

# COMPARING LINGUISTIC FEATURES OF ACADEMIC DISCOURSE IN PAKISTANI AND BRITISH ENGLISH: A MULTIDIMENSIONAL ANALYSIS

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## **Abstract**

Pakistani English as a non-native variety exhibits variation at different levels of language. Most of the previous quantitative studies have compared individual linguistic features of Pakistani English with their counterparts in British English and claimed about the distinctive identity of Pakistani English as an indigenous variety. These studies are, however, limited in their scope due to their dependence on individual linguistic features and unrepresentative data. Pakistani English need to be compared at the level of register to further highlight its unique features and strengthen its distinct identity. Biber (1988) developed multidimensional (MD) approach for register variation studies based on the co-occurrence of lexico-grammatical features. He disregarded the reliability of individual linguistic features for exploring variation among registers and accentuated the importance of co-occurrence of linguistic features for register variation studies. The present research as one of the pioneer studies on the multidimensional analysis of Pakistani English is based on the comparison of lexico-grammatical features of Pakistani and British academic writing along with five textual dimensions of Biber's 1988 study. A special purpose corpus of 8.38 million words of Pakistani academic writing has been constructed for the present research. The corpus consists of the research dissertations of M.Phil and PhD graduates and is further divided into categories of academic disciplines. The findings reveal that Pakistani academic writing conforms to the norms of British academic writing and has been found more informational, more non narrative, more explicit, less persuasive and more impersonal in using lexico-grammatical features when compared with British academic writing.

**Key Words:** Pakistani English, Register variation, MD Analysis, Academic writing

## **Introduction**

Variability is intrinsic in human language. Human beings use language in different ways in different situations and for diverse communicative reasons. The change which 'starts from a specific area and spreads to neighboring areas' (Trudgil, 1991, p.07) has resulted in the evolution of different varieties of English across the globe. Variations in geographical, socio-cultural and communicative phenomenon have

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played their role in the evolution of different varieties of English all over the world. These varieties have their own communicative purposes and stand as independent languages with distinct linguistic features. Pakistani English (PE) is a nativized variety and has undergone various local and cultural influences and changes.

Studies on Pakistani English with reference to individual linguistic items have claimed the distinct identity of Pakistani English with certain deviant trends of its own when compared with British English. However, no register based study on Pakistani academic writing has been conducted in comparison with British English. For further exploration of its unique features and to strengthen its distinct linguistic identity, Pakistani English needs to be studied at the level of register, a situationally defined variety of language characterized by particular situation, topic and purpose. Biber proposed Multidimensional (MD) analysis in his 1988 study to explore variation among registers on the basis of co-occurrence of linguistic features. Biber considered that register variation studies relying upon individual linguistic features instead of co-occurring features are biased in nature. He regards multi-dimensional analysis as the most suitable alternative to investigate the linguistic variation which is corpus-based, quantitative, empirical and comparative in nature. So far, no register based study has been done on co-occurring linguistic features of Pakistani academic writing. Therefore, the present research aims at exploring distinct features of Pakistani academic writing as a register and further compares it with British academic writing to explore how much Pakistani academic writing as a register conforms to the previous claims regarding the distinct norms of Pakistani English. The following research question has been addressed in the present research.

How far is the language of Pakistani academic writing different from British academic writing analyzed in Biber's 1988 study?

### **Literature Review**

A dozen of researches have been done in the area of world Englishes (e.g. Jenkins, 2003; Kirkpatrick, 2002, 2006, 2007; Hickey, 2004; Trudgill, 2004; Kachru & Nelson, 2006; McArthur, T., 2003; Schneider, 2007; Fishman, 2008; Kachru and Smith, 2008; Mesthrie, 2006). World

Englishes have been studied from geographical, socio-cultural and linguistic perspectives. Most of the work done from socio-cultural perspective is based on the elaboration of theories and models of development, spread, classification and interaction of new Englishes (e.g. Kachru, 1986; Yano, 2001; Berns, 2005; Schneider, 2007; Kachru and Smith 2009; Michieka, 2009; Seidlhofer, 2005). The work done from linguistic perspective explores lexical, phonological and grammatical features of the world Englishes. Many other studies compare patterns of language use in different varieties of English. For example, Kachru (2003) compares expressions of definite reference in English as used in India, Nigeria, Singapore and the USA; Sand (2004) investigated the article use in contact varieties; Nelson (2006) is concerned with the 'common core' of lexis in six varieties of English; Mair (2007) explores the collocational and cultural contours of varieties of English around the world; Collins (2009) explores the distribution patterns of a set of modals and quasi-modals in nine varieties of English; and finally, Kirkpatrick (2007) presents a book-length account of socio-cultural and historical backgrounds of world Englishes as well as their linguistic features.

Like many other countries English has been nativized in South Asian countries. Nativization refers to a process in which the native languages affected too much the new varieties of Englishes and added in them many new local trends. The presence of English language for over 200 years in the south Asian region has led to the nativization of the language, which is manifested in numerous local varieties of English. These local varieties are collectively referred to as South Asian English.

### **Pakistani English as Non Native Variety**

Like many other south Asian countries, English has been nativized in Pakistan as it has sucked up many local expressions ranging from sounds to lexico-grammatical and discourse features. Studies on Pakistani English (PE) have been mainly conducted from two different perspectives: occurrence of individual linguistic items in multiple texts and register based studies in terms of co-occurrence of linguistic features. Studies on the occurrence of individual linguistic items include both manual and corpus based researches. The researches based on manual analysis include studies mainly on lexical (e.g. Mahboob, 2004; Baumgardner, 1993a, 1993b, 1998; Rahman, 1990b, 1991; Talaat

,1993, 2002; Y. Kachru and Nelson, 2006) and phonological levels (Rahman, 1990b). Taalat's (1993) study of lexical variation in PakE, for example, looks at the semantic shift in certain lexical items as a shift from their original Standard British English usage to a so-called Urduised meaning. Baumgardner (1987; 1993; 1998) discusses Pakistani English is based on the comparison of Pakistani English with exonormative models of English. His discussion of the acceptability of various syntactic, lexical, and morphological innovations in Pakistani English is the only large-scale study of its kind. But the scope of his study did not extend to the investigation of sociolinguistic variation in Pakistani English. Mahboob (2004) presents an overview of syntax morphology, lexis, and phonology of Pakistani English. Some of the studies address issues of spelling (e.g. Hassan, 2000) in Pakistani English.

Mehmood & Mehmood (2009) are among the earliest who carried out corpus based research on Pakistani English and compared its distinctive features with British and American Englishes. Mahmood, R. (2009) studied the 'Lexico-Grammatical' aspects of the nouns and noun phrases in Pakistani English. The different patterns of the nouns and noun-phrases were studied in comparison with the British and American Corpora. Mahmood, R. (2009) also worked on the collocations, colligation and word-grammar in Pakistani English. Mahmood, A. (2009) worked on multiple trends in Pakistani English through a corpus-based study and verified the legitimacy of previous claims made by the researchers working on Pakistani English. The researchers have tried to strengthen the distinct identity of Pakistani English through their work by highlighting the distinguishing features of Pakistani English as a legitimate variety. However, these studies being based on general purpose corpora built up from limited and unrepresentative data are unable to distinguish among registers of Pakistani English. To explore the independent trends of Pakistani English it needs to be studied beyond individual occurrences of lexical, phonological and grammatical features. Pakistani English so far is a less researched area and it needs to be studied at the level of register to further validate its distinct identity.

**Register Based Studies on Pakistani English**

So far only two register based studies have been conducted on Pakistani English. These studies include: linguistic variation across advertisement in print media (Shakir, 2013) and linguistic variation across press reportage of Pakistani print media (Ahmed & Mehmood, 2015). Both studies employ multidimensional analysis to explore internal as well external variation. Ahmed and Mehmood compare the lexico-grammatical features of Pakistani press reportage with British press reportage on Biber's five textual dimensions and discover the significant statistical linguistic differences between Pakistani press reportage and British press reportage register. Findings of the study reveal that Pakistani press reportage has certain deviant trends and exhibits distinctive features of its own. For example, On dimension 1, the researchers find both Pakistani press reportage register and British press reportage register as highly informational as it justifies the norm of press reportage register. On D2, Pakistani press reportage register was found highly narrative in nature; whereas, British press reportage register was found non-narrative in press discourse production. On D3, British press reportage was found situation dependent in discourse production of press reportage in comparison to Pakistani press reportage register which was found highly explicit in nature. On D4 and D5, no differences have been observed between both varieties of English. The study further compares the distinctive linguistic features of both Pakistani Press reportage register and British press reportage. The findings reveal the distinct linguistic characteristics of Pakistani Journalistic register, which emphasizes categorical independent existence with its own independent norms. The researchers relate these deviant trends to cross cultural differences being exhibited in two registers. They stress the need for further register based studies on Pakistani English by disregarding the previous studies which relied on the frequency of individual linguistic features.

**Need for more Register Based Studies on Pakistani English**

The process of strengthening Pakistani English as an independent variety seeks for the continuity in the researches at other levels beyond individualistic features. The above mentioned brief review of Pakistani English also reveals that there is a much vacuum in the area of register

based studies. Therefore the present research strives for further investigations of co-occurring linguistic features at the level of register to add into the validation of Pakistani English as a legitimate variety on the one hand and to explore how much Pakistani academic writing deviates or conforms to the norms of British academic writing on the other.

### **Previous Studies on Pakistani Academic Writing**

Pakistani academic writing is the least explored area so far. Previous researches have focused individual linguistic items in academic writing or general problems faced by learners in producing academic writing. For example, the research work which represents Pakistani academic writing as a small part of general purpose corpora of Pakistani Written English (PWE) comes from Mehmoodians (2009). In PWE, Pakistani academic writing is represented by three sub-registers of text books, research articles and thesis. However, no distinct features of Pakistani academic writing have been studied in this research. Asghar (2015) conducted research on the features of meta discourse and contrastive rhetoric in Pakistani academic writing. The research is based on a small corpus consisted of 11 written texts, each comprising of 450 words at average. The research is an attempt to develop awareness about meta-discourse features in students' writings. The brief review calls for further investigation of linguistic features in Pakistani academic writing as register and to compare them with their British counterparts to identify the differences or similarities between them.

### **Register Variation**

Variation in language in terms of situation of use refers to register variation. Studies on register variation focus on lexico-grammatical features in accordance with the situation of use. Language used in different registers belongs to different situations, different purposes, and different participants. Register variation is widely considered to be intrinsic to all cultures. Ferguson (1983, p. 154) emphasized the fact that "register variation in which language structure varies in accordance with the occasions of use, is all-pervasive in human language." That means that registers are characterized by the use of particular lexical and grammatical features which are viewed in the situational context and for

further functional interpretation. Both lexical and grammatical features in registers exhibit functional substance in general: linguistic features have a tendency to occur in a register as they are predominantly well-suited to the purposes and situational context of the register.

Register analysis involves three basic elements: the situational background, the linguistic features and the functional association between the two. Registers are characterized by particular lexico-grammatical features and are linked with the specific situational contexts. Register analysis explores the functional association between linguistic features and the situational context. Linguistic features tend to occur in a register because they are particularly well-suited to the purposes and situational context of the register.

Pakistani English exhibits variation not only at lexical, phonological and syntactical levels but also at the level of use. Pakistani English has its own registers which vary in accordance with the situation of use. So far only two register based studies have been conducted on Pakistani English. There is a need to study other registers of Pakistani English to further explore its individual and distinct identity.

### **Multi-Dimensional Analysis and Register Variation Studies**

Biber (1988) presented Multidimensional analysis for register variation studies in his influential work '*Variation across Speech and Writing*' in which he compared 23 spoken and written registers based on the co-occurrence patterns of prominent linguistic features in an empirical way. Co-occurrence of linguistic features refers to the clusters of associated features having a tendency to occur together in a particular register.

Multidimensional analysis uses the methodological tools of corpus linguistics. By using computational techniques, it is possible to analyze the linguistic patterns found in a large corpus of texts. Such analyses include a comprehensive linguistic characterization of each text, based on a wide range of linguistic features. The primary goal of multidimensional analysis is to focus on the linguistic analysis of texts and text types and it undermines the analysis of individual linguistic features. It turns out, though, that the relative distribution of common linguistic features, considered individually, cannot reliably distinguish among registers. Biber considers: 'few registers can be identified by unique lexical or grammatical features. Instead, to carry out the linguistic

analysis of a register, you must consider the extent to which linguistic features are used, in order to identify the linguistic features that are pervasive and especially common in the target register'. On the basis of this idea, MD approach focuses the fact that individual linguistic features cannot distinguish among registers; rather, sets of co-occurring features work together towards getting a shared a communicative goal. These are marked in MD analysis as dimensions.

Moreover, the approach being explicitly multi-dimensional assumes that multiple parameters of variation will be operative in any discourse domain. Biber (1988) made it clear that no single dimension can differentiate between spoken and written form of texts. Biber (1988) also made clear that textual dimensions in multi-dimensional studies are investigated through the process of factor analysis in which the co-related linguistic features are further explored for their shared communicative function. Biber (1988) discussed the concept of factor analysis in MD analysis, "Factor analysis enables quantitative identification of underlying dimensions within set of texts. Factor analysis provides primary analysis, but it is dependent on the theoretical foundation provided by an adequate data base of texts and inclusion of multiple linguistic features" (p. 65). "When applied to linguistic data, factor analysis can therefore be used to identify sets of linguistic features that tend to co-occur across the texts of a corpus". (Grieve, 2010, p. 5).

Dimensions are identified and labeled on the basis of the functional interpretation of sets of co-occurring linguistic features with significant frequencies in texts. It is important to mention here that the co-occurring patterns underlying dimensions are identified quantitatively through statistical factor analysis. Dimensions are further interpreted in relation to the communicative functions shared by the co-occurring features and are accordingly labeled.

Multi-dimensional approach of register variation synthesizes quantitative and qualitative functional methodological techniques. Quantitative techniques are not sufficient in themselves for MD analyses of register variation. Rather, like all register analyses, qualitative analysis is required to interpret the functional bases underlying each set of co-occurring linguistic features. The dimensions of variation have both linguistic and functional content. Quantitative analysis is concerned with



the linguistic content of a dimension comprising a group of linguistic features to explain the quantitative linguistic patterns in functional terms, where as qualitative analysis is required for the interpretation of functional bases underlying each group of linguistic features.

Theoretically, MD approach is different from previous register variation based studies in three different ways. First, most of the studies disregarded single dimension / parameter to investigate variation differences among registers; whereas, MD approach stresses the fact that different sets of co-occurring linguistic features accentuate the different functional interpretations e.g. explicitness, involvedness, informational focus, etc. Second, previous studies highlighted the fact that register variation can be studied in the form of dichotomous characteristics; while MD approach shows that no incessant range of linguistic variation is associated with each of these dimensions. Third, previous investigations showed uncertainty about groupings of linguistic features selected on intuitive level to co-occur for certain in the texts; whereas, MD approach uses quantitative statistical techniques and provides the identification of the prominent co-occurrence patterns in a language.

The prominent feature of MD analysis is that it deals with both linguistic and functional aspects of language. After, the clusters of co-occurring linguistic features are derived through statistical factor analysis, the co-occurring features are interpreted in functional way and are given names as dimensions. Biber (1988) explored five textual dimensions in his study on linguistic variation across speech and writing:

### **Dimension 1: Informational vs. Involved Production**

This dimension represents interactive and involved discourse (verbal) on positive side and highly informational discourse (carefully planned and edited) on negative side of polarity. Nouns, prepositional phrases, and, attributive adjectives are some of the features whose co-occurrence on negative pole represents density of information. The features with positive weight on this dimension are associated with 'highly constrained production circumstances' and represent interactive discourse. The linguistic features on the negative side of polarity include private verbs first and second person pronoun referring directly to addressor and addressee, emphatics, Wh- questions and amplifiers as markers of involved and interactive text. Due to the shared function of the linguistic

features on both positive and negative sides, the dimension is labeled as 'Involved vs. Informational Production'.

**Dimension 2: Narrative vs. Non Narrative Concerns**

The dimension 2 distinguishes between narrative and non-narrative type of discourse. The features of narrative discourse include past tense verbs, third person pronouns, perfect aspect verbs, public verbs as indicators of past action. Non-narrative registers have lower frequency of occurrence of such linguistic features.

**Dimension 3: Explicit vs. Situation Dependent Reference**

The dimension 3 differentiates between explicit and situation dependent type of text on two sides of polarity. The features with positive loading on this dimension include 3 forms of relative clauses (Wh relative clauses on object and subject positions and pied piping constructions), phrasal coordination and nominalizations to exemplify explicit informational discourse. The time and place adverbials along with other adverbs are specific to situation dependent text.

**Dimension 4: Overt Expression of Persuasion**

The dimension has features with positive loading only. Infinitives, modals of prediction, suasive verbs, conditional subordination, modals of necessity, split auxiliaries and modals of possibility work together to mark persuasion.

**Dimension 5: Abstract vs. non Abstract Information**

The dimension 5 is labeled as Abstract vs. non Abstract Information and represents informational discourse that is abstract and formal. The features with positive weight include conjuncts, agentless passives, adverbial past participial clauses, by-passives, past participial WHIS deletions, other adverbial subordinators and predicative adjectives. All these features indicate complex logical relations among the clauses. This dimension has also been labeled as 'impersonal vs. non-impersonal style' in later works.

Multidimensional analysis can be conducted in two ways. One is to carry out Old MD analysis based on the exploration of variation across

texts on five textual dimensions (discussed above) of Biber's 1988 study. The other is referred as new MD analysis based on the new factor analysis of the data and formation of new dimensions. The present research employs old MD analysis and explores linguistic variation across Pakistani academic writing in comparison with British Academic writing on five textual dimensions of Biber's 1988 study

### **Previous Register-Based Studies on Multidimensional Analysis of Pakistani English**

Very few researches have been conducted on register variation of Pakistani English. Most of the researches have strived for the recognition of Pakistani English on the basis of individual linguistic features, whereas, the functional interpretation of linguistic differences have not been explored which is a marked feature of register studies. So far, only two studies (Shakir, 2013 on advertising register in Pakistani print media; Ahmed & Mehmood, 2015 on press reportage register in Pakistani Print media) have been conducted which have employed MD approach to explore linguistic variation based on internal and external comparisons. The studies stress the need to explore other registers of Pakistani English to highlight the linguistic variation and linguistic identity of Pakistani English as a non-native variety. Both studies disregarded previous researches on Pakistani English due to their reliance on frequency of individual linguistic features and being based upon unrepresentative data. Shakir (2013) mainly investigated how far Pakistani print advertisements varied with reference to source, audience and product category on five textual dimensions propounded by Biber (1988) and found significant variance in accordance with source and product category. Ahmed & Mehmood (2015) worked on five leading newspapers and explored that the language of Pakistani press reportage is highly informational, narrative, explicit, less persuasive along with Biber's 1988 five textual dimensions. The present study has also explored variation across Pakistani academic writing in comparison with British academic writing on five textual dimensions of Biber's 1988 study.

## Materials and Methods

### Construction of Corpus and Data Analysis

The first step in building a representative Corpus of Pakistani Academic Writing (COPAW) was to select disciplines that may represent a wide range of academic areas. Three major disciplines, Humanities, Sciences and Social Sciences due to their importance in academics were then selected to study. 235 M.Phil and PhD research dissertations were collected from multiple universities of Pakistan of which 100 PhD theses were downloaded from HEC research repository. The research theses represent a wide array of subjects in Humanities, Social Sciences and Sciences. The corpus was compiled of 235 text files on the bases of sub-categories. Finally, a corpus of 8.385000 million words was ready for further data analysis process.

The following table describes the categories of Pakistani Academic writing to be studied in the present research.

**Table:1 Sub-Categories of Pakistani academic writing in terms of Disciplines**

Sr. No	Sub-Categories of Pakistani Academic Writing	Codes
1	Humanities	H
2	Social Sciences	SS
3	Sciences	S

### Data Analysis

The data analysis in the present research is based on three rigorous steps: tagging of data for linguistic features, attaining counts of linguistic features, turning raw frequencies into normalized scores and calculation of dimensions scores. They are briefly discussed as under

### Tagging of the Corpus

The corpus of Pakistani academic writing was tagged by employing Biber's tagger for all the linguistic features used in 88 MD Analysis on five textual dimensions. (List of Features attached as Appendix I).

### **Turning Raw Counts of Linguistic Features into Normalized Frequencies**

Biber's tag count program was used for the raw counts of the frequencies of different linguistic features and normalized frequencies. The raw frequencies of linguistic features were obtained from all texts (235) and computed out of 1000 words. This normalization was highly essential for comparison of frequency counts across texts due to variation in the length of texts. 'A comparison of non-normalized counts will give an inaccurate assessment of the frequency distribution in texts' (Biber, 1988, p.75). This standard, set by Biber himself in his 1988 study is based on the formula: actual frequency divided by total number of words, multiplied by 1000.

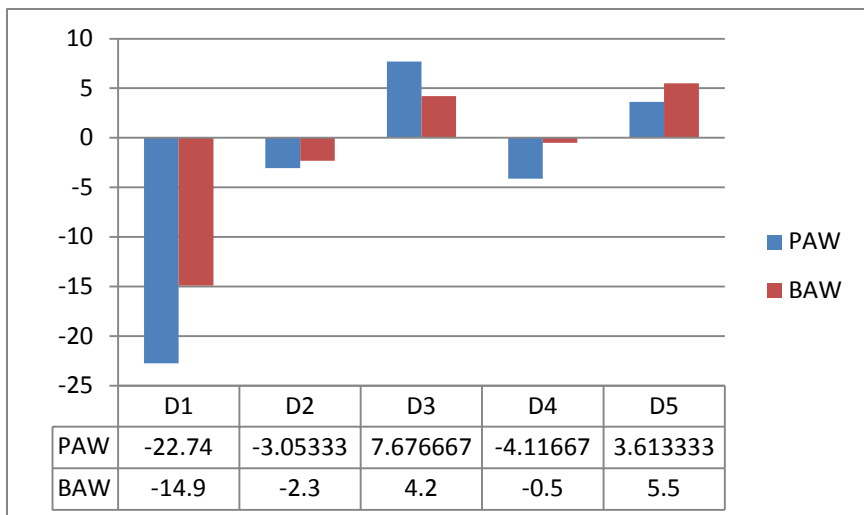
### **Calculating Dimension Scores**

The dimension score of each text of Pakistani academic writing was calculated by subtracting the standardized scores of negative features from the sum of standardized scores of positive features. The dimensions with no negative features include only sum of positive scores of linguistic features. In this way, dimension score of each text in 1988 MD analysis of Pakistani academic writing was calculated.

### **Results of Multidimensional Analysis**

Previous studies on Pakistani English like Baumgardner, (1993); Tallat, (1993, 2002); Mehmood & Mehmood (2009), Ahmed & Mehmood (2015) have claimed that Pakistani English is different from British English and is an independent variety with its distinguishing linguistic features which are considered as norms. By taking the same stance, the present study explores the linguistic features of Pakistani academic writing as a register and compares its results with those of Biber's 1988 study of British academic writing on five textual dimensions in a general way. The results of the present study are compared with those of Biber's 1988 study as a trend to figure out certain differences as well as similarities. It may also be mentioned that the best comparative study would have been possible, if any recent study based on specialized corpora of British academic writing had been available. The figure given below compares the mean dimension scores of Pakistani academic

writing with British academic writing on five textual dimensions of Biber's 1988 study.



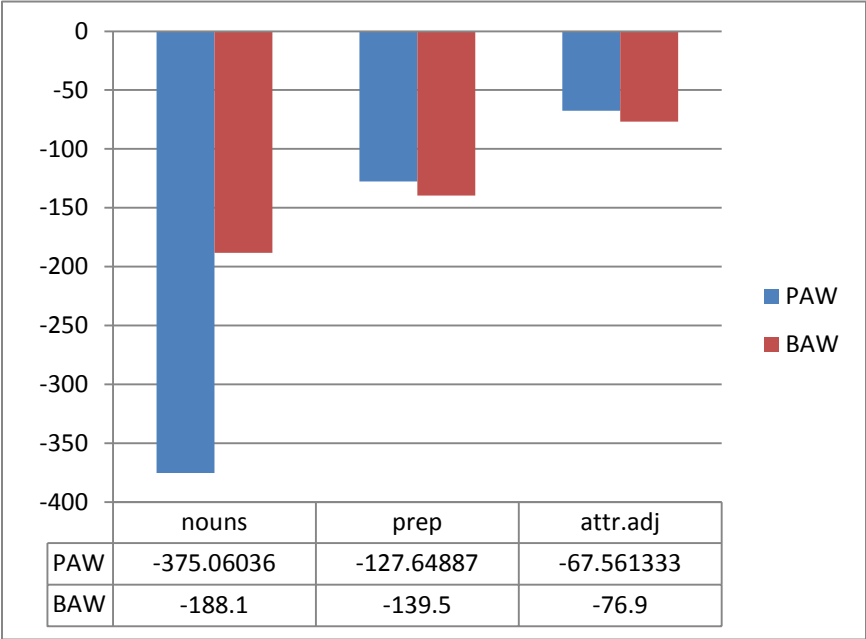
**Figure: 1 Comparison of Pakistani Academic Writing with British Academic Writing on Biber's 1988 Five Textual Dimensions**

The comparison exhibited in figure 1 reveals that both Pakistani academic writing and British academic writing demonstrate similar trends on all the five dimensions. Both Pakistani and British academic writings are found to be informational, non narrative, explicit, non persuasive and impersonal. The differences are found in terms of the extent to which the two registers vary on the five textual dimensions.

Among all dimensions, the differences on D4 are found interestingly greater than on other dimensions. The differences can be related to cross cultural variation between the two registers in employing features of informational discourse. On D1 Pakistani academic writing with mean score of -22.74 has been found more informational, more carefully integrated and less interactive than British academic writing with mean score of -14.9. On D2 Pakistani academic writing (-3.05333) has been found less narrative and more expository when compared with British academic writing (-2.3). On D3, Pakistani academic writing with the positive mean score of 7.676667 has been found more explicit, open and elaborated as compared to British academic writing with the mean score of 4.2. These results indicate that Pakistani academic writing is less

time constrained and situation dependent as compared to British academic writing. On D5, the results have been found reverse, in that on this dimension PAW has low mean score as compared to BAW and has been revealed less impersonal and detached and has been revealed more personal in the production of academic discourse.

The figure given above clearly depicts that both registers as highly informational on D1. The high informational stance of Pakistani academic writing calls for detailed analysis of its grammatical features on this dimension. This informational density is essentially due to the high frequency of nouns, prepositions and attributive adjectives.



**Figure: 2 Features of Informational Discourse in Pakistani and British Academic Writing**

The figure 2 compares the mean frequency of informational features across the two registers. Pakistani academic writing is found to be exceedingly more informational due to the more extensive use of nouns (-375.06036). The frequent use of nouns indicates the greater focus on referential meaning and informational density in Pakistani academic writing. British academic writing has shown a greater trend of using prepositions and attributive adjectives, though the differences are not as greater as on nouns between the two registers. Prepositions work to specify or elaborate the identity of the referents. The less use of

prepositions and attributive adjectives indicates that Pakistani academic writing is propounded to have less explicit and less elaborated referential identity.

The below given example from social sciences illustrates the characteristics of informational discourse in Pakistani academic writing.

Example:

**Quality education** has become a **burning issue** today. **Annual reports of various public and private institutes** like **federal** and **provincial public service commissions** finger out **the quality of higher education institutes**. During **the selection process, the graduates, even master degree holders of these institutes**, sometimes do not justify **their competence**. **Competence and commitment of teachers (motivation)** towards **teaching** are **two of the most important factors of quality' education**. **These two variables** are not only **indicators of quality education** but **they** determine **teachers' performance**.

The above example illustrates the typical linguistic features of informational discourse with frequent nouns, prepositions and attributive adjectives. The passage is produced with informational focus and careful lexical choices.

On D2, it is noted that both Pakistani and British academic writings have negative feature and are non narrative in style. The results indicate that Pakistani academic writing is more descriptive, expository and procedural in nature and less event oriented as compared to British academic writing. Expository discourse is characterized mainly by the use of present tense. These non-narrative concerns have been discussed by many researchers including Biber, 1988; Biber & Conrad, 2009; Biber, 2010; and Connor & Upton, 2003, 2004. Connor and Upton (2004) describe these non-narrative concerns as:

'These non-narrative purposes include (1) the presentation of expository information, which has few verbs and few animate referents; (2) the presentation of procedural information, which uses many imperatives and infinitive verb forms to give step by step description of what to do, and (3) description of actions



usually in progress, that is, actions in the present tense, a straightforward and concise packaging of information'. (p.249)

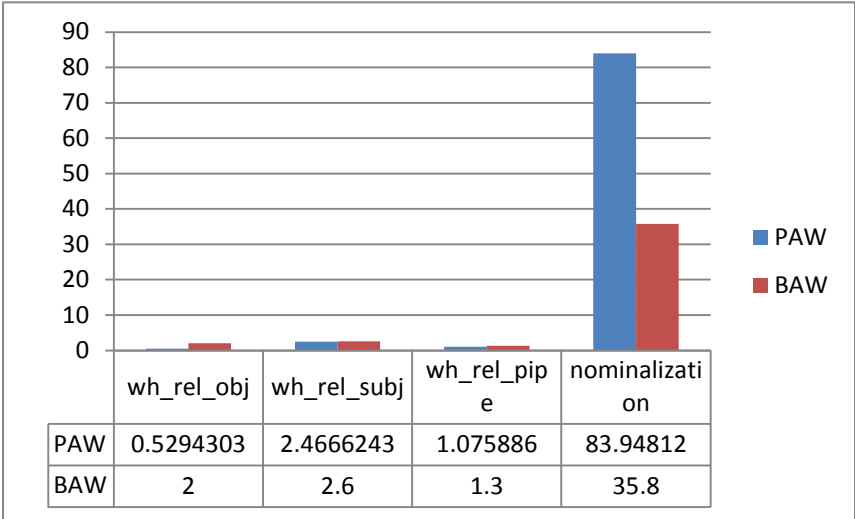
The following example from the corpus of Pakistani academic writing exhibits the non narrative stance of Pakistani academic writing.

Example:

**Groundwater is a valuable** resource **that is utilized** for agriculture, domestic and industrial use besides surface water resource in Pakistan. Efficient management of groundwater resources **relies** on a comprehensive database that **represents** the hydraulic characteristics of the natural groundwater system and modeling tools **to describe** the impacts of decision alternatives. In regional groundwater management problems, the information on the groundwater system **has to be related** with land use, surface water, soil characteristics and environmental issues.

The example above shows Pakistani academic writing as highly non-narrative and gives the presentation of expository information, which has present tense verbs, description of actions usually in progress, that is, actions in the present tense, a straightforward and concise packaging of information

On D3, both Pakistani and British academic writing have features with positive mean scores which show that both are explicit and highly elaborated in style, though not to the same extent. The linguistic features on this dimension include WH relative clauses on object positions, WH relative clauses on subject positions, and pied-piping constructions. These features function to explicitly identify referents or to provide elaborating information concerning referents. The co-occurrence of phrasal co-ordination and nominalizations with these relativization features indicates that referentially explicit discourse also tends to be integrated and informational. The below given figure 5.1.3.3 compares the frequency count of the feature of explicitness in both registers.



**Figure: 3 Features of Explicitness in Pakistani Academic Writing and British Academic Writings**

Figure 3 illustrates the features of explicitness in both Pakistani and British academic writing. Pakistani academic writing is marked with the extremely high use of nominalizations. The high frequency of nominalization indicate the absence of adverbs in Pakistani academic writing. Nominalizations are abstract nouns usually derived from adjectives, nouns and verbs and are essential in academic discussions, where frequent reference is made to abstract concepts and where actions and processes are often referred to in general terms rather in relation to a specific place and time. This means that lesser temporal and spatial references are used and a lot of information is being compressed in derived nouns in Pakistani academic writing.

Example:

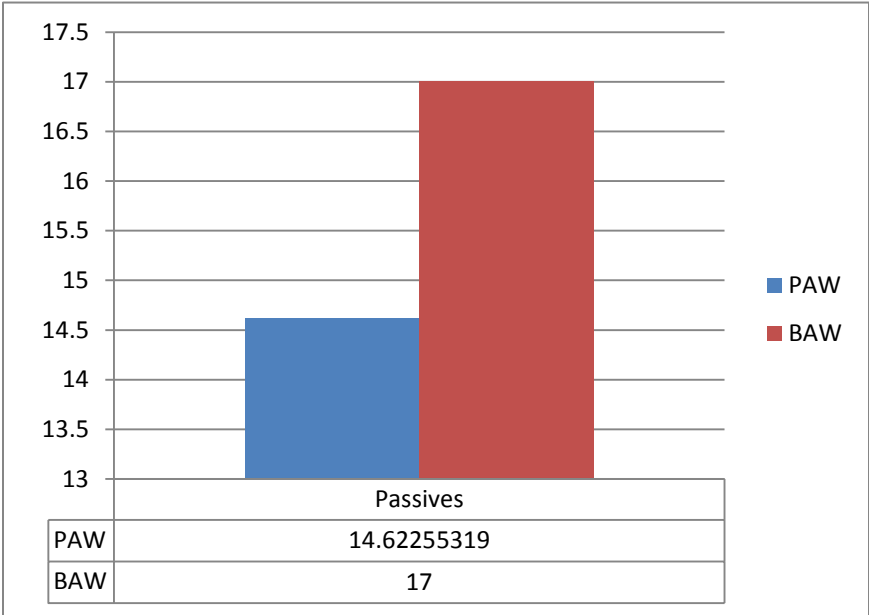
Goleman (1998) defines emotional **competence** as a learned **capacity** based on emotional **intelligence**, results in outstanding **performance** at work place. It covers 3 domains containing 19 components of emotional **competence** (viz., emotional **self awareness**, accurate **self awareness**, **self confidence**, **self control**, **transparency**, **optimism**, **adaptability**, **achievement**, **initiative**, **social awareness** cluster, empathy, organizational awareness, **serviceorientation**, inspirational **leadership**,

**influence, developing others, change catalyst, conflict management, teamwork & collaboration).**

The example given above reveals the abundant use of nominalization in Pakistani academic writing that indicates the preferences for the production of abstract and compressed information. The presence of wh-clauses at along with the density of nominalization mark Pakistani academic writing as more explicit and precise rather than situation dependent.

On D4, both Pakistani and British academic writing have negative mean score indicating lack of overt expression of argumentation. However, Pakistani academic writing is more non persuasive with mean scores of -4.11667 than British academic writing which has -0.5 mean score on this dimension. Features of overt argumentation are generally employed to indicate logic behind the procedures, describing how and why the procedures work. Moreover, overt expression of argumentation is also used to explain procedures to the novices. The results show that in Pakistani academic evidences and procedures are discussed with the fewest features of overt argumentation. The main purpose in Pakistani academic writing is not to persuade the reader but the description of explicit and overt information. On the other hand British academic writing has overt inclination towards persuasive discourse to influence and persuade the readers with logic and argumentation that means description of procedures is accompanied by the features of persuasion.

Figure 1 illustrates the comparison between Pakistani and British academic writing on five textual dimensions of Biber's 1988 study. The results on D5 reveal that both Pakistani and British academic writing have positive features on this dimension and are found to be impersonal and objective in the presentation of informational discourse. The distribution on this dimension is quite different from other dimensions. Pakistani academic writing have the greater mean score on all the other dimensions, whereas, on D5 British academic writing has greater mean score of 5.5 as compared to the mean score (3.613333) of Pakistani academic writing and is found more impersonal and detached. Passives are mainly responsible for creating impersonal and detached discourse. The presence of passives as markers of detached discourse is being shown in the following figure.



**Figure 8: Features of Impersonal Discourse**

Figure 8 demonstrates the presence of passives in two registers and reveals that British academic writing with greater mean score is more detached and impersonal in the production of discourse. Whereas, Pakistani academic discourse tend to be more personal and subjective. The extensive use of passives also gives a sense of objective detachment in expository prose. As agents are not important in academic discourse and the main concern of the writer is to present information in exact and objective way, so passive voice is useful: it reduces the importance of the agent noun phrase by putting it in a by-phrase or not mentioning it at all. The differences between two registers may be associated with the cross cultural variation.

**Conclusion**

From the foregoing discussion on comparison between Pakistani academic writing and British academic writing on five textual dimensions of Biber’ 1988 study, it is concluded that both registers have exhibited similar trends and have been found highly informational, non-narrative, explicit, non persuasive and impersonal. However, there are

differences in the extent to which the two registers share these characteristics on different dimensions. On D1 Pakistani academic writing has been revealed much more informational than British academic writing which is true to the norms of academic writings. On D2, Pakistani academic writing is found to be slightly more expository than British academic writing. On D3, Pakistani academic writing is characterized by elaborated discourse with noticeable difference from British academic writing and been found less situation dependent. On D4, Pakistani academic writing is revealed to be highly lacking in overt expression of persuasion than British academic writing indicating that it is less logical and argumentative. On D5, it is more personal and less detached than British academic writing.

Further investigation into the frequency counts of the linguistic features reveals that on D1 Pakistani academic writing is found to be using almost double ratio of nouns as compared to the low ratio of nouns in British academic writing. The frequent use of nouns indicates the greater focus on referential meaning and informational density in Pakistani academic writing and that it is more informational and less interactive. However, prepositions and attributive adjectives are comparatively slightly lesser in use in Pakistani academic writing. Pakistani academic writing has also been shown abundant with present verbs which make it more expository and less event oriented when compared with British academic writing. Density of nominalization is another marked feature of Pakistani academic writing which further characterizes it with explicit and open style. The frequent use of nouns on D1, present verbs on D2, nominalizations on D3 and lesser use of passives on D5 contribute in making Pakistani academic writing as highly informational, expository and explicit and less impersonal respectively.

Overall, Pakistani academic writing in comparison with British academic writing is more informational, more expository, more explicit, less persuasive and less impersonal. The differences clearly speak of differences in the situational characteristics and different academic context of the two registers. However, the comparison would have been clearer, had an equal sized, recent corpus based study on British academic writing been available.

The findings of the present research do not strictly support the claim of the previous studies on Pakistani English. Unlike Pakistani press reportage register which has certain deviant trends and is opposite to British press reportage register on two dimensions, Pakistani academic writing register conforms to the norms of British academic writing register and follow similar trends on all dimensions. However, the trends may further be verified through future researchers by conducting further comparative studies between British academic writing based on the specialized corpora and the results of the current study. It may also be further validated by conducting further comparative researches on different other registers of Pakistani English.

In future diachronic researches might be conducted to evaluate language change in Pakistani academic writing register by collecting the corpus of Pakistani academic writing of previous decades and comparing its results with the present study. Moreover, the results of the present study can be compared with the results of the other register based studies on Pakistani English. For example a comparative study may be conducted on the language of Pakistani academic writing, Pakistani press reportage and Pakistani print advertisement register. The comparison will explore the linguistic differences and similarities among three registers and be a valuable contribution in strengthening the distinct identity of Pakistani English. Moreover, the findings of the present study provides bases for viewing the results in perspective of world Englishes and the results may be compared in native and non-native context.

## References

- Ahmed, S., Mehmood, A. (2015). Comparing Explicit Features of Pakistani Press Reportage with British Press Reportage: A Multi-Dimensional Analysis, *Journal of Critical Inquiry*. Vol 13, (II), 1-24.
- Ahmed, S. (2016). *Linguistic Variation across Press Reportage of Pakistani Print Media: a Multidimensional Analysis*. (Doctoral Dissertation, Department of Applied Linguistics Government College University, Faisalabad)
- Asghar, J. (2015). Metadiscourse and Contrastive Rhetoric in Academic Writing: Evaluation of a small academic corpus, *Journal of Language Teaching and Research*. Vol 6, (2) ISSN 1798-4769
- Baumgardner, R. J. (1998). Word-formation in Pakistani English. *English World-Wide*, 19(2), 205-246.
- Baumgardner, R.J. (1987). Utilising Pakistani English newspaper to teach grammar. *World Englishes*, 6(3), 241-52.
- Baumgardner, R.J. (1993). *The English Language in Pakistan*. Karachi: Oxford University Press.

- Baumgardner, R.J. (1993a). The indigenization of English in Pakistan. In R.J. Baumgardner (Ed.), *The English Language in Pakistan*. Karachi: Oxford University Press.
- Baumgardner, R.J. (1993b). Utilising English newspaper to teach grammar. In R.J. Baumgardner (Ed.), *The English language in Pakistan*. Karachi: Oxford University Press.
- Baumgardner, R.J. and Kennedy, A.E.H. (1993c). The use of local contexts in the design of EST materials. In R.J. Baumgardner (Ed.) *The English Language in Pakistan*. Karachi: Oxford University Press.
- Berns, M. (2005) Expanding on the expanding circle: where do WE go from here? *World Englishes* 24, 85–93
- Biber, D. (1988). *Variation across speech and writing*. Cambridge: Cambridge University Press.
- Biber, D. (1995). *Dimensions of register variation: A cross-linguistic comparison*. Cambridge: Cambridge University Press.
- Biber, D. (2003). Variation among university spoken and written registers: A new multi-dimensional analysis. In C. Meyer & P. Leistyna (Eds.), *Corpus analysis: Language structure and language use*. Amsterdam: Rodopi.
- Biber, D. (2006). *University Language: A Corpus-based Study of Spoken and Written Registers*. Amsterdam: John Benjamins.
- Biber, D. and S. Conrad. (2001). 'Introduction: multi-dimensional analysis and the study of register variation' in S. Conrad and D. Biber (eds) *Variation in English: Multi-dimensional Studies*, pp. 3–12. New York: Longman
- Biber, D., & Conrad, S. (2001). Quantitative corpus-based research: Much more than bean counting. *TESOL Quarterly*, 35, 331-36.
- Biber, D. & Conrad, S. (2009) Register, genre and Style. Cambridge: Cambridge University Press
- Biber, D. & Gray, B. (2010). Challenging stereotypes about academic writing: Complexity, elaboration, explicitness. *Journal of English for Academic Purposes*, Published by Elsevier Ltd. available online Jan 27, 2010
- Collins, Peter (2009) Modals and quasi-modals in world Englishes. *World Englishes* 28, 281–92.
- Fishman, Joshua A. (2008) *Standards and Norms in the English Language*. Berlin: Mouton de Gruyter.
- Hickey, Raymond (2004) Englishes in Asia and Africa: origin and structure. In Raymond Hickey (ed.), *Legacies of Colonial English: Studies in Transported Dialects* (pp. 503–35). Cambridge: Cambridge University Press
- Jenkins, J. (2003). *World Englishes*. London: Routledge.
- Kachru, B. B., Kachru, Y. & Nelson, C. L. (Eds.), (2006). *Handbook of World Englishes*. Malden: Blackwell
- Kachru, Yamuna, and Smith, Larry E. (2008) *Cultures, Contexts, and World Englishes*. London: Routledge.
- Kachru, B. (1986). *The Alchemy of English: The spread, functions and models of non-native Englishes*, Oxford: Pergamon Press.
- Kachru, Yamuna, and Smith, Larry E. (2009) The Karmic cycle of world Englishes: Some futuristic constructs. *World Englishes* 28, 1–14.
- Kachru, Yamuna (2003) On definite reference in world Englishes. *World Englishes* 22, 497–510.
- Mahboob, A. (2004). Pakistani English: An overview of its syntax, morphology, and lexis. In B. Kortmann., & E. Traugott. (Eds.), *A handbook of varieties of English* (Vol. 2, pp. 1045-57). Munich: Mouton de Gruyter
- Mahmood, A. (2009). *A Corpus-analysis of Pakistani English* (Unpublished doctoral dissertation). Bahauddin Zakariya University, Multan.
- Mahmood, R. (2009). *Lexico-Grammatical study of noun phrase in Pakistani English* (Unpublished doctoral dissertation). Bahauddin Zakariya University
- Mair, Christian (2007) Varieties of English around the world: collocational and cultural profiles. *Topics in English Linguistics* 54, 437–70.

- McArthur, T. (2003). World English, Euro-English, Nordic English. *English Today*, 19(1), 54–8.
- Mesthrie, R. (2006). World Englishes and the Multilingual History of English, *World Englishes*, 25 (3/4), 381–390
- Michieka, Martha M. (2009) Expanding Circles within the Outer Circle: the rural Kisii in Kenya. *World Englishes* 28, 352–64.
- Rahman, T. (1990). *Pakistani English: The linguistic description of a non-native variety of English*. Islamabad: National Institute of Pakistan Studies
- Rahman, T. (1991). *A history of Pakistani literature in English*. Lahore, Vanguard.
- Sand, Andrea (2004) Shared morpho-syntactic features in contact varieties of English: article use. *World Englishes* 23, 281–98.
- Schneider, E. W. (2007). *Postcolonial English: Varieties around the world*. Cambridge: Cambridge University Press.
- Seidlhofer, B. (2005). English as a lingua franca. *ELF Journal*, 59(4), 339–340
- Shakir, A. (2013). *Linguistic variation across print advertisements in Pakistani media: A multidimensional analysis* (Unpublished doctoral dissertation) International Islamic University, Islamabad.
- Talaat, M. (1993). Lexical variation in Pakistani English. In R.J. Baumgardner (Ed.), *The English language in Pakistan*. Karachi: Oxford University Press.
- Talaat, M. (2002). *The Form and Functions of English in Pakistan*. (Doctoral Dissertation, Department of English, Bahauddin Zakariya University, Multan).
- Trudgill, Peter (2004) *New-dialect Formation: The Inevitability of Colonial Englishes*. Edinburgh: Edinburgh University Press
- Yano, Y. (2001). World Englishes in 2000 and beyond. *World Englishes* 20, 119–132.

### Appendix I

#### **Linguistic Features Relevant to the 88 MD analysis of Academic Writing**

---

Private verb( e.g, believe, feel, think)

---

‘That’ deletion ( e.g; I think[that] he did it)

---

Present tense verb( uninflected present, imperative and third person)

---

Pro-verb ‘do’

---

Demonstrative pronoun(that, this, those, these)

---

Adverb/ Qualifier-Emphatic ( e.g, just, really, so)

---

First person pronoun ( e.g, we, our)

---

Pronoun it/its

---

Verb ‘Be’ ( Uninflected present tense, verb and auxiliary)

---

Subordinating Conjunction- Causative ( e.g, because)

---

Discourse particles ( sentence initial, *well, now*)

---

Nominal pronoun( e.g, someone, everything)

---

Adverbial-Hedge( e.g, almost, may be)

---

Adverb/ Qualifier, Amplifier( e.g, absolutely, entirely)

---

Wh-question

---

Modals of possibility( can, may, could, might)

---

Coordinating conjunction-clausal connector

---

Wh-clause(e.g, he believed what I told him)

---

Stranded Preposition( appearing at sentence end)

---

Noun( excluding nominalization and gerund)

---

Preposition

---



Attributive adjective ( e.g, national interest, annual return)
Past tense verbs
Third person pronoun ( except ‘it’)
Verb-perfect aspect
Public verb ( e.g, assert, complain)
Wh-pronoun- relative clause-object position( the person who he likes)
Wh-relative clause-subject position ( e.g, the participants who like to join...)
Wh-relative clause-object position with prepositional fronting(‘ pied piping’)
Co-ordinating conjunction-phrasal connector
Nominalization( e.g, organization, development)
Adverb-Time( e.g, instantly, soon)
Adverb-place ( e.g, above, beside)
Adverb other( excluding adverb/Qualifier, Hedge, Emphatic, Time, place, Amplifier
Infinitive Verb
Modals of prediction( will, would.)
Suasive Verb( e.g, ask, command)
Subordinating Conjunction- conditional ( if, unless)
Modal of necessity( Ought, should, must)
Adverb within auxiliary ( splitting aux-verb)( e.g, the product is specifically meant)
Adverbial-conjuncts( however, therefore, thus)
Agentless passive verb( e.g, however, therefore, thus)
Agentless passive verb( e.g, the scheme was introduced)
Passive verb+ by ( e.g, the plan was introduced by principal)
Passive post nominal modifier( e.g, the message conveyed by)
Subordinating conjunction-Other ( e.g, as, excepts, until)
Present Tense Verbs( Uninflected present, imperative and third person)
2 <sup>nd</sup> person Pronoun
Ist Person Pronoun
Verb “Be”
Noun ( excluding nominalization and Gerund)
Preposition
Verb Perfect Aspect
Predictive adjectives
Passives all
That-complement clause controlled by stance verb
To-complement clause controlled by stance verb
To-complement clause controlled by stance adjective
Process nouns, ( isolation et.)
Other abstract nouns ( e.g, idea)
Activity Verb ( e.g, give, take)
Mental verb ( e.g, believe, enjoy)

Seem
Contractions
Split infinitives
NOT neg.
P-AND
O_AND
FINAL PREP.

### Appendix II

Analysis of variance table for variation among disciplines on five textual dimensions of 1988 MD analysis

Source of variation	Humanities		Social Sciences		Sciences	
	d.f	MS	d.f	MS	d.f	MS
<b>Dimension</b>	4	8414.3**	4	11069**	4	12876**
<b>Error</b>	395	3.2	395	4.0	370	2.0
<b>Total</b>	399		399		374	

\*\* = Highly significant ( $P < 0.01$ ); d.f=degrees of freedom; MS = Mean squares

### Dimension x Disciplines Interaction mean $\pm$ SE

Dimension	Categories		
	Humanities	Social Sciences	Sciences
<b>D1</b>	-19.01 $\pm$ 0.34E	-22.56 $\pm$ 0.39E	-26.65 $\pm$ 0.26E
<b>D2</b>	-2.76 $\pm$ 0.09C	-2.81 $\pm$ 0.08C	-3.59 $\pm$ 0.07C
<b>D3</b>	8.17 $\pm$ 0.18A	8.52 $\pm$ 0.20A	6.34 $\pm$ 0.15A
<b>D4</b>	-3.60 $\pm$ 0.11D	-3.54 $\pm$ 0.10D	-5.21 $\pm$ 0.06D
<b>D5</b>	3.29 $\pm$ 0.17B	3.21 $\pm$ 0.15B	4.34 $\pm$ 0.21B

Means sharing similar letter in a row or in a column are statistically non-significant ( $P > 0.05$ ).

The table 4.3 shows that there lie no statistical significant differences among disciplines on all dimensions along 1988 MD analysis, whereas, highly significant differences are found among dimensions on all disciplines.