospital data indicate that 29% of inpatients aged 30 years and above have eight tobacco-related diseases. These tobacco-related diseases have been causing death among 16% of the population. Moreover, those data indicate that 9% deaths of Bangladesh are attributable to tobacco (Acharys et al., 2005).

The cost of tobacco-related illness in Bangladesh is estimated to be 27.4 billion taka and total benefit from the tobacco sector is 24.8 billion taka-20.3 billion taka collected as tax revenue on the domestic consumption of tobacco and 4.5 billion taka earned as wages in tobacco production. Thus the cost of tobacco usages outweighs the benefit from tobacco revenue and wages by 2.6 billion taka. Therefore, the Bangladesh economy should benefit from controlling tobacco consumption by implementing strict rules and regulations (Acharys et al., 2005).

Research Design:

According to the Becker-Murphy model, or the rational addiction model (Becker, Grossman and Murphy,1994) past consumption of some goods influence their current consumption by affecting the marginal utility of current and future consumption. Greater past consumption of harmfully addictive goods such as cigarettes stimulate current consumption by increasing the marginal utility of current consumption more than the present value of the marginal harm from future consumption. Therefore, past consumption is reinforcing for addictive goods. The Becker-Murphy model has several empirical implications for addictive behavior that

include a bimodal distribution of consumption, quitting by "cold turkey", a negative cross effect, larger long-run than short-run elasticity of demand, larger responses to anticipated than unanticipated price changes, and larger response to permanent than temporary price changes (Becker, Grossman and Murphy,1994). However, in absence of information about past consumption, I have modeled the tobacco expenditure of rickshaw puller as a function of the consumer's income like any other consumption function. The expected sign of the parameter estimates of income is positive.

The model I can be specified as

Log (Expense_tobacco)=α+ β1 Income + ϵ…………………………….(Model I)

I am investigating the effect of advertising restrictions on the consumption of the tobacco as a non-price effect. If the rickshaw pullers has not seen the advertisement of tobacco on TV, radio, and newspaper, I have assumed that tobacco restriction is effective, and so I have setup the dummy variable "Ad_restriction" to 1. The expected sign of the parameter estimates of income is positive but the expected sign of the parameter estimates of AD_Restrict is negative.

Log (Expense_tobacco)=α+β1 Income+β2 AD_Restrict+ϵ……………….(Model II)

I have also included three variables such as education level , age as policy variable and children as a budget constraint. As I have mentioned earlier in the paper, most rickshaw- pullers are illiterate and helpless, I will try to determine if increase in education or age can play a significant role in reducing tobacco consumption. In order to determine the education impact, the data have been divided into two groups based on completion or not completion of compulsory primary education (up to Fifth grade of school) .

The model can be specified as

Log (Expense_tobacco)=α+ β1 Income +β2 high_educ +β3 Age+ β4 AD_Restrict +ϵ .(Model III)

Log (Expense_tobacco)=α+β1 Income +β2 low_educ +β3 Age+ β4 AD_Restrict + ϵ.(Model IV)

Table 1 briefly describes the variables used in the above models and their expected sign. This paper investigates the null hypothesis that increase of advertising restriction will not decrease tobacco consumption among the poor rickshaw-pullers of Bangladesh.

Data

The data were collected from Muhammadpur Metropolitan area's rickshaw-pullers. Rickshaw-pullers are three-wheel cycle drivers who manage their livelihood by carrying people from one place to another. They are mostly uneducated and live from hand to mouth. They live in slums, and can barely afford the necessities of life. They represent the poorer section of the population of Bangladesh. A number of rickshaw pullers were selected who reside in the suburbs of Dhaka City on a random basis. Basically there is no difference among the rickshaw-pullers regarding their jobs and their standard of living. So the selected group is likely to be representative of the bigger clusters of the rickshaw-puller.

The data were collected by reading the questions of the survey to the respondents and recoding their answers. There were almost five hundred rickshaw-pullers in the location. 250 of them were taken as samples. Data were collected over a period of three months from June to August, 2005. The demographic information, expenditure pattern on tobacco and necessities, and awareness of the newly passed law, knowledge about hazard of tobacco, and their behavior if the price of tobacco were to be increased were collected through a questionnaire.

Limitations

The findings of the study can not be applied to all the citizens of Bangladesh because the paper focuses only the poor rickshaw-pullers of this country.

Results

The rickshaw-pullers of Bangladesh spend on an average around Tk. 532 for tobacco consumption per month, which is equal to 81% of their average expenditure on rent or 48% of their average expenditure on food. For these reasons, some researchers have remarked that Dhaka rickshaw-pullers are never too poor to smoke (Efroymson &Ahmed, 2001). From the demographic patterns, we can see that half of the rickshaw-pullers start smoking around the age of 18 or less. I asked them whether they know that tobacco is harmful for their health. To my great surprise, all of the rickshaw-pullers seemed to be aware of the harmful effect of tobacco. Moreover, they know that passive smoking is also harmful. Of the 250 respondents, 205 persons reported as smokers i.e. almost 80% of rickshaw- puller smokes. 204 persons reported that they will smoke less or will not smoke at all if the price increases i.e. their opinion shows that they are highly price sensitive.

The model I is statistically significant because F-statistics is significant at one percent level. However, the adjusted R^2 of 4.67% i.e. only 4.7 percent change of log

of monthly tobacco consumption is explained by the variable income. We find that rickshaw-pullers will smoke even if there is no income since _ is 5.7923.However, an one taka increase in income will increase spending on tobacco by approximately 0.0 001248 taka. This implies that consumption among rickshaw-pullers have reached the addictive level because a significant variation in income does not affect consumption significantly. However, income as an explanatory variable is significant at the five percent level in our one-tail test.

From model II, we find that Advertisement restriction can permanently decrease tobacco consumption level. Moreover, if the respondent had not restricted himself to any advertisement, then spending on tobacco would have decreased by 0.14. The explanatory dummy variable AD-Restrict is statistically significant at 10 percent level, and the parameters estimate of AD_Restrict is negative. For this reason, it can be said that advertising restrictions do impact on the reduction of tobacco consumption. From model III and model IV, we also find that advertisement restrictions decrease tobacco consumption. Moreover, if respondents are educated and have not seen any ads then the log of spending on tobacco would decrease by 0.13 whereas if the respondents are not educated and have not seen any ads then the log of spending on tobacco would decrease by 0.10375. Although the explanatory power of the independent variables of all models is not strong, the models are statistically significant at one percent level. Thus, in this paper, I reject the null hypothesis that increase of advertising restriction will not decrease tobacco consumption among the poor rickshaw pullers of Bangladesh. Moreover, my findings suggest that education plays an important role in the reduction of tobacco consumption.

Conclusion

Advertising restriction has a positive impact on the poor rickshaw puller of Bangladesh since it decreases the consumption of tobacco amongst them. If the new law becomes effective, it can save the lives of millions of citizen from health hazards and death. However, the citizens of Bangladesh are yet to receive any benefit of the anti-tobacco law because "the anti-tobacco law has been rendered ineffective due to flouting of the law and people's ignorance about the legal provision. The law has failed to stop smoking in public places and it has hardly any effective on the sale of cigarettes and tobacco products". (Meheriban, *The Daily Star,* December 19, 2005). Therefore, the government should take more aggressive steps to reduce this violent epidemic from the country. What follows are some proposals to make the anti-tobacco law effective:

- The government has started to list voters throughout the country. It can issue

voter cards throughout the country which will be used to ensure that tobacco products can be bought only by adults. (minimum age to be a voter of Bangladesh is 18)

- The government will increase excise tax on the tobacco industry which will be largely used to launch an anti-tobacco campaign and to subsidize treatment of tobacco-related diseases among the citizens.

- The government should enforce laws to control the black market. Tobacco industries like British American Tobacco of Bangladesh always argue that increase in tax will increase black market dealings of tobacco. No doubt policy makers have to be conscious of the activation of the black market, but they should not let the tobacco industry pay less tax simply because of their weakness in controlling the black market. Although consumers always oppose any incremental tax policy on their necessities, the survey by WBB (Work for Better Bangladesh, 2002) shows that 80% smokers and 93% non-smokers support increased tax on tobacco product (Ahmed and Alam, 2005).

- The government should ask all public places to reserve a place for smokers.

There should be one designated authority to whom citizens can complain; not a vague "law enforcement authority" clause. Moreover, they should always be ready report any violation of anti-tobacco laws.

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Appendix A

Table1 Definition, means and standard deviation of variables (s.d=standard deviation)			
Variables	Description	Expected Sign	Actual Sign
Income	Per month income of the rickshaw puller	+	+
Level_educ	The highest grade of school attend by the rickshaw puller	-	+

Age	The age of the rickshaw puller at the time of survey	-	-
Ad_Restrict	Dummy variable which is set to 1 if the rickshaw puller haven't seen any AD	-	-
Expense_tobacco	Expenditure on tobacco	Dependent variable	Dependent variable

Source: Survey Conducted By Mariam Jamila, Muhammadpur, Dhaka, 2005

Table 2 Regression Results (Dependent variable: the natural logarithm of monthly tobacco expenses)				
Variables	Equation 1	Equation 2	Equation 3	Equation 4
Intercept	5.79236 (0.12681)***	5.77971 (0.12686)***	5.75160 (0.16693)***	5.85709 (0.17410)***
Income	0.00012487 (0.00003757)**	0.00013181 (0.00003782)**	0.00012744 (0.00003783)***	0.00012744 (0.00003783)***
High_educ			0.10549 (0.06121)**	
Low_educ				-0.10549 (0.06121)**
Age			0.00055595 (0.00381)	0.00055595 (0.00381)
Ad_Restrict		-0.14080 (0.10184)*	-0.13458 (0.10167)*	-0.10375 0.10439
N	205	205	205	205
F	11.05	6.50	6.50	4.01
Adjusted R2	0.0467	0.0510	0.0510	0.0555

Notes:

1. The figures are the coefficient and the standard errors are given in parenthesis.
2. * denotes .10 level of significance,** denotes .05 level of significance , *** denotes .01 level of significance
3. Mean of the dependent variable (the natural log of monthly tobacco expense) is 6.24

BOOK REVIEWS

Marquez, Gabriel Garcia. *Memories of My Melancholy Whores*

Iffat Sharmin

East West University

Arguable among the greatest novelists of the twentieth century, Nobel Laureate, Gabriel Garcia Marquez's new novel *Memories of My Melancholy Whores* is his first work of fiction in ten years. This slim novel of hundred and fifty pages is so beautifully translated by Edith Grossman, widely recognized as the pre-eminent Spanish to English translator, that, it makes one to stop and admire the beauty of the words. What attracts one to Garcia Marquez's books is his   style of writing; his simple, subtle, and highly descriptive writing draw the readers right into the setting and into the mindset of the protagonist. In this slender book, there is not one stale sentence, redundant word or unfinished thoughts. In fact this easy and quick-to-read novel is something worth reading despite the criticisms it has attracted from many readers and critics. While many fans and critics of Marquez are happy to get a hold of his first fiction, they are disappointed as they had expected that "Marquez would offer the next entry in his memoir trilogy to follow up *Living to Tell the Tale.*" Instead, they are "surprised with a 'digression', in the form of a novella," Marquez's fist fiction, Memories *of My Melancholy Whores.* This 'digression', referred to as the "fairy tale for the aged" by the book's publisher, begins with an anonymous first person narrator, a newspaper journalist who, at the age of ninety, falls in love for the first time with a fourteen year old seamstress. I must admit that I was taken back by the idea that a ninety year old man wants to sleep with a fourteen year old girl. But one must dig deeper than the literal text when reading this novella.

Garcia Marquez, a master of the arresting first sentence, begins his novella, thus; "The year I turned ninety, I wanted to give myself the gift of a night of wild love with an adolescent virgin." For his ninetieth birthday, the unnamed narrator has the madam of the brothel acquire for him an adolescent virgin. After 10 pm, dressed as a dandy in white linen, trouser cuffs turned up to disguise how much he

has shrunk in recent years, sweating with fear, he arrives at the brothel. Inside one of the "unplastered adobe rooms", he finds the fourteen year old girl peacefully (11) sleeping, "naked and helpless as the day she was born." Unable to rouse her, he lies next to her admiring the Sleeping Beauty. When he wakes up, he discovers "the improbable pleasure on contemplating the body of a sleeping woman without the urgencies of desire or the obstacles of modesty". This newfound pleasure sets in motion a strange courtship. Enchanted by his sleeping virgin, whom he names Delgadina, he begins to reflect on his life's many lost romantic opportunities. He recounts numerous sexual experiences that he had in the past with prostitutes or the other women he had forced to accept money for sleeping with him: "I have never gone to bed with a woman I didn't pay, and the few who weren't in the profession I persuaded by argument or by force, to take money even if they threw it in the trash." He also adds "when I was 20 I began to keep a record listing name, age, place, and a brief notation on the circumstances and style of lovemaking. By the time I was 50 there were 514 women with whom I had been at least once."

Nevertheless, it is hard not to dislike this man in these opening pages. His emotional life is an empty shell of repetitive sexual acts, and his public life a miserable failure. As he admits, his public persona "lack(s) interests: both parents dead, a bachelor without a future, a mediocre journalist." He finds solace in writing a weekly column, immersing himself in literature and listening to classical music. So late in his life he realizes that by sleeping around with numerous women, he had actually prevented himself from having a meaningful attachment. It dawns on him for the first time now that "whores left (him) no time to be married". This reveals how painfully disconnected a life the narrator has lived until this point. Having spent his entire life buying pleasure from countless women, he has failed to establish any lasting or intimate bonds and sadly has never fallen in love. Yet his ninetieth birthday marks a profound change, and this work's charm lies in Marquez's ability to transform the sordid lust of this old man into an aching meditation of love.

After reading *Memories of My Melancholy Whores,* one must realize that it is love that the man in the heart of the story seeks, not sex. Though he recounts his sexual acts willingly, there is vagueness in his tales, particularly in the story of the bride whom he left at the altar on their wedding day. Something is missing from his life and he worries that, at the age of ninety, it's too late to recapture it. So, perhaps wishing to get a taste of youthfulness, he requests for a young, unsullied companion. Instead, he gets a frightened child, a girl who works during the day

sewing buttons on shirts. She is asleep when he goes to her. He doesn't wake her, but sleeps next to her, barely touching her. This becomes the pattern of their relationship: sleeping together but not touching. And yet he falls in love with her, even while admitting to himself that the love he feels is based more on his ideas about this girl than on the actual girl. What initially appears absurd becomes increasingly interesting. The narrator's dissatisfaction prompts him to return to woo the girl for a second time but he fails yet again to seduce her. But, we are relieved when he fails and from here till the end, Marquez makes us experience the transformative power of love. As his chaste passion for Delgadina grows, he awakens to the "miracle of the first love of (his) life at the age of 90." Afterwards, his nightly visits become habitual. Oddly, the two lovers spend every night together, but they are never awake at the same time. Without speaking a word to each other, they develop an affection and tenderness that defies expectation. It is this attraction that proves most compelling, for Marquez suggests that love happens in the strangest of places and between the most unlikely of pairs. What is memorable about this affair is not the narrative trajectory of its story, but the exquisite details that make this particular love meaningful and unique.

Though *Memories of My Melancholy Whores* deals with a disturbing story and is unsettling to read at first, it is never for a minute dull, and it does touch on the problematic nature of love. Most relationships are based, at least in their initial stages, more on perception than reality. Yes, the situation is seldom as extreme as is the case here. But rest assured, the book is never really repulsive, despite the fact that the narrator spent so much time in the brothels. After all, the book isn't really about sex but about life, and about what happens when you get near the end of it. And at the end the reader is happy that the unnamed, lonely narrator got the chance to experience love; so what if he is ninety— its better late than never!

P.S. Chauhan, ed. *South Asian Review. V.S. Naipaul: His Ideas, Work and Ark*

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The South Asian Review, a fully refereed journal published thrice a year by the South Asian Literary Association, has brought out a special issue dedicated solely to V.S. Naipaul and, as the title suggests, 'his ideas, work and art'. This issue has been guest-edited by P.S. Chauhan who, in his introductory essay "The Current State of Naipaul Studies", notes that the volume "marks the beginning of a more just and less rigid, of an honest and less polemical, and of a more exacting and less sweeping criticism of Naipaul's work."

Over the years Naipaul studies has gone through significant changes as critics have gradually tried to reach a sound understanding of the true 'Naipaulian' qualities of commitment, sensitivity and straightforwardness and of his limitations. The 25 articles compiled in this issue manifest the divergent, multi-faceted and complex nature of Naipaul's work that reflect his transformation, identity crisis, contradictory stances and underscore his multifarious talents as a person, a writer and a critic of the customs, tradition, and practices evident in different places of the world. We can roughly group the articles in this review into the following categories based on their contents: (a) Naipaul's diasporic condition or treatment of identity crises; (b) the evolution of his ideas; (c) his role as a writer and the style of his works; (d) his treatment of women; and (e) miscellaneous topics.

The articles dealing with Naipaul's identity crisis and his diasporic condition trace Naipaul gradually back in time to his roots in different 'worlds', beginning with his ancestral home in India, childhood in Trinidad, and his writerly life and close association with Oxford culture. Elvira Pulitano, while talking about The *Enigma of Arrival* a work which cannot be labelled either as an autobiography or as fiction, shows how Naipaul challenges 'western notion of subjectivity' by proposing alternative modes of identity formation which in his case have been formed by the synthesis of different cultures and 'worlds'. But this idea of synthesis is problematic as Naipaul suffers from his doubly-exiled state. In "Deterritorializing Trinidad and India: V.S. Naipaul's Diasporic Travels in India",

Harveen Mann investigates *India: A Million Mutinies Now* as a nationally deterritorializing text which turns the narratives of both India and Trinidad into interdependent postcolonial histories reflecting Naipaul's Trinidadian-Indian self. Mann also shows how in *India: A Million Mutinies Now,* Naipaul ceases to see everything myopically through the lenses of European culture. In "Travel Taking Further: V.S. Naipaul, Travel Writing and the Quest for Postcolonial Identities", Jacinta Matos traces Naipaul's unease with the novel form which he terms an imperial project that the writer cannot call his own. By citing a few of Naipaul's travel narratives, especially the ones on India, Matos traces his futile search for a unified identity. Abdollah Zahiri, in *"The Enigma of Arrival:* Inverse Authorship, Textualizing Reterritorialization", talks about the 'inverse authorship' of *The Enigma of Arrival* which takes the reader into a journey from back to front regarding the diasporic accounts of an autobiographic tale. It also pinpoints Naipaul's shift 'from instrumental rationality to postcolonial reason'. Naipaul's shift from a sense of displaced identity and loss of history in works like *A House for Mr. Biswas* to acceptance of the hybrid and fragmentary identity or nature of self is examined by Judith Levy in her article "V.S. Naipaul: From Displacement to Hybridity?". She shows how Naipaul, in his latest works, returns to the autobiographical form to reassess his former notions of identity and loss. In Odd Man Out: V.S. Naipaul and Postcolonial Studies", Zesus Zapata points out how Naipaul, in his search for roots and rejection of Caribbean identity, accepts his Indian ancestry partially and identifies himself with Western literary and cultural traditions, while distancing himself from his contemporaries at a time of decolonization and 'resistance'. In "Naipaul and the Illusion of Identity", Nandini Bhautoo-Dewnarain writes that the transcendence of self-identity against all odds is what has been traced by Naipaul all along. Taking into consideration four novels of V.S. Naipaul *(The Mimic Men, A Bend in the River, The Enigma of Arrival and A Way in the World)*, Yu-Yen Liu, in her article "Negotiating the Changing World: Migrancy and Identity in V.S. Naipaul's Fiction", explores the ways Naipaul negotiates his identity in an ever-changing world. Liu cites Stuart Hall, James Clifford, Iain Chambers and Paul Gilroy and shows how the concept of identity changes as Naipaul's characters move from one place to another and eventually embraces a trans-cultural identity.

The second group of articles discovers a change in Naipaul's worldview and stance as a writer. In her essay "Frustrated Homelands: V.S. Naipaul and Caribbean Indianness as Despair", Lisa Outar shows how Naipaul has a melancholic view of ethnicity and gradually sinks into the state of a disinterested judge of the postcolonial world. Raphael Dalleo traces a gradual transformation

in Naipaul and shows how his view of Trinidad as typifying the colonial and postcolonial world, and his view of a place that is sterile and absurd, evolves as he comes to see it as a part of a transnational network. His earlier negative view is replaced by a more tolerant one. Jasbir Jain's article "Out of the Colonial Cocoon? From *The Mimic Men to India: A Million Mutinies Now"* argues that Naipaul's identification with power and rejection of his roots is reflective of his inner ambivalence which ultimately doesn't let a unitary subject come into being. She discards Naipaul's belief that the mutinies in *India: A Million Mutinies Now* are attempts at working towards a unified India. According to her, the mutinies are nothing but divisive power structures.

A good number of essays in this collection are devoted to assessing the characteristics of Naipaul's writings as a whole, the changes his works have shown over time in terms of form, the regulating factors of his writing and the stances he assume in his works. Stuart Murray's article "Naipaul in the 1970s: Authorial Preferences and the Symptomatic Reading of Place" reveals how, in his fictions of the 1970's, Naipaul portrays a postcolonial world in disarray. Murray shows how Naipaul claims that a writer has the right to claim his own subject matter and, a thorough understanding of the places and peoples he writes about. He also underscores Naipaul's opinion that a writer should not just fictionalize the common historical accounts of different parts of the world. Masood Raja's essay "Reading the Postcolony in the Center: V.S. Naipaul's *A Bend in the River"* attempts to read Naipaul beyond the politics of representation and beyond the tyranny of the text or authorial intention. In "Rituals of Passivity: Naipaul's Mimetic Book on the South", Ben P. Robertson scrutinizes *A Turn in the South* and challenges Naipaul's claim to realism although it was praised by many upon publication. He points out that Naipaul castigates Americans and shows the paradox of inequality in a people supposed to be living on the basis of equality. Nicole Gyulay, in his essay "Writing for the West: V.S. Naipaul's Religion", analyzes Naipaul's Eurocentric perspectives and his attitudes towards religion and stresses his early struggle to become a writer. Havice Ovgu Tuzan's "The Dual Vision: Compassion and Cruelty in the Writings of Naipaul" argues that dismissing Naipaul as a 'reactionary' or as a 'native informer' would mean disregard for the substantive complexity of his worldview. Tuzan asserts that Naipaul's observations on 'half-made societies' definitely rings true and are marked by signs of his genuine concern for 'Third World' countries.

Two of the articles of the special issue focus almost entirely on Naipaul's treatment of women. Gillian Dooley's paper "Naipaul's Women" attempts to

answer the accusations made against Naipaul for his supposedly misogyny in his early novels. Dooley tries to suggest that his later works indicate that he is equally critical of his male characters. She suggests that if any accusation of misogyny is to be labelled, it should be directed at Naipaul's fictional characters and not at the writer himself. On the other hand, Sanna Dhahir examines Naipaul's *Guerrillas* where Naipaul links woman to the life-negating sexual goddess of Hindu mythology.

The complexity and multiplicity of the subject matters in Naipaul's works is quite evident to anyone reading this special issue of the *South Asian Review* since many of the articles dealing with him is on miscellaneous subjects. Rachel Donadio in her *Profile* talks about Naipaul's disapproval of the novel as a form of art and notes how he is bent on proving the works of the master novelists, including the French greats, to be futile. As Naipaul worked harder and harder at this form, he found out that the novel form induces falsity and has its limitation. Donadio also points out how Naipaul sees great possibility of economic growth of India and China although the Arab countries hold out no signs of hope for him. In "V.S. Naipaul's A House for Mr. Biswas: Poetics of History, Biography, Modernity and Culture", K.D. Verma shows how Naipaul blends history, biography, modernity and culture in an aesthetic and philosophical manner in *A House for Mr. Biswas.* Timothy Weiss' paper "Tales of Two Worlds: Naipaul after 9/11" examines the representation of a disordered world in Naipaul's linked novels of the millennium *Half a Life* and *Magic Seeds.* It also sets these novels in the context of his works of the 1960's which represent nihilism both in the farcical state of the 'First World' and the hopelessness of the 'Third World', and those of the late 1980's and 1990's which offer some glimpses of hope. Weiss suggests that after the catastrophe of 9/11, we should read Naipaul from a different political perspective. In "Buried Alive: The Gothic Carceral in Naipaul's Fiction", Ankhi Mukherjee examines Naipaul's preoccupations in his fictional works with live burial, a state of the self where it is blocked off from life-sustaining elements, which calls for literary strategies derived from the Gothic tradition. Vivian Nun Halloran's paper traces Naipaul's obsessive *leitmotif* concerning the need for a thorough analysis of the Caribbean history of slavery to solve the present problems of the century. It asserts Naipaul's belief that the legacy of slavery keeps affecting the lives of Caribbean people. Focusing on Naipaul's novels *The Suffrage of Elvira and Miguel Street,* Maureen Shay traces the relationship between literacy/ illiteracy and self-representation, cultural definition and national articulation. Sangiata Gopal explores a new "area of darkness" and the limits of epistemology in *The Enigma of Arrival.*

This major collection of scholarly essays "interested less in the man than in his work" attempts not only at throwing light on Naipaul's works but also insists on reading Naipaul in a number of interesting and rewarding ways in the context of recent developments in literary studies and theory. The diversity of cultural and intellectual backgrounds of the authors and the essays selected clearly mark Naipaul's worldwide popularity as a writer. Despite the fact that Naipaul continuously challenges his critics through his contradictory remarks and stances, the writers in this collection attempt at presenting a new Naipaul who, as he himself suggests in his Noble Lecture, has "always moved by intuition alone".

V. S. Naipaul, Magic Seeds

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When V.S.Naipaul's last book was published, a few months before he received the Nobel Prize for literature, it was perceived not to be a very big event. His next work, a sequel(amazing and singular for Naipaul, the novelist), Magic Seeds, his 'first fictional work[properly] set in India' also failed to arouse universal acclaim, despite the Prize. But it is a novel worth reading for its preoccupations, like the failure of idealism, questions of identity, etc. if not the story, as it contributes to understanding this versatile but enigmatic writer.

Naipaul's previous novel, *Half a Life,* was the story of Willie Chandran, a half caste, culturally hybrid, morally anchorless character's first forty years in India, Great Britain and an unnamed country. *Magic Seeds,* begins in Europe where Willie has gone at the end of *Half a Life,* leaving his hybrid wife Anna, who had supported economically and emotionally his flotsam existence. It ends after a long sojourn by Willie in India and in England.

Willie's sister Sarojini, the wife of a left wing filmmaker in Germany, points out to Willie, his lack of moral direction. She inspires him to go to India to take part in a guerilla war in support of lower caste untouchables in accordance with Marxist-Leninist-Maoist ideology. Ironically, Willie unwittingly joins a splinter faction of the group he was supposed to fight with. After seven years of fruitless campaign, Willie surrenders to the police and spends several years in jail. Sarojini finally manages to get Willie released with the help of his English friend Roger through presenting him as a pioneer of postcolonial Indian writings, in English. Willie then returns to England but only to get entangled in a web of sexuality and mindless living.

Towards the end of the novel, Willie, who in *Half a Life,* had felt constricted by his limited kind of existence, comes to view himself as a man 'serving an endless prison sentence' from which he may free himself if he acts upon the realization: that 'It is wrong to have an ideal view of the world' (Naipaul, 2004:294). However, we do not see Willie acting upon the realization as the novel ends there.

The story line of this work is more schematic than that of *Half a Life.* The characters seem as drab as before, but the basic ideological framework of the writer, a n unbeliever in any kind of idealism, gets accentuated through the treatment of identity markers like caste and class and the revolutionary leftist guerilla movements, which had their heyday in the sixties and seventies in different parts of India. The long middle section on the caste/class war reengages with the problem of caste and partially class in a more aloof kind of way than in the first book. The glossing over of the unpleasant reality of caste which made Willie';s mother's uncle(the firebrand lower caste untouchable leader) appear ineffective and Willie's father's action of marrying his mother, comical in the previous novel, is given here a more accentuated expression. The movement to free the lower caste is led by middle and upper class Hindus. The untouchables, on the other hand, are uninterested in any kind of class war. The gap between the two not only upholds Naipaul's pessimistic views about idealism and more clearly utopian politics but also presents caste as a problematic category demanding intervention.

The section on the sexual free play, towards the end of the novel(for example between Willie and Perdita, Roger's wife and between Roger and the maid Marian) speaks of a kind of liberation for Willie but at the same time also of ennui and a cul-de-sac situation.

Fate takes the form of a cyclic encounter and the whole world seems to be gray. The individual's existence seems meaningless except in being anchored in a world, which is gray without the dignity of being dark. The magic solution ("seeds") presented at the end of the novel ('It is wrong to have an ideal view of the world')(Naipaul, 2004:294), comes too late and is offered as too schematic an answer to have. The novelist takes on the tone of a didactic author in the manner of seventeenth and eighteenth century English novelists, and we feel awkward.

This is Naipaul's only 'Indian' novel and thus the portrayal of Indians is of special significance to his readers here. If Naipaul's public expressions on India, bespeaking of atavism , in the comments he made subsequent to the Nobel are coupled with the presentation of Indian and other characters , we get the impression of a dark personality.

The novel is not, however, without its positive characteristics. The treatment of caste and class oppression is far more realistic and nuanced than we find in other writers. The enigmatic nature of identity as presented here makes us feel that the writer, perhaps because of his hybridity, understands the complexities

involved better than others. The class war type of leftist politics touched the people of Bangladesh and readers will feel affinity with the novelists' viewpoint at certain points. The characters if not much attractive succeed in keeping us interested.

Magic Seeds, was a surprise to me in being a sequel and is at times troubling, as a novel. I for one would not want a third novel based on the same characters. Naipaul's critical engagement with the issues if identity and idealism, in this novel, however creates the feeling in readers that he has still things to offer his readers. We therefore wish that Naipaul does not end his novelist's career with Magic Seeds.