

An Exploration Of Functionality Of Non-Fiction Texts - A Multi-Dimensional Comparative Analysis Of Native Varieties Of English

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ABSTRACT: Linguistic variation is a trending topic to study the functionality of languages on the grounds of theory, methodology, and practicality. This study sets out to explore the linguistic functionality of native non-fiction texts varieties. Through comparative Multi-dimensional (MD) analyses homogeneous and heterogeneous ranges between the American and British nonfiction texts are found. Data for the current research is taken from the corpus that is formed by the random selection of 400 American and British nonfiction texts allocated into the sub-categories of prose, research article, newspaper, and essay. For comparative MD analyses of each sub-genre of American and British non-fiction texts MAT tagger 1.3.2 findings was taken. The outcome indicates that there is a slight hegemony of American nonfiction texts over British nonfiction texts in terms of linguistic functions especially on D1 and D3 which suggests that American nonfiction texts are somehow more informative and explicit than British nonfiction texts. The possible reasons for these linguistic variations in native Englishes are also discussed in section 5.

Keywords: Linguistic variation, Nonfiction, Multi-dimensional (MD), Englishes

I. INTRODUCTION

Linguistic as a scientific study of language always retains its emphasis on researches that carries the practically reliable models of functionality. Exploration of linguistic variations in language or texts has remained common in the field of Linguistics. For corpus-based researches, the multidimensional analyses approach for investigating linguistic variation is the most applicable method in this era. As per authentication of its results and time-saving assistance, this method of research for analyzing different kinds of language variation is on trending all around the globe (Huang, 2013). MD analyses approach can be used for exploring linguistic variations across language registers, language genres, language

varieties, etc. For the time being, MD analyses have become a reliable method to study linguistic variations.

A number of researches have been found on MD analyses on comparing native and non-native English varieties using learner's writing (Abdulaziz, Mahmood, & Azher, 2016), academic writing register variation (Azher & Mahmood, 2016), linguistic change in native and non-native newspapers (Ahmed, & Mehmood, 2015), analysis of non-native legal English language (Asghar, Mahmood, & Asghar 2018) and similarities and dissimilarities between native and non-native Englishes (Ali, & Shehzad, 2019). Furthermore, there were also found work on linguistic features to define register or genre

and comparison of language functions with native and non-native English language varieties (Ahmed & Mehmood, 2015). In above-mentioned researches comparison of language functionality was made among two or more different varieties of native and non-native English languages. Moreover, these researches have been done on only five or less than five dimensions of Biber's (1988) study.

The immense inclination of researchers in this field evoked us to explore the linguistic variation of two native English language varieties i.e. British and American non-fiction texts at six dimensions set by Biber (1988). In the current study comparative multidimensional analysis of language functionality of American and British nonfiction texts is done through MAT findings. Moreover, each sub-genre is also compared with genres set by Biber (1989) and later on compared with each variety of language. It also investigates the linguistic variations between two native English varieties to know how far varieties of English are overlapping in their functionality in this global village.

1.1. Purpose

This research paper aims to meet the emerging trends of analyzing language functionality of non-fiction texts using modern computational tools. This research provides the comparison between functional similarities and dissimilarities of the English language used in native English countries as Britain and America.

1.2. Objectives

The objectives of this research are penned down:

- To collect the relevant data for the corpus formation.
- To compare the language functionality of American and British non-fiction texts.
- To explore the differences between British and American non-fiction

texts on six dimensions of MD analyses.

- To compare the sub-genres of American and British non-fiction texts with genres set by Biber (1989).

1.3. Research Questions

The present study is an attempt to find out the solution to the following questions:

- What are the linguistic variations found in American and British nonfiction texts?
- How far MD analysis determines the homogeneous and heterogeneous linguistic features of American and British non-fiction texts?
- In what way six dimensions of MAT tagger 1.3.2 analyses label and differentiate language functionality in American and British non-fiction texts?
- What are the text types of American and British non-fictions provided by MAT analyses?

1.4. Significance

Current research has great significance in the field of MD analyses as it gives comparative multidimensional analysis of two native varieties of English texts. It gives perceptions to ponder into similarities and dissimilarities in the functionality of native English language varieties. This research will be significant not only for upcoming researchers but also for English as foreign language (EFL) syllabus designers as it gives deep insights of comparison of language functionality of native English academic prose.

1.5. Limitation

The current study is confined to the findings of MAT tagger 1.3.2. Linguistic variations are

drawn out on six dimensions of Biber's (1988) study.

1.6. Delimitation

In the present research linguistic variation only in non-fiction texts was investigated. Concerning the non-fiction texts only the four most common categories i.e. essays, newspapers, prose, and research articles were selected. For comparing the non-fiction texts of native Englishes two big and widely used English varieties i.e. British English and American English were chosen.

2. LITERATURE REVIEW

This section provides a comprehensive view to the previous researches in the field of MD analysis using Biber's (1988) model.

Abdulaziz, Mahmood, and Azher (2016) conducted corpus-based research on the use of the English language in Pakistan by comparing its distinctive features with British and American English language and explored linguistic variation between Pakistani Learner writing with native, second language, and foreign language learner writing. Its focus was on contributing a comprehensive description and contrast between linguistic elements of Pakistani learner writing and formed two significant dimensions; "Involved versus Informational Production", and "Overt Expression of Argumentation". This study highlights the newest analytical method towards corpus takes one step additionally in that it is multidimensional in the creation and targeted at pick out situational components on the groundwork of very often co-occurring linguistic attributes in purely quantitative terms. Its ultimate motive is to attain a comprehensive elucidation of linguistic variation and use in a language.

Ahmed and Mehmood (2015) explored the linguistic change in the press reports of Pakistani print media and conducted register variation studies based on multidimensional analysis. This study engaged in

multidimensional analysis to find internal and external variations and emphasized the need for more register-based studies on Pakistani English which place reliance on the frequency of individual linguistic attributes. This research also compares the results in line with a British press report on the five textual aspects of the Biber and finds notable statistical linguistic dissimilarities between the Pakistani Press Report and British Press Reportage Register.

Azher and Mahmood's (2016) research is based on the register, which studies various variables as the pioneer's aims to explore Pakistani academics Writing Register through Multidimensional Analysis. A corpus of 8.385000 million words has been built for this research. It contains 235 research papers by corporate M.PHL and Ph.D. graduates and is further expanded. To find a distinct identity of Pakistani scholarly writing as a registrar, it finds linguistic variations in the research sections on the five textual aspects of Biber (1988). The results of his study have made Pakistani scholarly writings highly informative, non-narrative, comprehensively clear, and non-persuasive in style.

Ali and Shehzad (2019) investigated the similarities and differences between Pakistani and South Asian English and analyses the linguistic features of Pakistani English as a separate variety from other varieties of English used in India and Bangladesh. And corpus of English newspapers of these three countries was developed and analyzed using Biber's (1988) multivariate/ multidimensional approach. It shows the result of dimensions 2 and 3 in which Pakistani news reportage is in the form of narrative and is explicit as compare to India and Bangladesh.

Asghar, Mahmood, and Asghar (2018) have investigated linguistic variation in different Pakistani Legal English genres categories where law and language interface by using multidimensional analysis tools and Biber's dimensions. The findings indicate that legal language has a variety of linguistic

features related to different legal genres and explains the genres of Pakistani legal English are distinguished from one another based on sets of co-occurring linguistic features.

Irshad and Anwar (2021) explored how the language of newsletters of Pakistani universities distinguishes from that of annual reports of Pakistani human rights NGOs by using two corpora types including Pakistani universities' newsletters and Pakistani human rights NGOs' annual reports. Biber's (1988) multidimensional approach D1 and D2 gave a pathway to the theoretical grounding of the study. They drew their results on the basis of MAT software (1.3) has been used to tag and analyze the data through D1 and D2 of a multidimensional approach.

After studying previous researches it was found that there is an urge to comparatively analyze the native English non-fiction texts on all six dimensions introduced by Biber's MD analysis model (1988) to find out the linguistic variations within native Englishes.

3. METHODOLOGY

Dimension 1: Involved vs. Informational Production

Positive Features	Negative Feature
Involved	Informational
Private verbs	Total other nouns
Subordinator that deletion	Average word length
Contractions	Total prepositional phrases
Present tense	Type-token ratio
Second person pronouns	Attributive adjectives
Pro-verb do	
Analytic negation	
Demonstrative pronouns	
Emphatics	
First person pronouns	
Pronoun it	
Be as main verb	
Causative adverbial subordinators	
Discourse particles	
Indefinite pronouns	
Hedges	
Amplifiers	

This section gives detailed methodology of the current research. Previous researches were reviewed and an appropriate methodology was designed that can fulfill the objectives of this research.

3.1. Research Framework

This research is a mixed method research as the quantitative and qualitative approaches were adopted to find out the functional variations among the four varieties of two native English non-fiction texts.

For the present research Biber's theoretical model (1988) for multidimensional analysis was used. MD analysis is an approach which uses statistical techniques to calculate co-occurring linguistic features to investigate linguistic variations on six dimensions. Interpretations were made according to Nini's (2015) descriptions about 67 tags, dimensions and text types. On MD analyses each dimension is scored with positive and negative factor. In each factor there is a set of co-occurring features. The present study was done on the following six dimensions:

—
 Sentence relatives
 Direct WH-questions
 Possibility modals
 Phrasal coordination
 WH-clauses
 Stranded preposition

Dimension 2: Narrative vs. Non Narrative Concerns

Positive Features	Negative Feature
Narrative	Non-Narrative Concerns
Past tense	Present tense
Third person pronouns	Attributive adjectives
Perfect aspect	
Public verbs	
Synthetic negation	
Present participial clauses	

Dimension 3: Explicit Vs. Situation Dependent Reference

Positive Features	Negative Feature
Explicit	Situation Dependent Reference
WH relative clauses on object position	Time adverbials
Pied-piping relative clauses	Place adverbials
Contractions	Other adverbial subordinators
WH relative clauses on subject position	
Phrasal coordination	
Nominalizations	

Dimension 4: Overt Expression of Persuasion

Positive Features	Negative Feature
Overt Expression of Persuasion	
Infinitives	No negative Features
Prediction modals	
Suasive verbs conditional	
Subordination	
Necessity modals	
Split auxiliaries	
Possibility modals	

Dimension 5: Abstract Vs. Non-Abstract Information

Positive Features	Negative Feature
Abstract	Non-Abstract Information
Conjuncts	No negative Features
Agentless passives	
Past participial clauses	
By-passives	
Past participial WHIZ deletion relatives	
Other adverbial subordinators	
Conjuncts	

Dimension 6: On-Line Informational Elaboration

Positive Features	Negative Feature
On-Line Informational Elaboration	
That verb complements	
That relative clauses on object position	Phrasal coordination
That adjective complements	
Stranded preposition	
Existential there	
Demonstrative pronouns	
WH relative clauses on object position	

Corpus for the present research was collected from non-fiction texts of America and Britain via online resources.

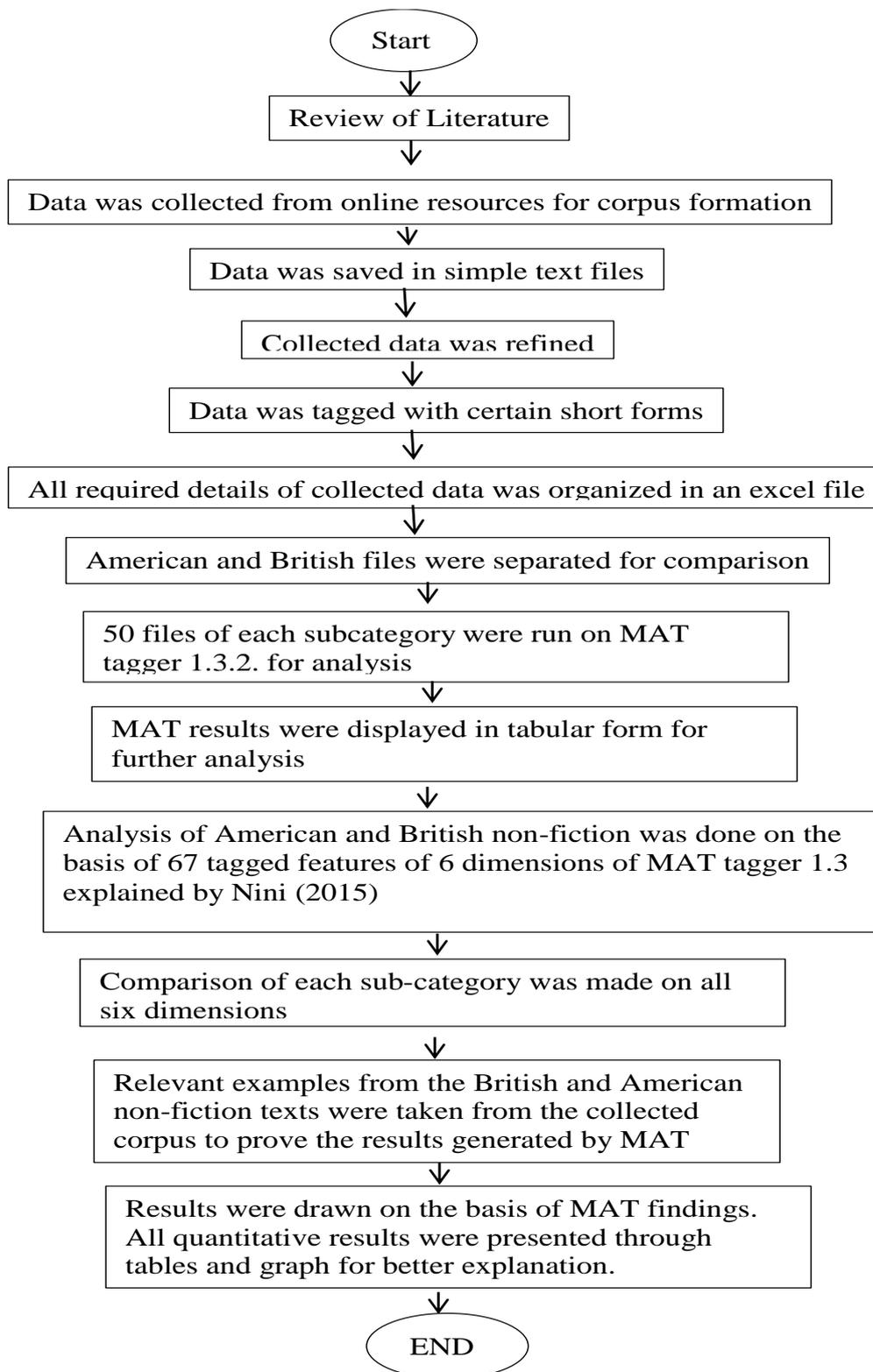
Table 3.1 Categories and sub-categories of non-fiction corpus

Sr. No.	Categories	Sub-Categories of Non-Fiction Corpus
1	American nonfiction texts	Essays, Newspapers, Prose, Research Articles
2	British nonfiction texts	Essays, Newspapers, Prose, Research Articles

As the above table shows the corpus was collected from the four different American and British non-fiction text varieties.

The research was done in the following steps as mentioned in **figure 3.1**.

Figure 3.1. Flow Chart of Present Research



3.2. Population

Population of the present research is comprised of American and British non-fiction texts.

3.3. Sample and Sampling Techniques

Sample for the present research was taken from non-fiction genres i.e. essays, newspapers, proses and research articles. Four text varieties

of American and British English language were selected for comparing variation in their language functionality. Random sampling technique was chosen for the present study.

Fifty texts of each genre were selected randomly. Corpus was comprised of total **1228128** words.

Table 3.2 Corpus detail

Sub-Categories	American	British
Essay	225908	43555
Newspaper	50531	40726
Prose	196426	149008
Research Article	292450	229524
Word Token	765315	462813
Sub-Total	1228128	

In the next step data was collected and saved in plain texts as per the demand of MD analyses. All the files were compiled and tagged with

certain symbols. The required detail of the corpus was also kept in an MS excel file.

Table 3.3 Sample of text

Sr. No.	Sample of Texts	Codes of Texts	Number of Texts
1	American Essays	Am_NF_Es_	50
2	British Essays	Br_NF_Es_	50
3	American Newspapers	Am_NF_News_	50
4	British Newspapers	Br_NF_News_	50
5	American Prose	Am_NF_Prose_	50
6	British Prose	Br_NF_Prose_	50
7	American Research Articles	Am_NF_RA_	50
8	British Research Articles	Br_NF_RA_	50

3.4. Data Collection Tools

Data for the present research was mainly collected from online resources in soft form. Data was evenly organized and compiled in various steps as described in figure 3.1.

3.5. Data Analysis Tools

Various data analysis tools were used to analyze and calculate the data. For linguistic analyses MAT tagger 1.3.2 was used. AntConc was used for calculating word token (TTR). General calculations, table and graphs were generated through Microsoft excel.

To fulfill the second objective of the present research, four text varieties of American and British non-fiction texts were compared with each other. For this purpose MAT tagger 1.3.2

was selected to run the corpus for multidimensional analyses. On MAT tagger VASW tags was selected with 400 type token ratio (TTR). This analysis was done on six dimensions introduced by Biber (1988) as well as comparison of each text variety was done with genre set by Biber (1998) and closest genre was found out. Results of MD analyses were arranged in tabular form to compare each text variety.

Relevant examples from American and British non-fiction texts were also drawn out to prove the MD analyses results. Finally, MD analyses results were interpreted and discussed in detail and objectives of current study were achieved successfully.

4. ANALYSIS AND DISCUSSION

In this section comparative analysis of American and British non-fiction texts is made on the basis of MAT results. To answer the second, third and fourth question of the current study a detailed comparative discussion on all six dimensions in each category is explained here in this section.

4.1. Comparison of Language Functionality of American and British Essays

By comparing the British and American essays using MAT tagger 1.3.2 following results was drawn out. Table 4.1 displays the differences of dimension score between American and British essays while table 4.2 presents the closest genre of essays with other genres set by Biber (1988). Figure 4.1 shows the difference between two varieties of essays on the highest dimension.

Table 4.1. Comparison of American and British Essays

Dimensions	American Essays	British Essays	Difference
D1	-0.88	0.61	-1.49
D2	0.06	-0.45	0.51
D3	5.12	4.3	0.82
D4	1.51	1.56	-0.05
D5	2.86	1.84	1.02
D6	1.05	0.49	0.56

Table 4.2 Comparison of American and British Essays with genres set by Biber (1988)

Dimensions	American Essays	British Essays
D1	General Fiction	General Fiction
D2	Personal Letters	Conversation
D3	Personal Letters	Academic Prose
D4	Personal Letters	Personal Letters
D5	Official Documents	Press Reportage
D6	Academic Prose	Academic Prose
Text Type	Involved persuasion	Involved persuasion

At D1, score of American essays is **-0.88** and score of British essays is **0.61** with difference of **-1.49** which is the least difference of all six dimensions which means that there is little difference in language functionality in both varieties of essays. It also exposes that American essays are somehow informative in contrast to the British Essays that are involved in language functionality. Table 4.2 presents the comparison of British and American essays with genres set by Biber (1988). Both varieties of essays are closest to general fiction.

At D2, American and British essays are again in contrast. Score of American essays is **0.06** while score of British essays is **-0.45** with

a difference of **0.51** (see Table 4.1). It explores that American essays are written in narrative discourse while British essays are non-narrative in discourse. Table 4.2 reveals that American essays are closest to the personal letters and British essays are closest to conversation.

At D3 score of American essays is **5.12** and score of British essays is **4.3** with a difference of **0.82** (see Table 4.1). It reveals that American essays are more independent in context than British essays. Comparison of American and British essays with genres set by Biber (1989) shows that American essays are closest to personal letters while British essays are closest to academic prose (see Table 4.2).

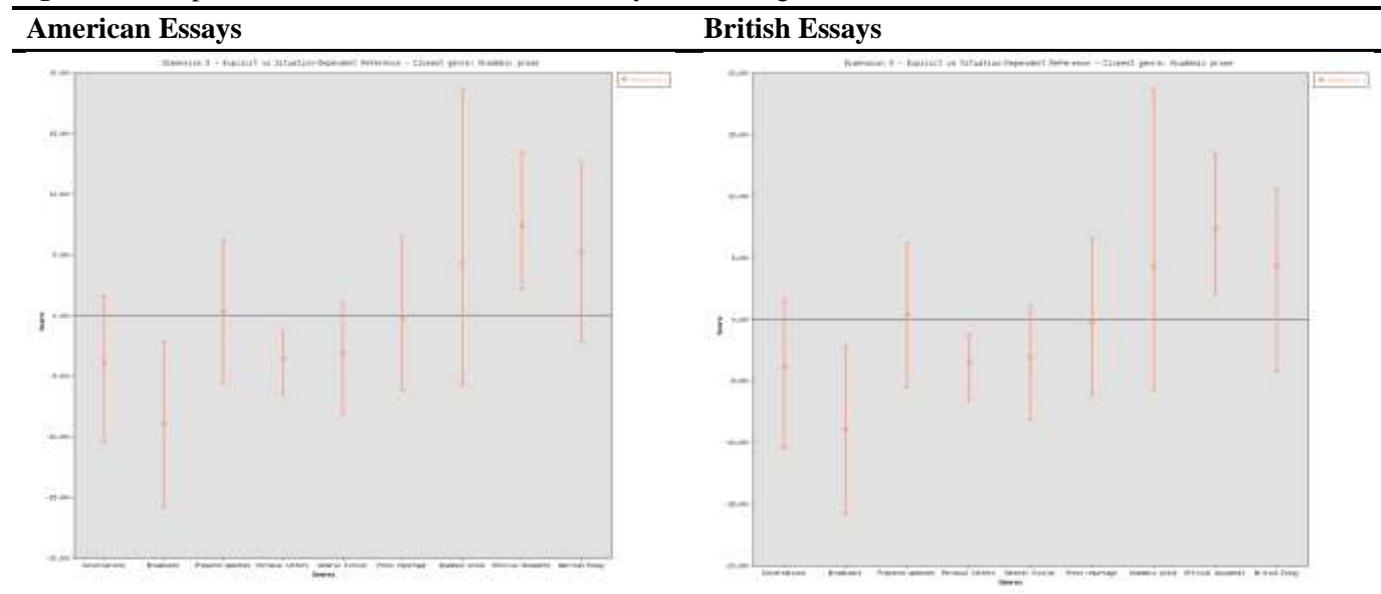
At D4 score of American essays is **1.51** whereas scores of British essays is **1.56** with a difference of **-0.05** (see Table 4.1). Both kinds of varieties of essays are explicit without any significant difference. Table 4.2 shows that both varieties of language are closest to personal letters.

At D5 score of American essays is **2.82** and scores of British essays is **1.84** with difference of **1.02** (see Table 4.1). These numbers expose that American essays are more abstract in information than British essays.

Table 4.2 tells that American essays are closest to official documents and British essays are closest to press reportage.

At D6 score of American essays is **1.05** and score of British essays is **0.49** with a difference of **0.56** (see Table 4.1) which means that American essays are informational in discourse and they are produced under certain time constraints than British essays. Both British and American essays are closest to academic prose (see Table 4.2).

Figure 4.1 Comparison of American and British Essays on the Highest Dimension Three



MAT tagger results shows that text type of American and British essays is involved persuasion. This text type includes persuasive speech and argumentative speech. Figure 4.1 shows that range of American and British essays is not much different with range of other genres except broadcast genre as showed in the graph it means that their language functionality is just like other genres. If all dimensions of American and British essays are compared, highest score is at D3 with a difference of **0.82** which means that both varieties of essays are independent in context. Minimum difference between two varieties of essays is at D1 **-1.49** (see table 4.2) which means that both varieties of essays are informational with minimum

difference. For an example the samples of American and British essays are given here:

Example (Am_NF_Es_014), (Dimension Score = 12.63)

Men **and** women perceive the beauty well enough--probably as well as he. The passionate **tenacity** of hunters, woodmen, early risers, cultivators of gardens **and** orchards **and** fields, the love of healthy women for the manly form, seafaring persons, drivers of horses, the passion for light **and** the open air, all is an old varied sign of the unflinching perception of beauty, **and** of a residence of the poetic in out-door people. They can never be assisted by poets to perceive-

-some may, but they never can. The poetic quality is not **marshal'd** in rhyme or uniformity, or abstract addresses to things, nor in melancholy complaints or good precepts, but is the life of these **and** much else, **and** is in the soul.

Example (Br_NF_Es_059), (Dimension Score = 10.6)

Several quires, placed one over against another, **and** taking the voice by catches, **anthem-wise**, give great pleasure. Turning dances into figure, is a **childish** curiosity. **And** generally let it be noted, that those things **which** I here set down, are such as do naturally take the sense, **and** not respect petty wonderments. It is true, the alterations of scenes, so it be quietly **and** without noise, are things of great beauty **and** pleasure; for they feed **and** relieve the eye, before it be full of the same object. Let the scenes abound with light, specially colored **and** varied; **and** let the masquers, or any other, that

are to come down from the scene, have some motions upon the scene itself, before their coming down; for it draws the eye strangely, **and** makes it, with great pleasure, to desire to see, that it cannot perfectly discern.

From **Example (Am_NF_Es_006)** and **Example (Br-NF-Es 093)** it discloses that features of elaborated discourse WH relative clauses on object position, pied-piping relative clauses, contractions, WH relative clauses on subject position, phrasal coordination, nominalizations are co-occurring in the both varieties of essays and they are highly argumentative and persuasive in discourse.

4.2. Comparison of Language Functionality of American and British Newspapers

Comparing the British and American newspapers, MAT tagger 1.3.2 gives the following results as showed in Table 4.3, Table 4.4 and Figure 4.2.

Table 4.3. Comparison of American and British Newspapers

Dimensions	American Newspapers	British Newspapers	Difference
D1	-13.85	-11.4	-2.45
D2	2.24	2.56	-0.32
D3	4.15	3.08	1.07
D4	-1.8	0.83	-2.63
D5	0.91	1.46	-0.55
D6	-1.54	-1	-0.54

Table 4.4. Comparison of American and British Newspapers with genres set by Biber (1988)

Dimensions	American Newspapers	British Newspapers
D1	Academic Prose	Academic Prose
D2	Prepared Speeches	Prepared Speeches
D3	Academic Prose	Academic Prose
D4	Press Reportage	General Fiction
D5	Press Reportage	Press Reportage
D6	General Fiction	Official Document
Text Type	General narrative exposition	General narrative exposition

Table 4.3 shows that at D1 difference between language functionality of British and American newspaper is not much significant. As score of

American newspapers is **-13.85** and score of British newspaper is **-11.4** with difference of **-2.45** it explores that both American and British

newspapers are informational in functionality. Texts of both varieties of newspapers are dense in information just like the discourse of academic prose. Comparisons of British and American newspapers with genres set by Biber (1988) also indicate that both varieties of newspapers at first dimension are closest to academic prose (see Table 4.2).

American and British newspapers are narrative in discourse like the discourse of fiction texts. Figure 4.2 displays that score of American newspapers is **2.24** while score of British newspapers is **2.56** with a difference of **-0.32**. It explores that there is no major difference between language functionality of American and British newspapers. Table 4.4 exposes that both American and British newspapers are closest to prepared speeches Biber's (1988) study.

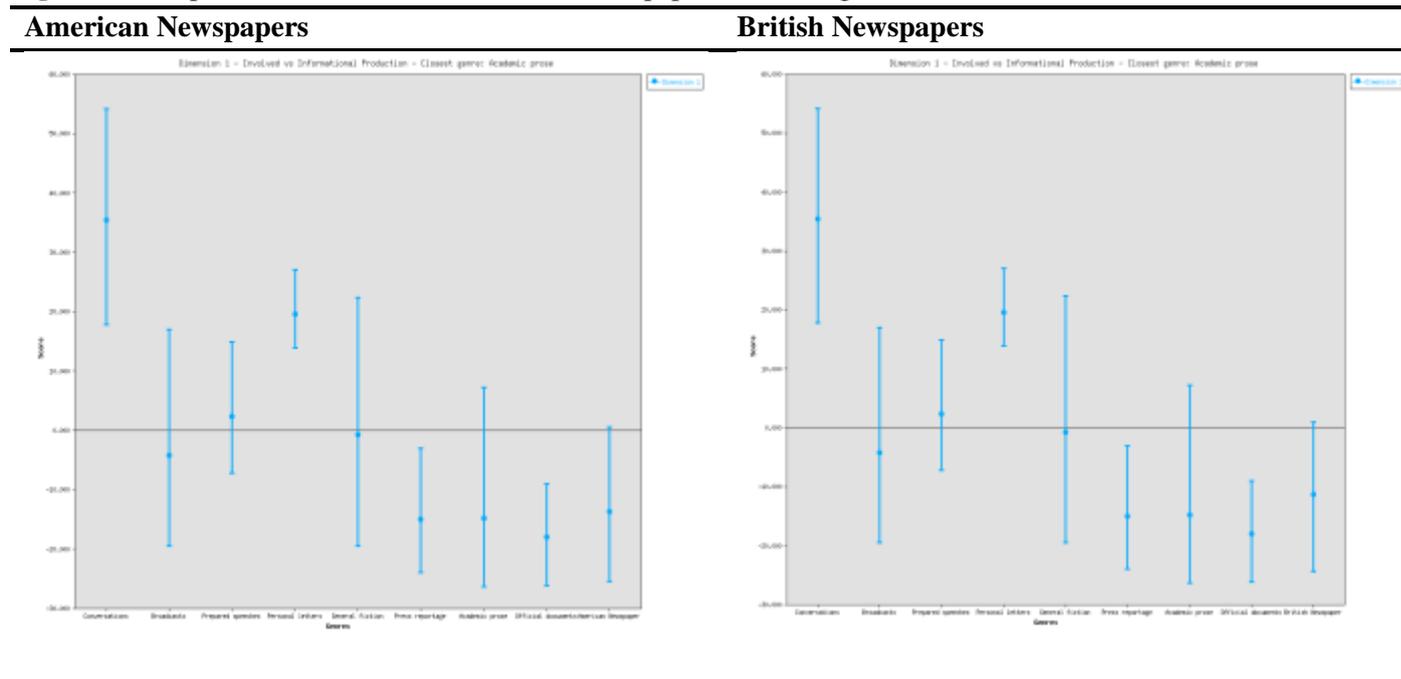
At D3 score of American newspapers is **4.15** and score of British newspaper is **3.08**. It reveals that American newspapers are more explicit than British newspaper. Comparison of American and British newspaper with Biber's (1988) genres shows that both varieties of newspapers are closest to academic prose as presented in table 4.4.

At D4 scores of American newspapers is **-1.8** whereas dimension scores of British newspaper is **0.83**. It indicates that British newspapers are explicit in contrast to American newspapers that are implicit in discourse. Table 4.2 shows American newspapers are closest to press reportage whereas British newspapers are closest to general fiction.

D5 illustrates that dimension score of American newspapers is **0.91** and dimension score of British newspapers is **1.46**. It indicates that British newspapers are more abstract in information than American newspapers. Table 4.1 reveals that both British and American newspapers are closest to press reportage genre.

At D6 score of American newspaper is **-1.54** and dimension score of British newspapers is **-1** which reveals that British newspapers lacks more features of on-line informational elaboration than American newspapers. Both varieties of newspapers are informational but they are not produced under certain time constraints. Moreover, British newspapers are closest to official documents while American newspapers are closest to general fiction (Table 4.2).

Figure 4.2 Comparison of American and British Newspapers on the Highest Dimension One



Range graphs produced by MAT tagger 1.3.2 show that language functionality of British and American newspapers is same like other genres but they are out of range in documentaries and personal letter. Text type of American and British newspapers is general narrative exposition which includes narrations that is used to convey information. Comparison of all dimensions of American and British newspapers shows that both varieties of newspapers are lowest at D1. It means that discourse in both kinds of varieties of newspapers is highly informational. Difference between the two varieties of newspapers is least at D4 with difference of **-2.63** (see Table 4.3) which means that both varieties are equal in explicitness. Samples from British and American newspapers are given in the following as examples:

Example (Am_NF_News_115), (Dimension Score = -25.55)

The **Telegram group** was a **sign of** how **anti-Asian sentiment** has flared up **in corners of** the **internet**, amplifying **racist** and **xenophobic tropes** just as **attacks** against **Asian-Americans** have surged. **On messaging apps** like **Telegram** and **on internet forums** like **4chan**, **anti-Asian groups** and **discussion threads** have been **increasingly active** since **November**, especially on **far-right message boards** such as **The Donald**, **researchers** said.

Example (Br_NF_News_156), (Dimension Score = -22.54)

Two trains have collided in **southern Egypt**, causing **three passenger carriages** to flip over and **killing 32 people**, **health authorities** have **said**. **Sixty-six people** were reportedly **injured**. **Dozens of ambulances** were rushed to the **scene of the crash** in the **southern province of Sohag**, said a **statement** by **Egypt's health ministry**. **Local media** displayed **videos from** the **scene** showing **flipped carriages with passengers** trapped **inside** and surrounded by **rubble**. **Some victims** seemed **unconscious**, while others were **bleeding**. **Bystanders** carried **bodies**, laying them out **on the ground** near the **site of the crash**.

From the examples (**Am_NF_News_115**) and (**Br_NF_News_156**), it shows that there is presence of nouns, attributive adjectives and prepositional phrases. Result shows that American and British newspapers are equal in conveying information to their readers.

4.3. Comparison of Language Functionality of American and British Prose

Comparison of language functionality of British and American prose on the bases of MAT tagger 1.3.2, following results were came (see Table 4.5, Table 4.6 & Figure 4.3).

Table 4.5. Comparison of American and British Prose

Dimensions	American Prose	British Prose	Difference
D1	-3.29	-4.46	1.17
D2	4.52	1.2	3.32
D3	0.93	1.45	-0.52
D4	-1.29	-0.98	-0.31
D5	-0.35	-0.83	0.48
D6	-1	-1.27	0.27

Table 4.6. Comparison of American and British Prose with genres set by Biber (1988)

Dimensions	American Prose	British Prose
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D1	Broadcast	Broadcast
D2	General Fiction	Prepared Speeches
D3	Prepared Speeches	Prepared Speeches
D4	Press Reportage	Press Reportage
D5	Press Reportage	Broadcast
D6	Official Document	Broadcast
Text Type	General narrative exposition	General narrative exposition

Table 4.5 shows that at D1 American prose is more informational than British prose as difference of **1.17** indicates. As score of American prose is **-3.29** while of British prose is **-4.46**. Texts of both varieties of prose are informational dense just like the discourse of academic prose. Comparisons of British and American prose with Biber's (1988) genres also indicate that both varieties of newspapers at first dimension are closest to academic prose (see table 4.6).

At D2 there is clear difference of **3.32** between American and British prose. It uncovers that American prose is more narrative than British prose, just like the discourse of fiction texts. It explores that there is significant difference between language functionality of American and British prose. Table 4.6 reveals that American prose is closest to general fiction whereas British prose is closest to prepared speeches.

At D3 score of American prose is **0.93** and score of British prose is **1.45** with difference of **-0.52**. There is least difference between the two varieties of prose at D3 which means that both varieties of prose are context dependent with no significant difference. Comparison of American and British prose with genres set by Biber (1988) shows that both

varieties of prose are closest to prepared speeches (see table 4.6).

At D4 scores of American prose is **-1.29** whereas scores of British prose is **-0.98** with a difference of **-0.31**. It indicates that British and American proeses are explicit. Table 4.6 shows the closeness of American and British prose with press reportage.

D5 illustrates that score of American prose is **-0.35** and scores of British prose is **-0.83** with a difference of **0.48**. It indicates that British prose is more non-abstract in information than American prose. Table 4.6 reveals that in comparison of Biber's (1988) genres American prose is closest to press reportage while British prose is closest to broadcast language.

At D6 score of American prose is **-1** and score of British prose is **-1.27** with difference of **0.27** which reveals that both American and British proeses are non-informational. Both varieties of prose are not written under certain time constraints. Moreover, comparison of both varieties of prose with genres of Biber (1988) shows that American prose is closest to official documents while British prose is closest to broadcasts (see Table 4.6).

Figure 4.3 Comparison of American and British Prose on the Lowest Dimension One

American Prose	British Prose
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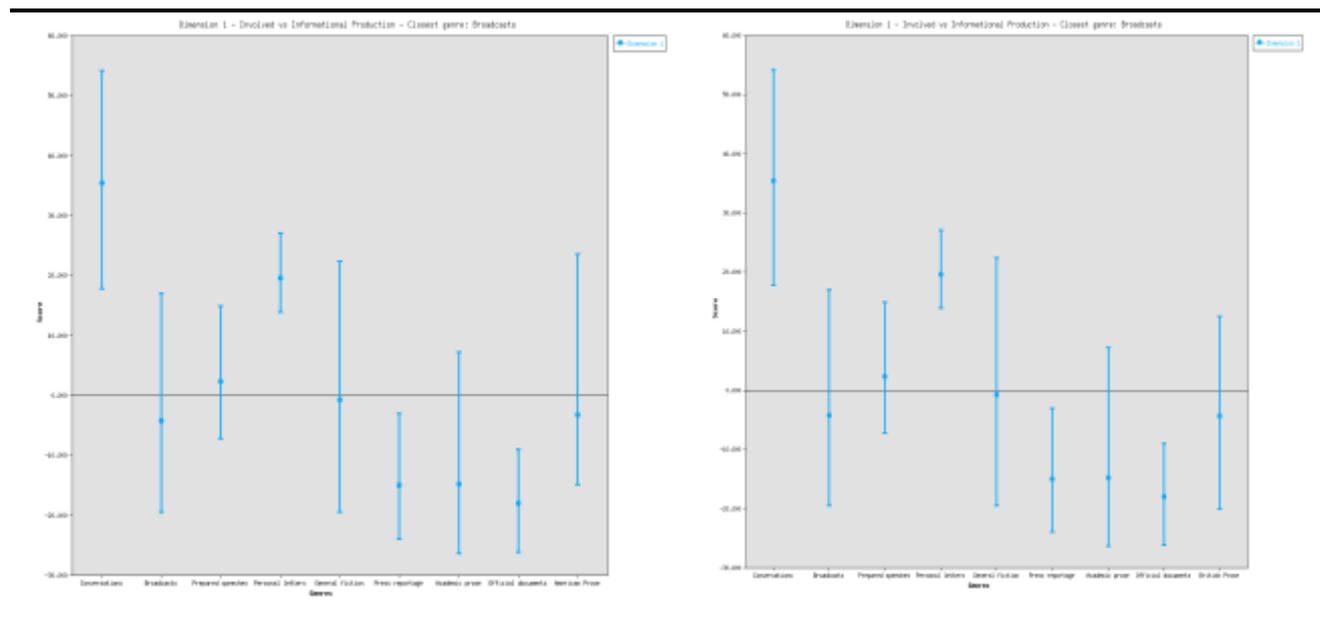


Figure 4.3 displays that range of American and British prose is identical in all genres but documentaries and personal letters are slightly going out of range. MAT tagger 1.3.2 results show that text types of American and British prose is general narrative exposition (see Table 4.6) in this text type score are lowest at D1. It means that informational discourse is used in both kinds of varieties of prose. Samples from British and American proeses are given in the following as examples:

Example (Br_NF_Pro_251), (Dimension Score = -20.23)

He was a **Scottish** essayist, **historian** and **philosopher**. In **his** writings **he** is found to be **highly** and **intensely** critical of the **intellectual** and **spiritual** mediocrity of his **time**. **He** is no less **critical** of the **self-** contentment with **material** prosperity, **moral** lassitude, the **surrender** to **scientific** skepticism and **analytic** reasoning. In fact, in **his** **non-fictional** prose writings **he** speaks against the **dilettantism** of his contemporaries. **Carlyle** had **his** own **original** idea about **history** which **he** looked upon as the **storehouse** of examples,

provided **by** some **great** men, designated as **'heroes'** by **him**.

Example (Am_NF_Pro_217), (Dimension Score = -15.01)

The **preparations** being complete, the **two** **private** soldiers stepped aside and each drew away the **plank** upon which he had been standing. The **sergeant** turned **to** the **captain**, saluted and placed himself immediately behind that **officer**, who **in** turn moved apart **one** **pace**. These **movements** left the **condemned** man and the **sergeant** standing on the **two** ends of the **same** **plank**, which spanned **three** of the **cross-ties** of the **bridge**. The **end** upon which the **civilian** stood almost, but not quite, reached a fourth.

4.4. Comparison of Language Functionality of American and British Research Articles

Language functionality of British and American research articles on the bases of MAT tagger 1.3.2 findings provides the following results (see Table 4.7, Table 4.8 & Figure 4.4).

Table 4.7. Comparison of American and British Research Articles

Dimensions	American Research Articles	British Research Articles	Difference
D1	-14.21	-15.86	1.65
D2	-2.82	-2.82	0
D3	7.92	8.06	-0.14
D4	-1.31	-2.67	1.36
D5	3.85	5.04	-1.19
D6	-0.11	-0.22	0.11

Table 4.8. Comparison of American and British Research Articles with registers set by Biber (1988)

Dimensions	American Research Articles	British Research Articles
D1	Academic Prose	Press Reportage
D2	Official Document	Official Documents
D3	Official Document	Official Documents
D4	Press Reportage	Broadcast
D5	Official Document	Official Document
D6	Conversation	Conversation
Text Type	Scientific exposition	Scientific exposition

Table 4.7 displays that at D1 score of American research articles is **-14.21** while score of British research articles is **-15.86** difference between language functionality of British and American research article 1.65 that is not major. It means that both American and British prose are condensed in information just like discourse of academic prose. Comparisons of British and American research articles with genres also indicate that American research articles are closest to academic prose while British research articles are closest to press reportage (see Table 4.8).

At D2 is zero difference between language functionality of American and British research articles it means that both are kinds of research articles are alike in narrative concerns just like the discourse of fiction texts. Table 4.8 reveals that both American and British research articles are closest to official documents.

At D3 score of American research articles is **7.92** and score of British research articles is **8.06** with a difference of **-0.14**. It exposes that American research articles are less context dependent than British research articles. Comparison of American and British

research articles with genres shows that both varieties of research articles are closest to official documents as presented in table 4.8.

At D4 scores of American research articles is **-1.31** whereas scores of British research articles is **-2.67** with a difference of **1.36**. It directs that both kinds of varieties of research articles are implicit in discourse. Table 4.8 shows that American research articles are closest to press reportage whereas British research articles are closest to broadcast genre.

D5 explains that score of American research articles is **3.85** and scores of British research articles is **5.04** with a difference of **-1.19**. It indicates that British research articles are more abstract in information than American research articles. Table 4.8 displays that at D5 both British and American research articles are closest to official document.

At D6 score of American research articles is **-0.11** and score of British research articles is **-0.22** with a clear difference of **0.11** which reveals that American and British research articles exposed information produced in certain time constraints. Moreover, both

American and British research articles are closest to conversations genre at D6 (see Table 4.8).

Figure 4.4 Comparison of American and British Research Articles on Dimension One

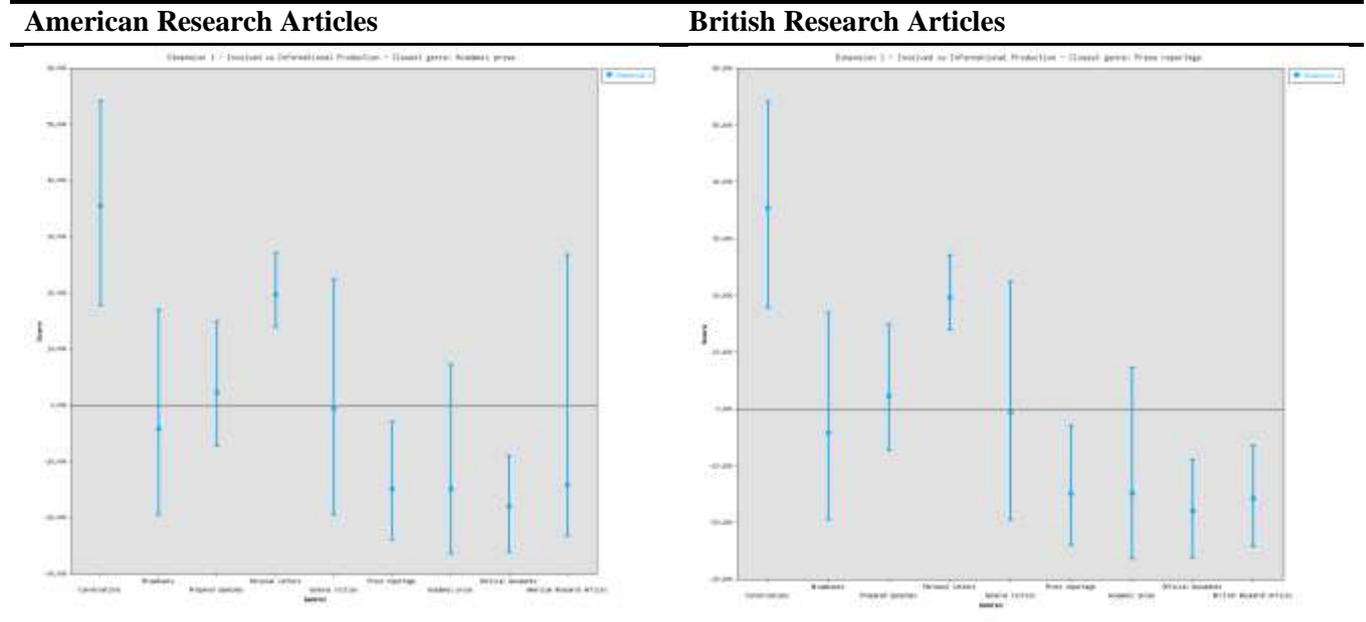


Figure 4.4 presents that there is distinct difference between the ranges of American and British research articles at D1 range of American is high whereas range of British is low and totally out of range of personal letters. MAT tagger 1.3.2 results show that text type of American and British research articles are scientific exposition which includes informational expositions focused on conveying technical information. Comparison of all dimensions of American and British research articles shows that both varieties of research articles are lowest at first dimension (D1) which means they are dense in conveying technical information but difference of **1.65** between them indicates that they are not analogous in conveying information. Zero difference at D2 shows American and British articles are akin in narrative discourse. Samples from British and American research articles are given in the following as examples:

Example (Am_NF_RA_317), (Dimension Score = -23.39)

Intensification and **modernization** of **education** require the **introduction** of **innovative technologies** aimed at the **development** of **creative thinking**, **productive imagination**, **memory**, **attention** and **cognitive activities** of **university alumni**. **Blogging** is among these **innovative technologies**. **Computer technology** and the **Internet** can be easily integrated into a **language classroom** and provide **meaningful writing opportunities**.

Example (Br_NF_RA_353), (Dimension Score = -24.28)

Demotivation is a relatively **new issue** in the **field of second/foreign Language (L2) learning motivation**. **Recognizing** and **removing barriers** can have a **marked effect on motivation** and **attention to learning in general** and **ESL/EFL learning in particular**. **Demotivating factors** are **essential factors** which negatively influence the **learner's attitudes** and **behaviors** and hence lead to **undesired learning outcomes**. The **purpose of**

the **present study** was to analyze the **effective factors on demotivation for English language learning among a group of Iranian university students.**

From examples (Am_NF_RA_317) and (Br_NF_RA_364) it shows that there is presence of nouns, attributive adjectives and prepositional phrases. Result shows that American and British research articles are

almost equal in conveying information to their readers.

4.5. Comparison of British and American Non-Fiction Texts

Comparison of nonfiction American and British texts on the findings of MAT tagger 1.3.2 results are depicted in **figure 4.5.** The graph below clearly displays the trends between two varieties of English language.

Figure 4.5. Comparison of Language Functionality of British and American Non-Fiction Texts

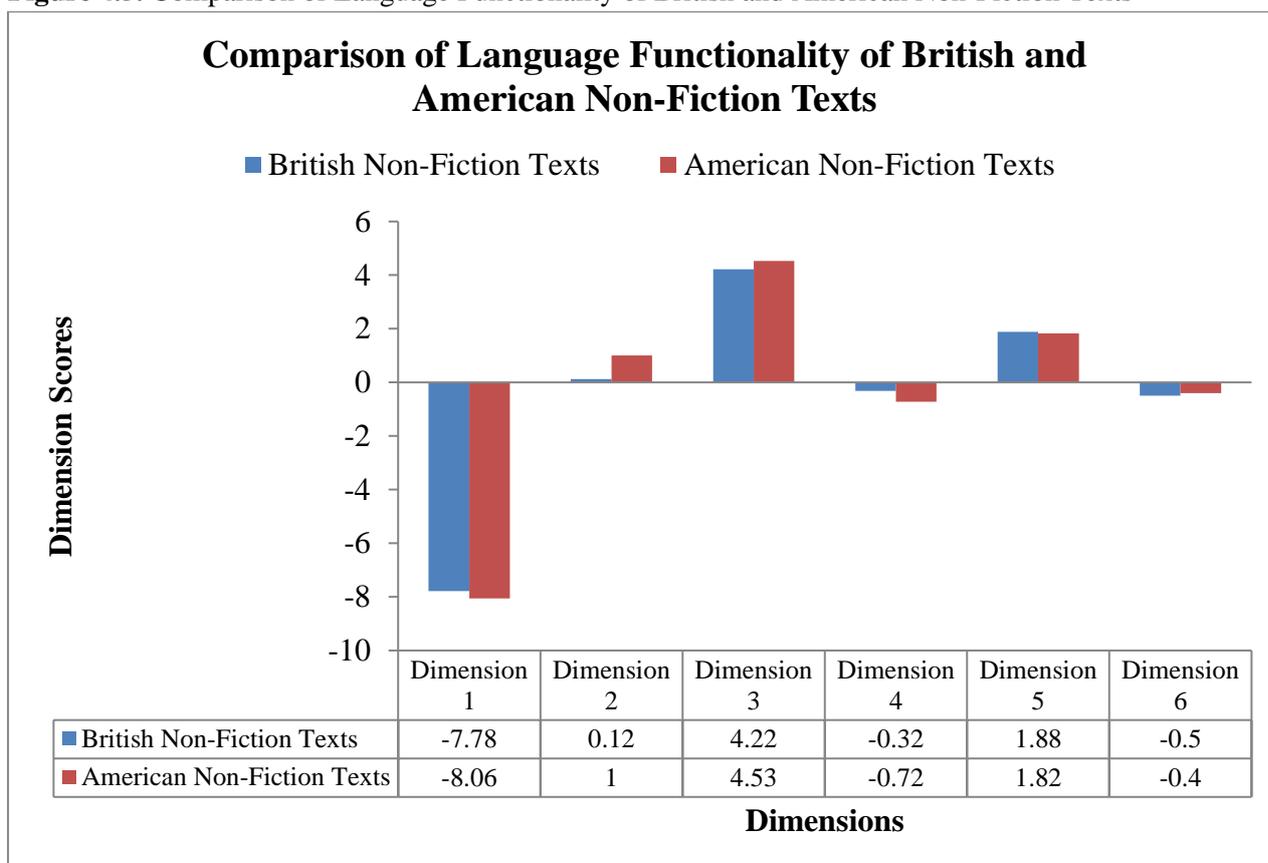


Table 4.9. Comparison of American and British non-fiction texts with genres set by Biber

Dimensions	American Nonfiction Texts	British Nonfiction Texts
D1	Broadcast	Broadcast
D2	Prepared Speeches	Personal Letters
D3	Academic Prose	Academic Prose
D4	Press Reportage	Conversation
D5	Press Reportage	Press Reportage
D6	Official Documents	Official Document
Text Type	General Narrative Exposition	General Narrative Exposition

In the above graph (figure 4.5) at vertical axis positive score stands for positive features of

dimensions and negative score stands for negative features of the dimensions.

At D1 score of American non-fiction texts is **-8.06** and score of British nonfiction texts is **-7.78**. Length difference in the bars shows that American non-fiction texts are more informational than British non-fiction texts.

At D2 it indicates that texts of both varieties of language are mostly written in narrative discourse as the bars in positive domain are shown. Difference between the American and British non-fiction texts is not significant as score of American nonfiction texts is **1** while score of British nonfiction texts is **0.12** but somehow American texts are more narrative as compared to British non-fiction texts.

At D3 both kinds of language varieties are context dependent in comparison of American and British non-fiction texts American non-fiction texts with score of **4.53** are more text dependent than British non-fiction texts with **4.22** score.

D4 shows that American and British non-fiction texts are implicit in discourse American non-fiction texts are more implicit than British non-fiction texts as score of American nonfiction texts is **-0.72** and British nonfiction texts is **-0.32**.

At D5 score of American nonfiction texts is **1.82** and score of British nonfiction texts is **1.88**. It means that American and British non-fiction texts convey abstract information without any noteworthy difference.

At D6 American score is **-0.4** and British score is **-0.5**. In comparison of both kinds of language varieties British non-fiction texts are less informational in certain time constraints than British non-fiction texts. Text type of American and British non-fiction texts are similar as both texts are general narrative in exposition.

5. RESULTS AND CONCLUSION

As far as the comparison of American and British nonfiction texts it is found that

American nonfiction texts have dominance over British nonfiction texts at D1, D2, D3 and D4.

In comparison of subgenres of both varieties of nonfiction texts American essays are more elaborated than British essays. Both American and British essays are informational as there is less difference between the two at D1. And significant difference at D5 reveals that technical information is abundantly found in American essays.

Comparison of American and British newspapers at D3 shows that there is distinct difference between the two varieties of texts in terms of context dependence information. At D4 there is less variance which indicates that both American and British newspapers are explicit in discourse.

By comparing the American and British prose it is found American prose is highly narrative as compared to British prose as there is major difference at D2. Less difference at D3 tells that both varieties of texts are almost equal in conveying context dependent information.

Comparative analysis of last subgenre that is of American and British research articles explores that American and British research articles are non-narrative in discourse as there is no difference between the two categories. From all six dimensions big difference between the two varieties is at D1 which reveals that British research articles are more informative as compared to American research articles.

From multidimensional comparative analysis of American and British nonfiction texts it is highlighted that American nonfiction texts have a slight supremacy in language functionality over British nonfiction texts as they are more informative and more elaborated in all subgenres chosen for this study. It reveals that although English as global language has broken the constraints of borders and nations but still geographical and cultural implications

on language bring variations within a single language. Possible reasons of these linguistic variations are the versatility of geographical and cultural differences behind these varieties of English.

9. Nini, A. (2015). Multidimensional analysis tagger (Version 1.3). URL <http://sites.google.com/site/multidimensional-tagger>.

References

1. Abdulaziz, M., Mahmood, A. M., & Azher, M. (2016). Variation in learner's argumentative essays – A Multidimensional comparative analysis: *Science International*, 28(4), 413-415.
2. Ahmed, S., & Mehmood, A. (2015). Comparing Explicit Features of Pakistani Press with British Press Reportage: A Multi-Dimensional Analysis, *Journal of Critical Inquiry*. Vol 13, (II), 1-24.
3. Ali, S. & Shehzad, W. (2019). Linguistic variation among South Asian Englishes: A corpus-based multidimensional analysis. *Journal of Nusantara Studies*, 4(1), 69-92. <http://dx.doi.org/10.24200/jonus.vol4i1ss1pp69-92>
4. Asghar, S. A., Mahmood, M. A., and Asghar, Z. M. 2018. A multidimensional analysis of Pakistani Legal English. *International Journal of English Linguistics* 8(5): 215.
5. Azher, M., & Mahmood, A, M. (2016). Exploring Variation across Pakistani Academic Writing: A Multidimensional Analysis. *Journal of Critical Inquiry*: 14 (II), 86-113.
6. Biber, D. (1988). *Variation across Speech and Writing*. Cambridge: Cambridge University
7. Huang, L. F. (2013). Pedagogical implications of the corpus-based investigation of discourse markers. *Learner Corpus Studies in Asia and the World*, 1, 227–254.
8. Irshad, I., Anwar, B., (2021). A Multidimensional Analysis of Pakistani English Written Discourse, *Linguistics and Literature Review* 7(1): 67- 81.